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Appendix A- LPA Feedback to the draft Public Consultation Strategy

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**Appendix F- Proposal Maps** 

**Appendix G- Feedback Form** 

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#### **Abbreviations**

AC Alternating Current

AIA Arboricultural Impact Assessment

ALC Agricultural Land Classification

AONB Area of Outstanding Natural Beauty

BMV Best and Most Versatile

Bn Billion

BNG Biodiversity Net Gain

BEIS Department for Business, Energy and Industrial Strategy

CAP Civil Aviation Publication

CIT Carbon Interface Tool

CoCP Code of Construction Practice

CO2e Carbon Dioxide equivalent

COVID Coronavirus Disease

CPRSS Corridor and Preliminary Routeing and Siting Study

CSE Cable Sealing End

CTMP Construction Traffic Management Plan

CWS County Wildlife Site

DC Direct Current

DCO Development Consent Order

DEFRA Department for Environment, Food and Rural Affairs

DGPS Differential GPS

DLL District Level License

DNO Distribution Network Operators

EACN East Anglia Connection Node

EC European Commission

EIA Environmental Impact Assessment

EMF Electric and Magnetic Fields

ES Environmental Statement

ESNP Essex Suffolk Norfolk Pylon Group

ESO Electricity System Operator

EWP Energy White Paper

EYTS Electricity Ten Year Statement

FES Future Energy Scenarios

FRA Flood Risk Assessment

GA General Aviation

GB Great Britain

GCN Great Crested Newt

GEMA Gas and Electricity Markets Authority

GREEN Green Energy Enablement

GW Gigawatts

GPS Global Positioning System

HDD Horizontal Directional Drilling

HND Holistic Network Design

HSE Health and Safety Executive

HV High Voltage

HVDC High Voltage Direct Current

IEMA Institute of Environmental Management and Assessment

IT Information Technology

KEGS King Edward VI Grammar School

Km Kilometre

kV Kilovolt

LEMP Landscape and Ecology Management Plan

LCRM Land Contamination Risk Management

LPA Local Planning Authority

LTC Lower Thames Crossing

LVIA Landscape and Visual Impact Assessment

LWS Local Wildlife Site

MAFF Ministry of Agriculture, Fisheries and Food

MP Member of Parliament

MW Megawatt

NETS National Electricity Transmission System

NHS National Health Service

NOA Network Options Assessment

NPS National Policy Statement

NSIP Nationally Significant Infrastructure Project

NTS National Transmission System

NVZ Nitrate Vulnerable Zones

OFFSET Offshore Electricity Grid Task Force
Ofgem Office of Gas and Electricity Markets

OS Ordnance Survey

OTNR Offshore Transmission Network Review

PCZ Primary Consultation Zone

PEIR Preliminary Environmental Information Report

PRoW Public Rights of Way

QGC Queens Green Canopy

RAF Royal Air Force

RAMS Risk Assessment and Method Statement

RNR Roadside Nature Reserve

RSPB Royal Society for the Protection of Birds

SAC Special Area of Conservation

SCENIHR Scientific Committee on Emerging and Newly Identified Health Risks

SCZ Secondary Consultation Zone

SEBs Statutory Environmental Bodies

SMEs Small and Medium Enterprises

SoS Secretary of State

SPA Special Protection Area

SQSS Security and Quality of Supply Standard

SRP Soil Resources Plan

SSSI Site of Special Scientific Interest

STEM Science, Technology, Engineering, and Mathematics

SuDS Sustainable Drainage System

TPO Tree Preservation Order

UK United Kingdom

UKPN UK Power Networks

UN United Nations

USA United States of America

UXO Unexploded Ordnance

WFD Water Framework Directive

WW2 World War Two

# **Executive summary**

National Grid Electricity Transmission (hereafter referred to as National Grid) is developing proposals to reinforce the high voltage power network in East Anglia. Norwich to Tilbury, previously known as the East Anglia Green Energy Enablement (GREEN) Project (hereafter known as the 'Project') will support the UK's net zero target through the connection in East Anglia of new low carbon energy generation, and by reinforcing the local transmission network.

We want to ensure that members of the public and all stakeholders are engaged at each iterative stage in the development of our draft proposals and that everyone has the opportunity to comment on the draft proposals at key decision-making points.

In spring 2022, a non-statutory public consultation was held for a period of eight weeks, between 21 April 2022 and 16 June 2022. This consultation introduced the Project, explained how National Grid had developed its proposals, and sought the views of the public and stakeholders.

The selected preferred route corridor and graduated swathe were presented at the 2022 non-statutory consultation. This indicated where an alignment had good potential to be routed, with darker shaded areas where we considered an alignment is more likely to be located than those areas in the lighter parts of the swathe, based on the information available to us at that time. This was indicative and subject to further assessment work, and the feedback we received at consultation. The choice of technology and other routing matters also remain open to further consideration.

The feedback received during the 2022 non-statutory consultation has been carefully reviewed and considered, alongside ongoing environmental and engineering studies. We have also backchecked and reviewed our previous studies.

No final decision as to the means of reinforcement has been made and any relevant decision to be made will be the subject of reconsideration and backchecking throughout the process of developing the Project.

This report explains the consultation process, provides an analysis of the feedback, and demonstrates how National Grid has had regard to the feedback, either by considering and responding to comments and queries, or by incorporating changes into the Project design itself. For completeness and context, this report also identifies where design changes have been made which were not driven by consultation feedback. In summary, design changes since the 2022 non-statutory consultation include:

- alternative corridor diverting from the crossing of the A1066 to pass to the east of Wortham Ling;
- alternative corridor diverting to the east at the south of Offton, then paralleling the existing 132 kilovolt (kV) overhead line route to the east of Flowton and connecting into Bramford Substation:
- alternative corridor to connect the underground cable route through the Area of Outstanding Natural Beauty (AONB) to the proposed Cable Sealing End (CSE) compound to the south of Notley Enterprise Park;
- alternative corridor further east of Ingatestone;

- proposal to amend the graduated swathe to the south of Bramford Substation to facilitate an alignment to the east of the preferred corridor;
- proposal to continue the underground cable through the AONB to the East Anglia Connection Node (EACN) substation;
- proposal to adopt underground cable technology in the vicinity of Great Horkesley for a distance of around 5.3 km;
- amendment to the corridor to the west of Writtle;
- proposal to restrict the graduated swathe and alignment to the eastern edge of the preferred corridor to reduce interaction with the Dunton Garden Village development proposal;
- proposal to adopt underground cable technology from the north of the Lower Thames Crossing (LTC) proposals within the western corridor through into Tilbury Substation;
- proposal to amend the graduated swathe to facilitate an alignment to the north of Fairstead;
- proposal to amend the graduated swathe to pass to the east of Bushey Wood to increase distance from properties on Woodhall Hill.

Changes to the preferred corridor and graduated swathe referenced in this report are reflected in the 2023 preferred draft alignment which is described fully in the Design Development Report published as part of the 2023 non-statutory consultation.

We are holding a further non-statutory public consultation to present and invite feedback on our preferred draft alignment, whilst we are very much still at the early stage of the proposed Project. This will run between 27 June 2023 and 21 August 2023, to provide the opportunity for the public and stakeholders to see how the Project has evolved since the previous non-statutory consultation, and to review and comment on how the proposals are developing including on the more detailed engineering design and environmental assessment work. As part of this, we have started to develop a preferred draft alignment which also shows potential positions for overhead line and associated pylons, underground cables, (CSE) compounds and connection substations. A further consultation feedback report will be produced following the 2023 non-statutory consultation.

For the purpose of this initial assessment at this early stage in the Project's evolution, the current preferred draft alignment reflects the use of standard lattice pylons. The use of other pylon designs is still under consideration. If an overhead line route is progressed as part of the Proposals, the use of other pylon designs will be subject to further assessments and consultation.

These assessments will include visual impacts and mitigation, environmental ecological and socio-economic considerations, construction and lifetime maintenance effects. Different designs in use in the UK include:

- Standard lattice;
- Low height lattice; and
- T-pylons.

The findings from the assessments will be presented at the next stage of public consultation.

If progressed with significant elements of overhead line, then it is likely the Project would be classified as a Nationally Significant Infrastructure Project (NSIP), and we would need to obtain 'development consent' under statutory procedures set by Government. In these circumstances, a statutory consultation stage is required. The Planning Act 2008 (PA2008) requires statutory consultation for NSIPs which provides all those with an interest in a project including local authorities, statutory consultees, land interest parties and the local community the opportunity to input into the design of the developing project.

The feedback from the non-statutory and statutory consultations (as applicable) will be used to inform the final designs that will be put forward in the application for development consent. National Grid expects to submit an application for consent for the Project in 2025.

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# 1. Introduction

### 1.1 Background

- National Grid Electricity Transmission plc (hereafter referred to as National Grid) owns, builds, and maintains the transmission network in England and Wales connecting electricity from generating stations to local distribution companies. National Grid does not distribute electricity to individual premises, but its role in the wholesale market is fundamental to ensuring a reliable and quality supply to all. National Grid's high voltage electricity transmission system operates at 400,000 volts (400 kilovolts (kV)) and 275,000 volts (275 kV). It is National Grid that is developing plans for Norwich to Tilbury, previously known as the East Anglia Green Energy Enablement (GREEN) Project (hereafter known as the 'Project'). Separate regional companies (Distribution Network Operators (DNOs)) own and operate the electricity distribution networks that comprise overhead lines and underground cables at 132,000 volts (132 kV) and below. It is the role of these local DNOs to distribute electricity to homes and businesses. The DNO in East Anglia is UK Power Networks (UKPN).
- National Grid is working to build a cleaner, fairer, and more affordable energy system that serves everyone, powering the future of our homes, transport, and industry. The proposed Project will support the UK's net zero target through the connection in East Anglia of new low carbon energy generation, and by reinforcing the local transmission network.
- The Project is a proposal by National Grid to reinforce the high voltage power network in East Anglia. The reinforcement is needed because the existing transmission network, even with current upgrading, will not have sufficient capacity for the new energy that is expected to connect to the network over the next ten years and beyond. Completion of the Project, together with other new reinforcements across the country will meet this future energy transmission demand.
- The Project proposes to reinforce the transmission network between the existing substations at Norwich Main in Norfolk, Bramford in Suffolk, Tilbury in Essex as well as connecting new offshore wind generation.
- Initial draft proposals consulted upon comprised the construction and operation of a new 400 kV electricity transmission connection over approximately 183 km and a new 400 kV connection substation. The draft proposals included indicative preliminary routing of an overhead line alignment and potential underground cabling through the Dedham Vale Area of Outstanding Natural Beauty (AONB) and a new 400 kV connection substation in the Tendring district in Essex. Our draft proposals also included works required at the existing 400 kV substations at Norwich, Bramford and Tilbury. Cable Sealing End (CSE) compounds would be required to connect sections of underground cable with the overhead lines. Further details about the proposals, including the Project map, can be found in Section 1.4.
- The Project website provides further information on background to the Project, why it is needed and how the proposals that were consulted on were developed by the Project team. The URL to the website is: <a href="https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/norwich-to-tilbury">https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/norwich-to-tilbury</a>. The

need for the Project is outlined in Section 1.2 and is set out in the *Project Background Document* (June 2023) which explained National Grid's approach to routeing and siting.

- If progressed with significant elements of overhead line then Norwich to Tilbury would be classified as a Nationally Significant Infrastructure Project (NSIP) and we would need to obtain 'development consent' under statutory procedures set by Government. NSIPs are projects of certain types, over a certain size, which are considered by the Government to be of national importance, hence permission to build them needs to be given at a national level, by the Secretary of State (SoS). Instead of applying to the local authority for planning permission, the developer must apply to the Planning Inspectorate for a different permission called a Development Consent Order (DCO).
- 1.1.8 If an NSIP, National Grid would need to submit an application for development consent to the Planning Inspectorate. If accepted the examining authority would be appointed (consisting of one or more examining inspectors) who after a period of public examination would make their recommendation to the SoS, who in turn would decide on whether development consent should be granted for the Project. The timescale between acceptance of the submission and a decision is approximately 18 months.

### 1.2 Needs case and strategic options summary

- Great Britain already has 8.5 gigawatts (GW) of offshore wind energy in operation, and another 1.9 GW under construction. The Government's Energy White Paper (EWP) (December 2020) outlines a plan to increase energy from offshore wind to 40 GW by 2030 (with this Government target being increased in April 2022 to 50 GW) and this Project will support in achieving this target.
- New connections for new offshore wind and nuclear power generation projects and for interconnectors into East Anglia are expected to continue in addition to the current contracted position. These are being constructed or expected to connect into substations at Necton, Norwich Main, Bramford, Friston and Sizewell. Additionally, agreements are in place with two offshore wind farm projects on the basis of their connections into a new East Anglia Connection Node (EACN) substation. National Grid has a duty to facilitate new connections and maintain a safe National Electricity Transmission System (NETS) and has considered the capability of the existing network to support such connections. This assessment considered various published Future Energy Scenarios (FES) (a range of scenarios which seek to address the uncertainty that exists over such an extended planning horizon) to consider network capability relative to the expected connection requirements.
- East Anglia's 400 kV electricity transmission network was built in the 1960s. It was built to supply regional demand, centred around Norwich and Ipswich. With the growth in new energy generation from offshore wind, nuclear power and interconnection with other countries, there will be more electricity connected in East Anglia than the network can currently accommodate.
- As a result, and to meet its duties, National Grid needs to reinforce the electricity network to allow power to be imported to, and exported from, East Anglia and to provide additional capability to allow power flows into and out of the south-east area to connect with areas of demand and interconnectors to Europe.
- The Project could also connect new offshore wind farms off the Essex coast to the electricity transmission network and a European interconnector. Two offshore wind farms the North Falls Offshore Wind Farm and Five Estuaries Offshore Wind Farm –

- and Tarchon Energy interconnector (from Germany) are currently in development. If consented, they are expected to be operational by the end of the decade.
- In 2022, as part of the wider Network Planning Process, National Grid carried out an initial assessment of the strategic options available to meet the needs case set out above. This drew on the economic analysis of the Electricity System Operator (ESO) in the Network Options Assessment (NOA) process and was presented in the April 2022 Corridor and Preliminary Routeing and Siting Study (CPRSS).
- This assessment identified a range of combinations of circuit options covering both East Anglia and the South East. For each of these combinations of options we undertook an appraisal of deliverability, considered the system benefit that the reinforcement provided, considered environmental and socio-economic factors and considered the cost benefit analysis completed by the ESO.
- Alternative technologies were investigated in identifying potential strategic options. These included an offshore connection using direct current (DC) technology, and various onshore connection options including, increasing operational voltages on existing network to above 400 kV; alternating current (AC) overhead lines (established technology); alternative pylon types; AC underground technology; high voltage direct current (HVDC) overhead line and underground cables; and gas insulated line (GIL).
- 1.2.9 Consideration of technology choices, siting and routeing of electrical infrastructure for this Project takes into account the Government's specific nationally applicable guidance to the electricity infrastructure companies in the form of the EN-5 National Policy Statement (NPS) published in 2011. This sets out that:
  - "The Government does not believe that development of overhead lines is generally incompatible in principle with developers' statutory duty under section 9 of the Electricity Act to have regard to amenity and to mitigate impacts"
- The UK Government announced a review of the 2011 energy NPSs within the Energy White Paper (EWP). In September 2021, the Department for Business, Energy and Industrial Strategy (BEIS) (now known as the Department for Energy Security and Net Zero) consulted upon draft energy NPSs with consultation closing on 29 November 2021. Since this consultation, further drafts have been published, however this report focuses on those pertinent at the time of our 2022 non-statutory consultation.
- The adopted 2011 energy NPSs were reviewed to reflect the policies and broader strategic approach set out in the EWP and ensured that a planning framework was in place to support the infrastructure required for the transition to Net Zero. BEIS' consultation sought views on the 2021 draft NPSs. BEIS' consultation on the following draft NPSs (2023) which are relevant to the Project has yet to conclude, the outcome of this will be taken into account as the Project develops:
  - Draft Overarching NPS for Energy (EN-1), March 2023;
  - Draft NPS for Renewable Energy Infrastructure (EN-3), March 2023; and
  - Draft NPS for Electricity Networks Infrastructure (EN-5), March 2023.
- The Department for Business, Energy and Industrial Strategy (BEIS) (now known as The Department for Energy Security and Net Zero) has confirmed that for any application accepted for examination by the Planning Inspectorate before any update to the existing NPSs, the extant 2011 suite of NPSs should have effect. The draft NPSs, which are themselves, subject to consultation feedback, will therefore have effect only on applications accepted for examination after their designation. Notwithstanding the

above, Draft NPS EN-1 (2021) set out at paragraph 1.6.3 that the draft NPSs "are potentially capable of being important and relevant considerations in the decision-making process. The extent to which they are relevant is a matter for the relevant Secretary of State to consider within the framework of the Planning Act and with regard to the specific circumstances of each development consent order application"

- The Government position set out in the 2011 EN-5 NPS is reinforced in the extant draft EN-5, September 2021 and more recently in the revised draft March 2023 that overhead lines should be the strong starting presumption for electricity networks development in general, this presumption is reversed only when proposed developments will cross part of a nationally designated landscape.
- In addition to EN-5, National Grid employs two sets of rules/guidelines for the routeing and siting of new energy transmission infrastructure:
  - The Holford Rules, which provide guidelines for the routeing of high voltage overhead transmission lines; and
  - The Horlock Rules, which provide the approach to and guidelines for, the design and siting of substations (in addition to CSE compounds and line entries).
- 1.2.15 When considering new electricity infrastructure, National Grid has regard to the degree to which options comply or deviate from these rules.
- Paragraph 2.8.7 of the existing NPS EN-5 makes clear 'that the Holford Rules, and any updates, form the basis for the approach to routeing new overhead lines'. The Holford Rules state that routeing of high voltage overhead transmission lines should where possible, in summary:
  - Rule 1: avoid areas of the highest amenity value and smaller areas of high amenity value;
  - Rule 2: choose the most direct line with no sharp changes in direction;
  - Rule 3: be positioned against tree and hill backgrounds as far as possible;
  - Rule 4: prefer moderately open valleys with woods;
  - Rule 5: be kept as far as possible from smaller lines, converging routes and other poles, masts, wires, and vales to avoid a concentration or 'wirescape'; and
  - Rule 6: approach urban areas through industrial zones, where they exist; and when
    residential and recreational land intervenes between the approach line and the
    substation, carefully compare costs of undergrounding, for lines other than those of
    the highest voltage.
- 1,2,17 The Horlock Rules state that:
  - Rule 1: in the development of system options including new substations consideration
    must be given to environmental issues from the earliest stage to balance the technical
    benefits and capital cost requirements, against the consequential environmental
    effects, in order to avoid as far as possible adverse effects;
  - Rule 2: siting of substations, sealing end compounds and line entries should seek to avoid areas of the highest amenity, cultural or scientific value by the overall planning of the system connections and areas of local amenity value, important existing habitats and landscape features should be protected as far as reasonably practicable;

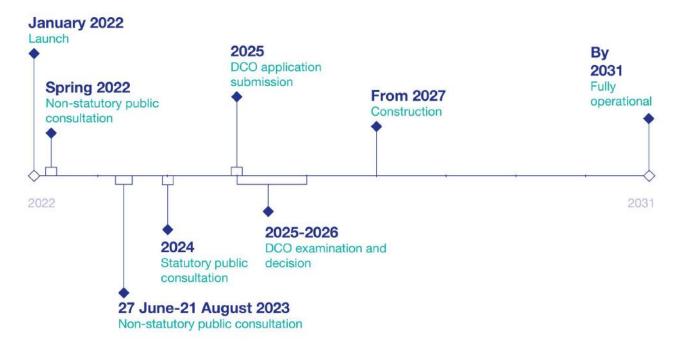
- Rule 3: siting of substations, extensions and associated proposals should take advantage of the screening provided by landform and existing features and the potential use of site layout and levels;
- Rule 4: proposals should keep visual, noise and other environmental effects to a minimum;
- Rule 5: land use effects of the proposal should be considered when planning the siting of substations or extensions;
- Rule 6: in design of new substations or line entries, early consideration should be given to the options available for terminal pylons, equipment, buildings and ancillary development appropriate to individual locations;
- Rule 7: space should be used effectively to limit the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way, whilst also having regard to future extension of the substation;
- Rule 8: design of access roads, perimeter fencing, earth shaping, planting and ancillary development should form an integral part of the site layout and design to fit in with the surroundings;
- Rule 9: in open landscape especially, high voltage line entries should be kept, as far
  as possible, visually separate from low voltage lines and other overhead lines so as to
  avoid a confusing appearance; and
- Rule 10: the inter-relationship between pylons and substation structures and background and foreground features should be studied to reduce the prominence of structures from main viewpoints. Where practicable the exposure of terminal pylons on prominent ridges should be minimised by siting pylons against a background of trees rather than open skylines.
- Further detail on National Grid's approach to consenting and each of the potential strategic options are provided in the Corridor and Preliminary Routeing and Siting Study (CPRSS), published in April 2022 to inform the non-statutory consultation. The CPRSS explains why, at the early pre-statutory stage of consultation, the offshore strategic options were not being progressed for now.
- In response to feedback, including that from the 2022 non-statutory consultation and the Offshore Electricity Grid Task Force (OffSET) regarding a fully offshore HVDC option to deliver the Project, in October 2022 National Grid provided further clarification on the potential for a feasible offshore strategic option to deliver the additional transmission capacity required. The clarification explained why, at this early pre-statutory stage of consultation, the offshore strategic option was not being progressed. This information can be found on the Project website.
- The response set out how National Grid is required to have regard to the National Policy Statements as part of its consideration when it develops proposals to meet transmission needs.
- Additional information on capital and lifetime costs was provided on the potentially feasible offshore strategic option to deliver the additional transmission capacity required. This information did not form part of the 2022 non-statutory consultation.
- Factors which were considered in determining whether to take an offshore option forward, included, but were not limited to:

- the advice contained in the adopted policy in the NPSs that overhead lines are appropriate technology;
- the potential for mitigation of on-shore options including undergrounding where justified and feasible; and
- cost and economics the offshore option would be several billion pounds more expensive than reasonable onshore options.
- 1.2.23 At that stage a fully offshore HVDC option was not progressed, although it was recognised by National Grid that no final decision had been made, and the matter would be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information. The outcome of that backcheck is set out in the Strategic Options Backcheck and Review which is available on the Project website.

## 1.3 Purpose of the consultation

- National Grid held a round of non-statutory consultation from 21 April 2022 until 16 June 2022, to introduce the Project, explain why additional capacity is needed on this part of the network, outline the process that National Grid has been through so far to identify the preferred strategic option and present our preferred route corridor, and to gather public feedback. A range of both online and in person consultation events were held and promoted to provide opportunities to feedback on the proposals at an early stage of the Project development.
- This consultation exercise explained why additional capacity is needed on this part of the network. The consultation presented a 'graduated swathe' to highlight where National Grid considered it most likely that the new infrastructure could be sited within the preferred corridor, taking into account the information available to it at that time. The route of the corridor was split into sections to make it relevant to those communities and identifiable by district council areas, making it easier to find information and to feedback on areas of most interest to those communities.
- 1.3.3 The objectives of the consultation were to:
  - introduce and provide an overview of the project to the public;
  - explain the need to build the reinforcement;
  - set out options considered and how the preferred corridor and graduated swathe was decided;
  - present and explain the preferred corridor with graduated swathe;
  - present and explain the preferred substation site;
  - ensure stakeholders had the opportunity to provide feedback; and
  - outline next steps and programme and how proposals will be developed further.
- Listening to communities gives valuable feedback and insight as proposals are developed and provides opportunities to minimise any impacts. National Grid will continue to carefully consider feedback received as the Project develops. The proposed timeline for the Project is shown in Figure 1.1.

Figure 1.1 - Project timeline



- Stakeholder and public involvement are important components of the UK planning system. Legislation and Government guidance aims to ensure that the public, local communities, statutory and other consultees and interested parties have an opportunity to have their views considered throughout the planning process. Within the DCO process, the emphasis is on engagement prior to the submission of the consent application, through the non-statutory consultation, (this report) and statutory consultation processes. National Grid want to ensure that all stakeholders are engaged in the development of the Project and have the opportunity to comment at key decision-making points. Further information on consultation process is provided in Section 2.1, including engagement undertaken prior to the 2022 non-statutory consultation.
- Further information about the DCO planning process can be found on the Planning Inspectorate's website: infrastructure.planninginspectorate.gov.uk.
- National Grid aims to ensure effective, inclusive, and meaningful engagement with the local community, statutory and other consultees, and interested parties.
- National Grid is committed to engaging those communities affected by its proposals in effective and meaningful consultation as reflected in its Stakeholder, Community and Amenity Policy (<a href="https://www.nationalgrid.com/electricity-transmission/document/81026/download">https://www.nationalgrid.com/electricity-transmission/document/81026/download</a>) which incorporates National Grid's Schedule 9 Electricity Act 1989 Statement relating to the preservation of amenity. It makes the following commitments to consultation when undertaking electricity works:

"We will promote genuine and meaningful stakeholder and community engagement. We will meet and, where appropriate, exceed the statutory requirements for consultation or engagement. We will adopt the following principles to help us meet this commitment:

- we will seek to identify and understand the views and opinions of all the stakeholders and communities who may be affected by our works;
- we will provide opportunities for engagement from the early stages of the process, where options and alternatives are being considered and there is the greatest scope to influence the design of the works;

- we will endeavour to enable constructive debate to take place, creating open and two-way communication processes;
- we will ensure that benefits, constraints and adverse impacts of proposed works are communicated openly for meaningful stakeholder and community comment and discussion. We will be clear about any aspects of the works that cannot be altered;
- we will utilise appropriate methods and effort in engaging stakeholders and communities, proportionate to the scale and impact of the works; and
- we will provide feedback on how views expressed have been considered and the outcomes of any engagement process or activity."
- National Grid's commitments align with the Gunning Principles which must be adhered to for a legitimate public consultation to be held. The four Gunning Principles are:
  - proposals are consulted on when they are still at a formative stage;
  - there is sufficient information to allow for 'intelligent consideration';
  - there is adequate time for consideration and response; and
  - 'conscientious consideration' must be given to consultation responses before decision are made.

# 1.4 What National Grid consulted on: The proposals for the 2022 non-statutory consultation

1.4.1 National Grid consulted on proposals to reinforce the high-voltage electricity transmission network from Norwich Main Substation in Norfolk to the existing substation at Bramford in Suffolk, and from Bramford to the existing Tilbury Substation in Essex, as well as a proposed connection substation to connect new offshore wind generation. A map of the overall Project, proposed locations of substations and districts that the 2022 non-statutory consultation proposals passed through in shown in Figure 1.2.

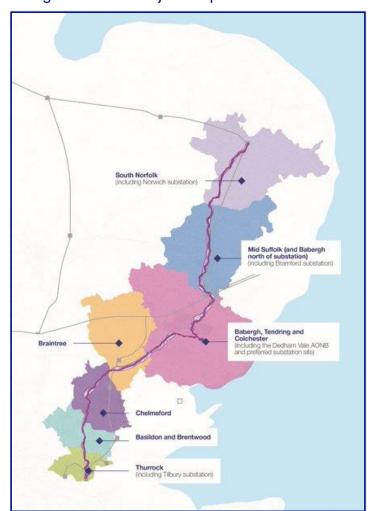


Figure 1.2- East Anglia GREEN Project map

### Reinforcement of the high-voltage electricity network

Initial proposals consulted on at the 2022 non-statutory consultation included the construction and operation of a new 400 kV electricity transmission line over approximately 60 km between Norwich Main and Bramford substations and approximately 120 km between Bramford and Tilbury substations, with a new 400 kV connection substation in the Tendring Peninsula. The proposed 400 kV electricity line would comprise mostly of steel lattice pylons and conductors (wires) with some underground cabling through the Dedham Vale AONB.

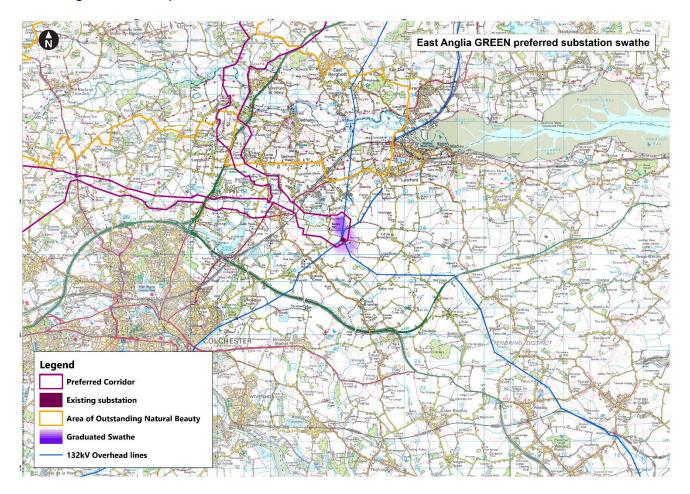
#### **CSE** compounds

As part of the initial 2022 non-statutory consultation proposals National Grid would need to build two CSE compounds to connect the overhead lines to the underground cables that would pass under the AONB. Each CSE compound would be fenced, and contain electrical equipment, support structures, a small control building and a permanent access provision. Potential sites for these are being developed based on feedback received from the first phase of public consultation (non-statutory) and surveys and assessments. National Grid will carefully consider any local landscape features which may help to screen the CSE compounds as well as the impacts on the AONB.

#### **Substation**

- Initial proposals which were consulted upon in the 2022 non-statutory consultation also included a new 400 kV connection substation sited on the Tendring Peninsula. The substation would be fenced, contain high voltage electrical equipment, such as circuit breakers and shunt reactors, support structures, control buildings, a permanent access road and parking areas. The proposed substation location swathe is shown in Figure 1.3.
- National Grid would also need to carry out work at the existing 400 kV substations at Norwich, Bramford and Tilbury.

Figure 1.3- Proposed substation swathe



### **Ancillary works**

- As part of the initial 2022 non-statutory consultation proposals, we identified that other ancillary activities would be required to facilitate construction and operation, however these will be presented at statutory consultation. These included, but are not limited to:
  - temporary land to facilitate construction activities including working areas for construction equipment and machinery, site offices, welfare, storage, and access; and
  - land required for mitigation, compensation and enhancement of the environment including Biodiversity Net Gain (BNG).

### 1.5 Purpose of this report

The purpose of this report is to summarise the feedback received during the 2022 nonstatutory consultation, including key responses from organisations. This is in accordance with paragraph 81 of the Department for Communities and Local Government (2015) publication 'Planning Act 2008: Guidance on the pre-application process', which states:

"It is good practice that those who have contributed to the consultation are informed of the results of the consultation exercise; how the information received by applicants has been used to shape and influence the project; and how any outstanding issues will be addressed before an application is submitted to the Inspectorate."

This report also identifies where National Grid has made changes to the proposals as a result of the feedback and how the responses received have influenced those changes. It will be used to inform the preparation of a Consultation Report which will be submitted in support of an application for development consent in accordance with Section 37(3)(c) of the Planning Act 2008.

### 1.6 Structure of this report

- 1.6.1 This report is structured as follows:
  - Chapter 1: Introduction This chapter provides background to the proposed Project and summarises the proposals as well as information about the purpose of the report and consultation;
  - Chapter 2: Methodology This chapter presents a summary of the consultation exercise, including the various methods and channels used;
  - Chapter 3: Analysis of Feedback Approach to analysis, as well as the analysis of, and response to, feedback and summary of changes made. This chapter presents the feedback received during the 2022 non-statutory consultation. It addresses feedback and details how National Grid has considered and had regard to the responses. This chapter also details changes that have been made following the feedback received. A table format is used for legibility, alongside cross-references to further appended information where relevant. It also summarises any responses received after the 2022 non-statutory consultation period; and
  - Chapter 4: Next Steps This chapter summarises the next steps in the DCO process.
- The 2022 non-statutory consultation report was prepared in line with advice set out in the Planning Inspectorate's Advice Note Fourteen: Compiling the Consultation Report from February 2021 (version 3).

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# 2. Methodology

### 2.1 Consultation process

- Prior to the non-statutory consultation during April to June 2022 (detailed below),
  National Grid undertook a series of local planning authority (LPA) briefings in
  September and December 2021; launched the Project website in January 2022;
  provided a draft consultation strategy in February 2022; and undertook further LPA
  briefings and draft consultation strategy workshops in March 2022.
- The non-statutory consultation ran between 21 April 2022 until 16 June 2022 and follows the approach as set out in the *Public Consultation Strategy*. The *Public Consultation Strategy* can be found at: <a href="https://www.nationalgrid.com/electricity-transmission/document/142436/download">https://www.nationalgrid.com/electricity-transmission/document/142436/download</a>
- 2.1.3 National Grid has built upon its knowledge and experience of consultation on major projects over many years and discussed that with the relevant local planning authorities who also have expertise and experience of consultation locally.

### Preparation for pre-application non-statutory consultation

- 2.1.4 National Grid developed and refined the consultation strategy alongside productive dialogue with the local planning authorities. Engagement was held to ensure a collaborative approach was taken to planning the consultation.
- Local planning authorities engaged with consist of: Essex County Council, Braintree District Council, Suffolk County Council, Tendring District Council, Thurrock Council, Basildon Council, Colchester City Council\*, Norfolk County Council, South Norfolk Council, Babergh and Mid Suffolk District Councils and Chelmsford City Council.
  - \*Formerly Colchester Borough Council.
- 2.1.6 A draft of the *Public Consultation Strategy* was prepared and shared with the affected local planning authorities in February 2022.
- 2.1.7 Briefings were held with each of the local planning authorities on the 28 February, 1 March and 2 March 2022. These sessions discussed the draft consultation strategy, its objectives and approach, consultation zones, proposed engagement activities, materials, and inclusivity.
- Further to these briefings, the local planning authorities were asked to provide feedback on the draft *Public Consultation Strategy*. All feedback was considered and where practicable taken on board by National Grid.
- Appendix A contains information on how the draft consultation strategy evolved further following this engagement and demonstrates National Grid's response to this feedback.
- 2.1.10 Appendix B contains the final Public Consultation Strategy.

#### 2022 Non-statutory consultation approach

2.1.11 National Grid's consultation approach is listed below, and each item is explained in more detail within this chapter:

- Dedicated Project website with interactive maps to show proposals, frequently asked questions (FAQs), online feedback form, email and postal address, and dedicated telephone information line;
- Direct mailing to the Primary Consultation Zone (PCZ) newsletter and Project contact details to within 1 km edge of the preferred corridor;
- Materials produced to support consultation Project Background Document, Corridor and Preliminary Routeing and Siting Study (CPRSS) and Appendices, newsletter, feedback form and exhibition banners;
- Consultation events 12 face-to-face events, 12 online webinars, and 'ask the expert' video and telephone appointments;
- Information points materials available at 13 information points in popular community hubs in close proximity to the proposals;
- Promotional activity advertising within the PCZ and the Secondary Consultation Zone (SCZ) in local and regional newspapers, social media, information to parish councils and press releases; and
- Engagement activities stakeholder briefings for MPs, local elected representatives and parish councils.
- 2.1.12 National Grid's *Public Consultation Strategy* gives further detail on the consultation activities described in this section of the report.

### Project website, email and information line

2.1.13 National Grid set up a website to publish information on the Project along with consultation materials. The website URL is:

https://www.nationalgrid.com/electricity-transmission/east-anglia-green

- 2.1.14 The website included links to additional resources in the document library and the following information:
  - an interactive map to show more detail of the preferred corridor and graduated swathe, the map also included pointers to further information, which may contain images, text or signpost to a different page that expands on the subject;
  - find out more pages with details of dates and timings of information events and webinars;
  - FAQs:
  - project videos, infographics and animations;
  - · feedback form; and
  - contact details.
- 2.1.15 During the consultation period the Project website received 72,725 views from 54,975 unique users.

### **Direct mailing to the Primary Consultation Zone**

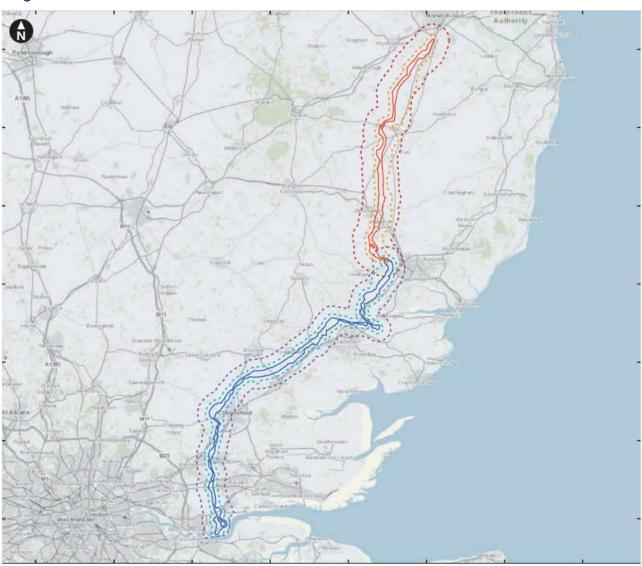
2.1.16 The PCZ included stakeholders whose properties' postcodes lie within 1 km of the edge of the preferred corridor as detailed in Figure 2.1. Where appropriate, the PCZ was

extended to include whole streets and postcodes rather than the 1 km boundary dissecting hamlets or neighbourhoods. All relevant stakeholders within this area were consulted including contacting each residential and business address directly. A newsletter was direct mailed to all properties within the PCZ. The newsletter can be found: <a href="https://www.nationalgrid.com/electricity-transmission/document/142451/download">https://www.nationalgrid.com/electricity-transmission/document/142451/download</a>

#### 2.1.17 The newsletter included:

- an introduction to the Project and overview of the proposals;
- details of the Project website, digital consultation and how people could discuss the proposals with the Project team through local public information events, live chats, location-based webinars, and telephone surgeries; and
- information on how people could provide feedback online or request printed materials including feedback forms and maps.
- Figure 2.1 shows the PCZ on a map. The PCZ for the north of the route is shown with yellow dashes and the south of the route is shown with light blue dashes.

Figure 2.1- PCZ distribution area



### Materials produced to support consultation

A range of consultation materials were provided as part of the consultation which included varying levels of technical detail. These are described in Table 2.1.

Table 2.1 – Consultation materials

Material	Location
Project Background Document: to provide an overview of the Project	https://www.nationalgrid.com/electricity- transmission/document/142446/download
CPRSS: detailed report on how preferred corridor was selected – The CPRSS report provided more technical information on the Project and the need for the Project, the options considered, the routeing and siting options assessed and our preferred options	https://www.nationalgrid.com/electricity-transmission/document/142461/download
Summary newsletter to provide a high- level description of proposals and invite to consultation events	https://www.nationalgrid.com/electricity-transmission/document/142451/download
Exhibition banners	https://www.nationalgrid.com/electricity-transmission/document/142456/download
Posters	Appendix E
Maps of the proposals	Appendix F
Feedback form	Appendix G

### **Public information events**

- 2.1.20 A hybrid programme of both in person events and online webinars provided stakeholders opportunities to find out more about the proposals and to provide feedback.
- 2.1.21 Plans were made that if in person events were cancelled for any reason, National Grid would have held an online event at the published time. All planned in person events went ahead as scheduled.
- The online webinars enabled the project team to present the same information as that at the public events and were available to stakeholders who might not feel comfortable in a public place.
- Twelve public information events were organised to be accessible to as many people as possible and held at suitable community hubs along the proposed route. The in person events provided the opportunity to speak to technical experts within the team and are detailed in Table 2.2.
- 2.1.24 In total 2,821 attendees joined the team at the public events.

Table 2.2 – Schedule of public information events

Date and time	Venue	Attendees
12-6:30pm 28 April 2022	Ingatestone and Fryerning Community Centre, 7 High Street, Ingatestone, CM4 9ED	194
12-6:30pm 4 May 2022	Witham Public Hall, Collingwood Road, Witham, CM8 2DY	110
10-4pm 7 May 2022	West Bergholt Open Memorial Hall, 45-57 Lexden Road, West Bergholt, C06 3BG	441
12-7pm 9 May 2022	Chadwell Village Hall, Waterson Road, Chadwell St Mary, RM16 4NX	30
1-6:30pm 11 May 2022	Mulbarton Village Hall, The Common, Mulbarton, NR14 8AE	362
10-4pm 14 May 2022	Palgrave and District Community Centre, 10 Rose Lane, Palgrave IP22 1AP	377
12-7pm 17 May 2022	Holton St Mary Village Hall, Holton St Mary, Hadleigh, C07 6NW	277
12-7pm 18 May 2022	Burstall Village Memorial Hall, Burstall, Ipswich, IP8 3DR	131
1-6pm 21 May 2022	Laindon Community Centre, Aston Road, Laindon, SS15 6N	29
11–5:30pm 24 May 2022	Writtle Village Hall, 18 The Green, Writtle, Chelmsford, CM1 3DU	226
1-7pm 27 May 2022	Needham Market Community Centre, School Street, Needham Market, IP6 8BB	261
10-4pm 28 May 2022	Lawford Venture Centre, Bromley Road, Lawford, Manningtree, CO11 2JE	383

### **Consultation events – webinars**

- Online webinars were organised to enable the Project team to present information about the Project to a large number of people and for them to be able to ask the team questions. Different webinars were organised to focus on specific geographical areas and the programme was widely advertised.
- 2.1.26 Members of the public were invited to register to attend a webinar via the Project website or by calling the Project telephone information line. They were then sent details through email of how to join the webinar via a desktop, tablet, or mobile device.
- During the webinars, members of the Project team explained the background to the proposals and details related to the 2022 non-statutory consultation. Following this, question and answer sessions took place, to enable attendees to ask questions of the Project team, simulating the type of engagement that would have been possible at a face-to-face exhibition. These sessions were moderated by members of the Project team to ensure pertinent questions were asked and that answers were provided.
- 2.1.28 A total of 12 webinars were held during the consultation period. Five presented a general overview of the proposals, whilst seven area-specific webinars were held to focus on specific parts of the proposed Project in the district council geographical areas.

- 2.1.29 General overview sessions were given to provide an introduction and background to the Project; context and need; the proposals and how they were developed; and information about the 2022 non-statutory consultation. There were also question and answers sessions at the end of each webinar.
- 2.1.30 Area-specific webinars covered the same information as the general overview sessions, however provided further detail about the proposals in that section.
- 2.1.31 Webinars were held over a variety of times, to provide morning, afternoon, and evening sessions throughout the consultation period. For those who could not attend the live webinar sessions, an 'Overview of Project' webinar and each area-specific webinars were recorded and made available on the Project website for playback.
- 2.1.32 A total of 381 stakeholders and members of the public attended the webinars. The attendance at each is set out in Table 2.3.

Table 2.3 – Schedule of online webinars

Webinar	Topic	Attendees
2pm 22 April 2022	Overview of Project	20
10am 23 April 2022	Overview of Project	14
7pm 25 April 2022	Overview of Project	50
2pm 26 April 2022	Proposals in South Norfolk District	41
10am 6 May 2022	Proposals in Babergh, Tendring and Colchester Districts	59
2pm 10 May 2022	Proposals in Chelmsford District	52
10am 13 May 2022	Proposals in Thurrock District	8
2pm 19 May 2022	Proposal in Mid Suffolk District (and Babergh District north of Bramford substation)	61
10am 20 May 2022	Proposals in Braintree District	23
2pm 25 May 2022	Proposals in Basildon and Brentwood Districts	12
2pm 8 June 2022	Overview of Project	23
7pm 9 June 2022	Overview of Project	18

#### Consultation events – video or telephone appointment

- The National Grid Project team contact information was published, including a freephone information line and an email address. Stakeholders were able to request a telephone call from a member of the Project team if they preferred to ask questions over the phone. This provided an alternative option for those who may have difficulty accessing other engagement channels or were less comfortable with online technology.
- 2.1.34 Thirteen requests were made to speak with a member of the Project team on specific matters. In addition to holding both telephone and online meetings, stakeholders who requested meetings were also engaged directly at public events or at subsequent group meetings.

### **Information point locations**

- In addition to being available via the project website and on request, project documents were made available at 13 locations within the consultation zone at various points throughout the consultation with stock levels regularly being checked and replenished during the consultation period.
- 2.1.36 Locations are listed in Table 2.1 and details of these points are in Appendix D of the Consultation Strategy which can be found <a href="https://www.nationalgrid.com/electricity-transmission/document/142436/download">https://www.nationalgrid.com/electricity-transmission/document/142436/download</a>.
- 2.1.37 Consultation materials displayed alongside a poster consisted of newsletters, feedback forms and the *Project Background Document*.
- 2.1.38 Information locations consisted of:
  - Diss Library, Church Street, Diss IP22 4DD;
  - Long Stratton Library, The Street, Long Stratton NR15 2XJ;
  - Stowmarket Library, Milton Road North, Stowmarket, IP14 1EX;
  - Capel St Mary, Village Hall, The Street, Capel St Mary, IP9 2EF;
  - Hadleigh Library, 29 High Street, Hadleigh, IP7 5A;
  - Ipswich County Library, Northgate Street, Ipswich, IP1 3DE;
  - Needham Market Library, 4 Teachers Close, Needham Market, IP6 8BB;
  - Suffolk County Council Offices, Endeavour House, 8 Russell Road, Ipswich, IP1 2BX;
  - South Norfolk County Council Offices, South Norfolk House, Swan Lane, Long Stratton, NR15 2XE;
  - Witham Library, 18 Newland Street, Witham, CM8 2AQ;
  - Brentwood Library, New Road, Brentwood CM14 4BP;
  - Tilbury Library, Tilbury Hub, Civic Square, Tilbury, RM18 8AD; and
  - Essex County Council Offices, County Hall, Market Road, Chelmsford, CM1 1QH.

### Promotional activity - press and social media

- National Grid identified the secondary consultation zone (SCZ) which extended to 4 km from the edge of the preferred corridor. The SCZ included stakeholders who are less likely to be directly affected by the Project but may be impacted by construction traffic and long-distance views. All members of the public, including those within the SCZ could register to receive all Project information and engage as they wish.
- 2.1.40 National Grid raised awareness of the Project and public consultation with stakeholders within the SCZ through the broad dissemination of information. This included:
  - placing advertisements in local and regional newspapers providing information about the consultation, and the engagement events and information on how to get involved in prominent community locations. See Table 2.4 for the schedule of adverts;
  - adverts were generally quarter page prints, and a copy of these can be found in Appendix C);

- providing Project documents at information points around the Project area for stakeholders to examine, the list of information points can be found in Section 2.1.24;
- placing advertisements on social media to target different demographics and to include those who might not otherwise engage with the consultation;
- publishing full details of consultation and engagement events on the Project website;
   and
- providing contact details for queries or to request paper copies of Project documents.

Table 2.4 – Newspaper adverts schedule

Publication	Paper copy / online	Date(s)
Colchester Gazette	Paper	21 April 2022
East Anglian Daily Times	Paper	21 April 2022
Eastern Daily Press	Paper	21 April 2022
Brentwood Gazette	Online	21 April 2022
Essex Chronicle	Paper and Online	21 April 2022
Halstead Gazette	Paper	21 April 2022
Thurrock Gazette	Paper	21 April 2022
Harwich and Manningtree Standard	Paper	21 April 2022
Braintree and Witham Times	Paper	22 April 2022

- 2.1.41 Digital promotion of the consultation was conducted through digital marketing campaigns hosted by online news providers and via Facebook and Twitter. Online adverts were placed in the Essex Chronicle (Essex Live) and Brentwood Gazette.
- Across Facebook and Twitter, advert campaigns ran from 21 April 2022 16 June 2022. Each advert directed users to visit the Project website and engage with the consultation, with adverts targeted at users living within the PCZ and SCZ and nearby communities. The traffic generated from these campaigns is set out in Table 2.5.

Table 2.5 – Social media campaign

Platform	Campaign dates	Total Impressions	Advert clicks
Facebook	21 April 2022 – 16 June 2022	639,654	6,150
Twitter	21 April 2022 – 16 June 2022	208,311	750

2.1.43 Copies of the social media adverts can be found in Appendix D.

#### **Engagement activities**

- 2.1.44 National Grid undertook several engagement activities leading up to and throughout the consultation period.
- 2.1.45 Briefings were offered to ten councils, 11 parish councils and 13 Members of Parliament with constituencies within the vicinity of the Project and were within the PCZ. Ten

councils, ten parish councils and seven Members of Parliament accepted the offer and details of these are provided in Table 2.6.

2.1.46 These briefings were given to provide an introduction and background to the Project; context and need; the proposals and how they were developed; and information about the 2022 non-statutory consultation. There were also question and answers sessions at the end of each briefing.

Table 2.6 – Briefings to stakeholders

Dates	Council meetings (County/ District/ Parish)	Attendees
9.30am 14 April 2022	Mid Suffolk and Babergh District Councils Briefing	11
11am 14 April 2022	Norfolk County Council Briefing	14
2pm 14 April 2022	Suffolk County Council Briefing	8
10am 20 April 2022	Braintree District Council Briefing	10
12pm 20 April 2022	Tendring District Council	2
4pm 20 April 2022	Basildon Borough Council	9
6pm 20 April 2022	Colchester Borough Council	5
2pm 21 April 2022	Chelmsford City Council	9
9am 22 April 2022	Dan Poulter MP briefing	2
9am 25 April 2022	Essex County Council briefing	7
2pm 25 April 2022	Stephen Metcalfe MP briefing	1
4pm 25 April 2022	James Cartlidge MP and Bernard Jenkins MP	2
7pm 26 April 2022	Brentwood Parish Council	2
7pm 27 April 2022	Tendring Parish Council	8
7pm 3 May 2022	Braintree Parish Council	11
7pm 5 May 2022	Colchester Parish Council	7
7pm 10 May 2022	South Norfolk Parish Council	15
7pm 12 May 2022	Babergh Parish Council	10
7pm 16 May 2022	Mid Suffolk Parish Council	16
7pm 19 May 2022	Basildon Parish Council	2
7pm 23 May 2022	Chelmsford Parish Council	2
7pm 25 May 2022	Rivenhall Parish Council	2
8 June 2022	South Norfolk District Council briefing	13
28 June 2022	Priti Patel MP briefing	1

Dates	Council meetings (County/ District/ Parish)	Attendees
1 July 2022	Kemi Badenoch MP briefing	2
5 July 2022	John Baron MP briefing	1

### 2.2 Ways to respond

- 2.2.1 Consultees could respond to the consultation by completing the feedback form (online and paper copy were available), through email to the Project email address or by sending a response directly to the Project's postal address:
  - email via EastAngliaGREEN@nationalgrid.com; and
  - postal Freepost EAST ANGLIA GREEN.
- A dedicated freephone telephone information line 0800 151 0992 (lines open Monday to Friday 9.00am 5.30pm) was also set up for people to call if they had any queries.

### 2.3 Responses

- A total of 3,787 feedback submissions were received during the consultation period from local communities, stakeholders, and other consultees. This comprised of paper response forms, online response forms, emails, and letters as detailed in Table 2.7. Feedback sent directly to National Grid in these formats has been accounted for in the relevant categories within this table.
- Although some feedback was received after the close of consultation, all responses received up to a month after the consultation closing (up to the 16 July 2022) have been considered in the reporting of feedback received in Sections 3.4 to 3.8 of this report. All feedback where extensions were agreed, have also been considered in the reporting process.
- 2.3.3 We have had regard to responses received after the 16 July 2022 until the 1 January 2023 however these are not included in the analysis in Sections 3.4 to 3.8. Key themes are briefly summarised in Section 3.9 of this report. Feedback received after the 1 January 2023 and prior to the start of our next consultation (June 2023) will be considered in the next feedback report.

Table 2.7 – Breakdown of responses received

Response Method	Number of Responses
Online feedback form	2138
Paper feedback form (via post)	496
Free text response (letter)	68
Free text response (email)	1085

# 3. Analysis of Feedback

## 3.1 Introduction

- This chapter summarises the responses received to the 2022 non-statutory public consultation and the changes to the Project made as a result.
- 3.1.2 Chapter 3 is structured as follows:
  - 3.2 Feedback form: contains a breakdown of the feedback form in terms of open and closed questions;
  - **3.3 Approach to analysis:** outlines the approach taken;
  - 3.4 Responses to closed questions: details the results to the closed questions;
  - **3.5 Reponses to open questions:** details the themes raised from the open questions;
  - 3.6 National Grid's response to technical stakeholder comments received: contains tables which set out National Grid's response to responses received to the 2022 non-statutory consultation;
  - 3.7 National Grid's response to public and non technical stakeholder comments received: contains tables which set out National Grid's response to responses received to the 2022 non-statutory consultation;
  - 3.8 How feedback has influenced design: outlines the changes that have been made as a result of the responses received to the 2022 non-statutory consultation; and
  - 3.9 Responses received after consultation close: contains a summary of themes which were received.

## 3.2 Feedback form

- The feedback form consisted of eight sections and asked a total of 21 questions, including a mix of closed and open questions. The closed questions asked about certain aspects of the Project and, where appropriate, an open question followed which invited consultees to give further information on their chosen response. The sections consisted of:
  - About you Your details (closed questions);
  - General Q1 (closed):
  - Policy context Q2 (closed), Q3 (closed):
  - Our preferred corridor and graduated swathe Q4 (closed/open), Q5 (open) and Q6 (open);
  - Substations Q7 (closed/open), Q8 (open) and Q9 (open);
  - Other considerations Q10 (open) and Q11 (open);

- Our consultation process Q12 (closed), Q13 (closed/open), Q14 (closed/open), Q15 (closed), Q16 (closed) and Q17 (open); and
- Equality and diversity Q18 (closed), Q19 (closed), Q20 (closed) and Q21 (closed).
- 3.2.2 A copy of the feedback form can be found in Appendix G.
- The closed (quantitative) questions are detailed in Section 3.3, while comments received during the open (qualitative) questions are detailed in Section 3.6 and 3.7.

## 3.3 Approach to analysis

- Following the close of the consultation, National Grid reviewed and considered all the responses received during the non-statutory consultation period (16 June 2022) and up to a month after the consultation closing (16 July 2022). Where extensions were agreed, feedback was also considered using the same approach.
- The responses to the closed questions were analysed and the outcome of this analysis is set out in Section 3.4. With regards to the percentages on the graphs in Section 3.4, the numbers have been rounded up or down to provide the percentage and as such there will be times when the totals are not equal to 100%.
- To analyse the responses received to the open questions, a coding framework was used based on the structure of the consultation response form. This enabled the grouping of responses into themes which was considered a reasonable and proportionate approach given the volume of feedback received and preferable to setting out each individual item of feedback in this report which would lead to duplication.
- 3.3.4 . A response to an open text question could receive multiple codes to highlight different themes covered. A classification tree was created to code all written/longform feedback this comprised of letters, emails, and the free text sections on the response form.
- Responses were also accepted through letter and email, and these were recorded and analysed in the same way as the open question responses to the feedback forms.
- Classification categories were created based on issues raised at events and briefings. In addition, new classifications were added on an ad-hoc basis as feedback was received allowing for further breakdown of themes.
- Each category was broken down into further sub-sections. This comprised of the sentiment of the comment (positive, negative, neutral) and whether the comment can be considered a suggestion.
- Some categories (such as visual impact) were also split so that comments could be coded as being specific to a certain area of the Project.
- All responses, regardless of their origin, were analysed by the Project team and assigned codes based upon the content of the response(s) provided.
- Each response was assigned a unique reference number to create an audit trail throughout the analysis process. Quality assurance checks were undertaken to ensure that each response was accounted for and analysed.
- We have had regard to responses received after the 16 July 2022 until the 1 January 2023 however these are not included in the analysis in Sections 3.4 to 3.8. Key themes are briefly summarised in Section 3.9 of this report. Feedback received after the 1

- January 2023 and prior to the start of our next consultation (June 2023) will be considered in the next feedback report.
- National Grid has considered every issue raised and had regard to all feedback, albeit it has not been able to accede to every suggestion or request.
- National Grid's response to feedback at this stage is preliminary and based on the Government's specific nationally applicable guidance to electricity infrastructure companies. The conclusions made will all be proportionately reviewed and back checked at each future stage as the Project proceeds and in conjunction with feedback received from future consultations.

## 3.4 Responses to closed questions

- This section presents feedback gathered through the closed questions on the feedback form. This includes responses, received up to a month after the consultation closing (up to the 16 July 2022).
- We have had regard to responses received after the 16 July 2022 until the 1 January 2023 however these are not included in the analysis in Sections 3.4 to 3.8. Key themes are briefly summarised in Section 3.9 of this report. Feedback received after the 1 January 2023 and prior to the start of our next consultation (June 2023) will be considered in the next feedback report.

## About you - How would you describe your interest in East Anglia GREEN?

- In response to this question which asked respondents to describe their interest in East Anglia GREEN (Figure 3.1), the majority (84%) of respondents who answered this question indicated that they were a 'Local resident'. The next most popular category was 'Landowner' with 6% of respondents that selected this option. 3% of respondents selected the option 'Other' and these are summarised in paragraph 3.4.3. A small percentage of responses were received from 'Local representatives', 'Regular visitors', 'Local interest group members', 'Local business owners' and 'Statutory organisations' and each of these groups received 2% or less.
- 3.4.4 Other responses included for example:
  - Lake manager;
  - Fishing club member;
  - Parish councils;
  - Holiday in the area;
  - Trustees of charities; and
  - Priory farm aviators.

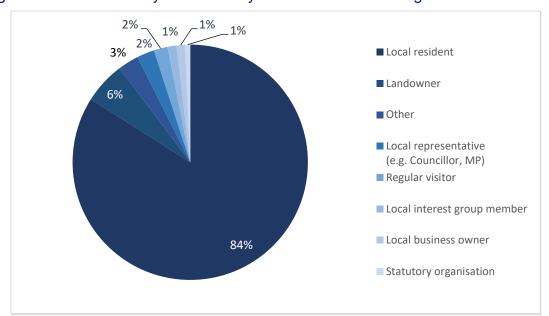
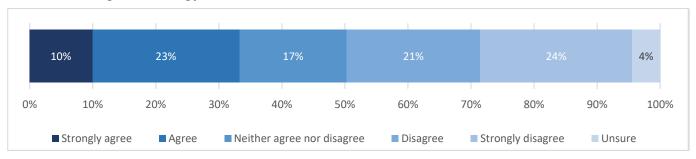


Figure 3.1 - How would you describe your interest in East Anglia GREEN?

## **General - Question 1**

In response to question 1, which sought to gauge respondents' levels of agreement with the identified need for the Project, 33% of respondents that answered this question agreed with the need (10% strongly agreed and 23% agreed). In comparison, 45% of respondents disagreed (21% disagreed and 24% strongly disagreed). 17% of respondents indicated that they 'Neither agree nor disagree' with the final 4% being 'Unsure'.

Figure 3.2- Do you agree with the identified need for East Anglia GREEN in upgrading the region's energy infrastructure?



## **Policy context - Question 2**

- In response to question 2, where respondents were asked how concerned they were about the effect of global warming/climate change on their life, almost two thirds (66%) of respondents who answered this question showed concern. 32% of respondents indicated that they were 'Very concerned' whilst 34% 'Concerned'. 26% of respondents selected 'Neutral' and the remaining 9% indicated that they weren't concerned (5% 'Not that concerned' and 4% 'Not at all concerned').
- When asked how concerned they were about the effect of global warming/climate change on the lives of future generations, levels of concern increased with three quarters (75%) of respondents who answered this question showed this. 47% of respondents were 'Very concerned' and 28% were 'Concerned'. One fifth of respondents (20%) selected 'Neutral' and the remaining 5% indicated that they weren't concerned (3% 'Not that concerned' and 2% 'Not at all concerned').

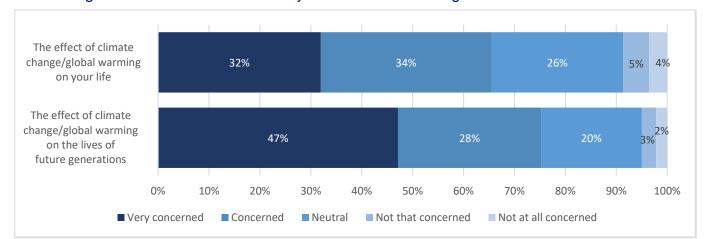
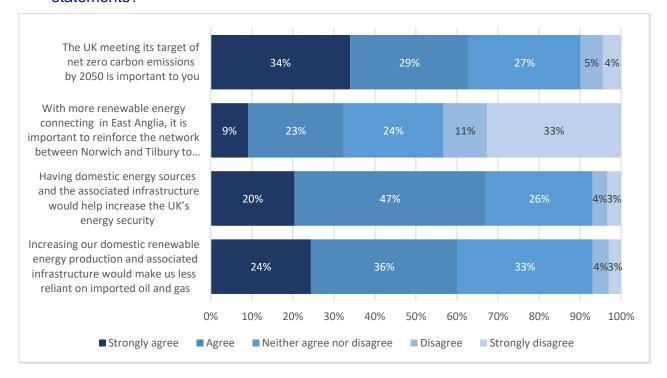


Figure 3.3- How concerned are you about the following?

## **Policy context - Question 3**

- In response to question 3, where respondents were asked the extent to which they agree or disagree with different statements, each option received varying results.
- The statement: "The UK meeting its target of net zero carbon emissions by 2050 is important to you" received higher levels of agreement (63%) than disagreement (9%). 34% of respondents who answered this question selected 'Strongly agree' and 29% selected 'Agree'. 27% of respondents neither agreed nor disagreed whilst the remaining 9% disagreed (5% selected 'Disagree' and 4% selected 'Strongly disagree').
- The statement: "With more renewable energy connecting in East Anglia, it is important to reinforce the network between Norwich and Tilbury to enable this energy to be transported to where it is needed" received higher levels of disagreement (44%) compared to agreement (32%). One third (33%) of respondents selected 'Strongly disagree' and 11% selected 'Disagree'. 9% of respondents selected 'Strongly agree' and 23% selected 'Agree'. The remaining 11% of respondents indicated that they neither agreed nor disagreed.
- The statement: "Having domestic energy sources and the associated infrastructure would help increase the UK's energy security" received higher levels of agreement (67%) compared to disagreement (7%). One fifth (20%) of respondents selected 'Strongly agree' and 47% selected 'Agree'. 4% selected 'Disagree' and 3% of respondents selected 'Strongly disagree'. The remaining 26% of respondents neither agreed nor disagreed.
- The statement: "Increasing our domestic renewable energy production and associated infrastructure would make us less reliant on imported oil and gas" received higher levels of agreement (60%) than disagreement (7%). 24% of respondents who answered this question selected 'Strongly agree' and 36% selected 'Agree'. Almost one third (33%) of respondents neither agreed nor disagreed whilst the remaining 7% disagreed. 4% selected 'Disagree' and 3% selected 'Strongly disagree'.

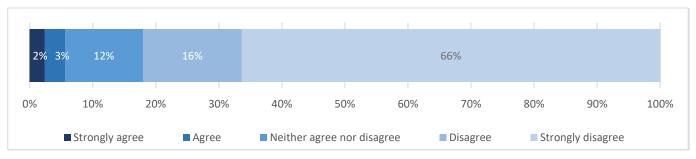
Figure 3.4 - To what extent do you agree or disagree with each of the following statements?



## Our preferred corridor and graduated swathe - Question 4

In response to question 4, where respondents were asked if they agreed with the process taken to select the preferred corridor, the majority of the respondents who answered this question disagreed. Almost two-thirds (66%) selected that they 'Strongly disagree' and 16% selected 'Disagree'. 12% of respondents selected that they 'Neither agree nor disagree' with the process taken. The remaining 5% of respondents agreed (2% selected 'Strongly agree' and 3% selected 'Agree').

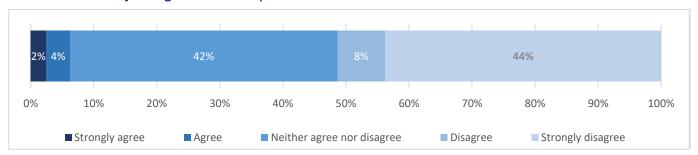
Figure 3.5 - We considered and assessed a number of options to select a preferred corridor. Do you agree with the process we have taken?



## **Substations - Question 7**

In response to question 7, where respondents were asked if they agreed with the process taken to select the substation site, the largest proportion of respondents (52%) who answered this question disagreed. 44% selected that they 'Strongly disagree' and 8% selected 'Disagree'. A large proportion of respondents (42%) selected that they 'Neither agree nor disagree' with the process taken. The remaining 6% of respondents agreed (2% selected 'Strongly agree' and 4% selected 'Agree').

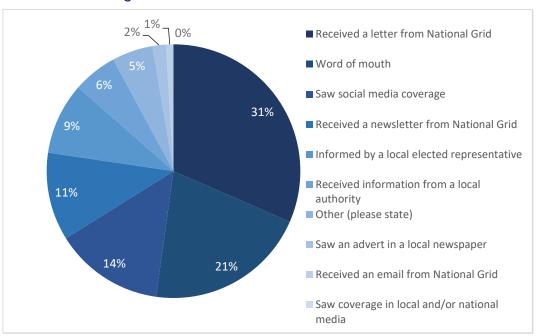
Figure 3.6 - We considered and assessed a number of options to select a substation site. Do you agree with the process we have taken?



## **Our consultation process - Question 12**

- In response to question 12, where respondents were asked to indicate how they heard about the consultation, the most popular method was 'Received a letter from National Grid' with 31% of responses for this option. Respondents were allowed to select more than one option. 'Word of mouth' was the next most popular method with just over a fifth (21%) of total responses that selected this.
- The least popular method of publicity was 'Saw coverage in local and/or national media' with no respondents that selected this (0%). Remaining response methods and percentages are shown in Figure 3.7.
- Respondents who selected 'Other' were asked to provide detail. These responses included:
  - Received a letter from land agents;
  - Raised at local interest group meetings;
  - Posters in the area; and
  - Local radio.

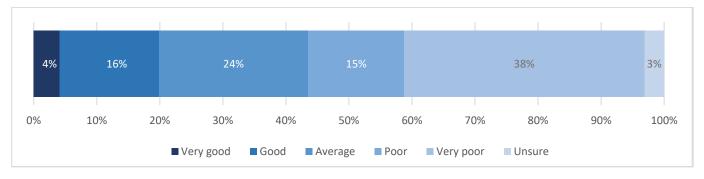
Figure 3.7- Please let us know how you heard about this consultation by ticking one or more of the following boxes.



## **Our consultation process - Question 13**

In response to question 13, where respondents were asked to rate the information included as part of this consultation in terms of how clearly it was presented and how easy it was to understand, a fifth (20%) of respondents who answered this question thought that it was good. 4% selected 'Very good' and 16% selected 'Good'. Almost a quarter of respondents (24%) thought that the materials were 'Average' whilst a small 3% were 'Unsure'. The remaining 53% of respondents thought that the materials were poor, with 15% that selected 'Poor' and 38% that selected 'Very Poor'.

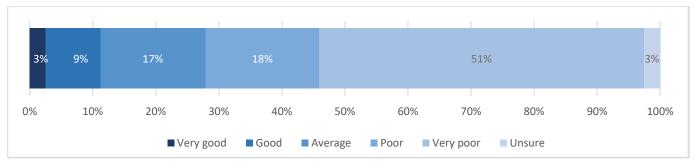
Figure 3.8 - Please rate the information included in our consultation materials in terms of how clearly it was presented and how easy it was to understand.



## Our consultation process - Question 14

In response to question 14 where respondents were asked to rate how well the consultation was promoted and advertised to the public, the largest proportion of respondents (51%) who answered this question thought that it was 'Very Poor'. A further 18% of respondents selected 'Poor'. This was closely followed by 17% of respondents who thought that the promotion and advertisement was 'Average'. 12% of respondents thought that it was good (3% selected 'Very good' and 9% selected 'Good'). The remaining 3% of respondents were 'Unsure'.

Figure 3.9 - Please rate how well this consultation was promoted and advertised to the public.



## Our consultation process - Question 15

In response to question 15, where respondents were asked if they attended any of the consultation events, over half (55%) of respondents who answered this question said 'No'. 36% of respondents attended a face-to-face event whilst 5% attended an event that was online. Only 4% of respondents indicated that they had attended both a face-to-face and online event.

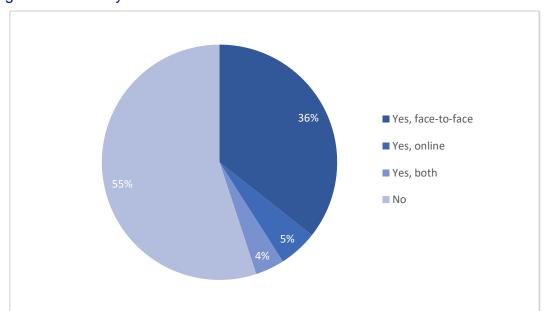
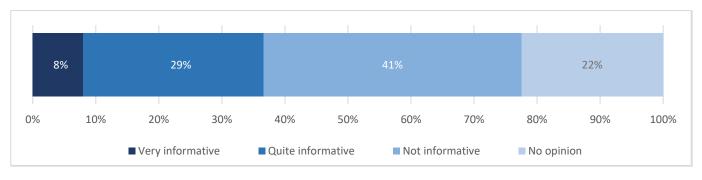


Figure 3.10 - Did you attend one of our face-to-face or online consultation events?

## Our consultation process - Question 16

In response to question 16, where respondents who answered 'Yes' to question 15 were asked how informative they found the consultation events, 37% of respondents who answered this question indicated that they found the events informative. 8% thought the events were 'Very informative' and 29% 'Quite informative'. 41% of respondents indicated that the events were 'Not informative' whilst the remaining 22% showed 'No opinion'.

Figure 3.11 - If you answered yes to question 15, how informative did you find our consultation events?



## **Equality and diversity - Question 18**

In response to question 18, where respondents were asked to indicate their gender, almost half of responses to this question (49%) were from males, compared to 39% from females. <1% of respondents categorised themselves as *'non-binary'*. The final 12% of respondents did not wish to provide their gender.

12%

49%

I Male
Female
Prefer not to say
Non-binary

Figure 3.12 - What is your gender?

## **Equality and diversity - Question 19**

In response to question 19, where respondents were asked if they considered themselves to have a disability, the majority of respondents who answered this question (79%) indicated that they did not, whilst a small proportion (6%) indicated that they did. The remaining 15% of respondents did not wish to answer.

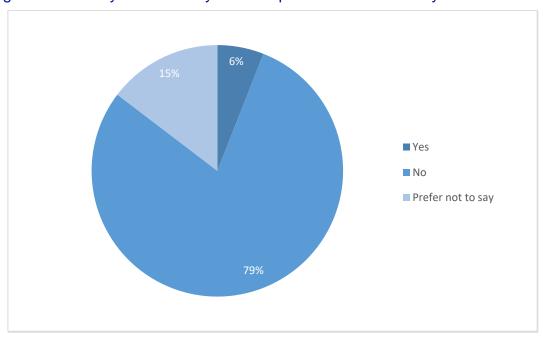


Figure 3.13 - Do you consider yourself a person with a disability?

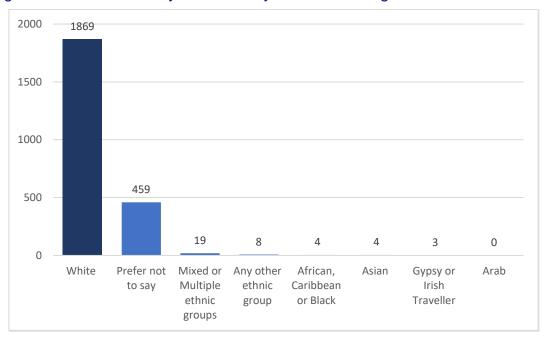
## **Equality and diversity- Question 20**

In response to question 20, where respondents were asked how they would describe their ethnic background, the majority of respondents that answered this question (79%)

indicated that they were 'White'. Almost a fifth (19%) of respondents did not wish to provide their ethnic background.

Respondents who selected 'Any other ethnic group' were asked to provide more details. Responses included: Anglo-Celtic, multi-cultural and statements around the relevance of the question.

Figure 3.14 - How would you describe your ethnic background?



## **Equality and diversity- Question 21**

- In response to question 21, where respondents were asked what their age was, feedback was received from respondents who answered this question ranging from 'Under 13' to the '76+' categories.
- The highest numbers of responses were received from those in the age group of '51-75' with just over half (52%) of representation in this age bracket. The next most represented age group with just under a quarter (23%) was '21-50'. 8% representation was from the age group '21-50'. The lowest represented age groups were '13-20' and 'Under 13' with 1% and <1% respectively. The remaining 16% of respondents did not wish to provide their age.

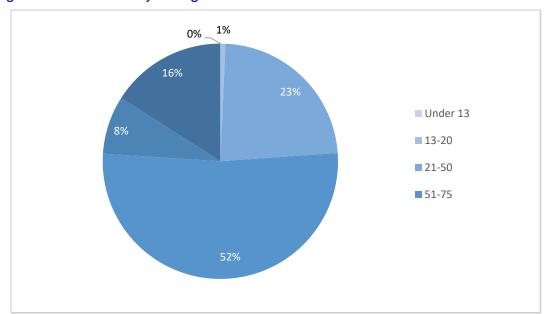


Figure 3.15 - What is your age?

## 3.5 Responses to open questions

- This section presents and discusses the feedback gathered via the open questions on the feedback form, or via other open formats provided by respondents (e.g., letters/emails).
- This section begins by outlining the different open questions that were asked as part of the feedback form.
- This is followed by some key themes which have emerged from the analysis of the feedback, which give a high-level understanding of the primary areas of interest and/ or concern amongst respondents.

## Our preferred corridor and graduated swathe- Question 5

- 3.5.4 Question 5 of the feedback form asked:
  - "Are there any features within the graduated swathe that you think we should take into consideration when developing our plans?"
- Responses to the points raised through open written feedback have been summarised in Sections 3.6 and 3.7.

## Our preferred corridor and graduated swathe- Question 6

- 3.5.6 Question 6 of the feedback form asked:
  - "Please comment on any aspects of the routeing and mitigation that you would like to see in relation to our proposals through the Area of Outstanding Natural Beauty (AONB)."
- Responses to the points raised through open written feedback have been summarised in Sections 3.6 and 3.7.

## **Substations- Question 8**

3.5.8 Question 8 of the feedback form asked:

"Please comment on any aspects of the site and/or areas of mitigation that you would like to see in relation to our proposals for a new connection substation."

Responses to the points raised through open written feedback have been summarised in Sections 3.6 and 3.7.

## **Substations- Question 9**

3.5.10 Question 9 of the feedback form asked:

"We will need to connect the reinforcement into existing substations at Norwich Main, Bramford and Tilbury and to carry out some work at these locations. Is there anything that you think we should consider in relation to this work?"

Responses to the points raised through open written feedback have been summarised in Sections 3.6 and 3.7.

#### Other considerations- Question 10

3.5.12 Question 10 of the feedback form asked:

"Are there any particular features, considerations or mitigation that you think we should consider as we refine our proposals?"

Responses to the points raised through open written feedback have been summarised in Sections 3.6 and 3.7.

#### Other considerations- Question 11

3.5.14 Question 11 of the feedback form asked:

"Are there any other considerations we should take into account when developing our proposals?"

Responses to the points raised through open written feedback have been summarised in Sections 3.6 and 3.7.

## **Our consultation process- Question 17**

3.5.16 Question 17 of the feedback form asked:

"Do you have further comments about our materials, consultation process or any suggestions for how we can improve our consultation?"

Responses to the points raised through open written feedback have been summarised in Sections 3.6 and 3.7.

# 3.6 National Grid's response to technical stakeholder comments received

3.6.1 This section contains feedback received to this consultation from **technical stakeholders** and National Grid's response to that feedback. These responses were

written in the context of the information available at the 2022 non-statutory consultation. Information provided is subject to change as the Project develops.

- Responses were received from technical stakeholders as listed in Table 3.1.
- Table 3.2 contains a summary of comments on all general matters raised. Tables 3.3 to 3.9 relate directly to the route swathe sections as separated by local authority geographical areas as shown in Figure 1.2. For ease of reference, the table for each section follows the local authority colour code in Figure 1.2.

Table 3.1- Technical stakeholders who responded to the consultation

Stakeholder	Stakeholder	Stakeholder
Babergh and Mid Suffolk District Councils	EDF Renewables	National Farmers' Union (NFU)
Basildon Council	Environment Agency	Norfolk County Council
Braintree District Council	Essex County Council	North East Essex Clinical Commissioning Group
Brentwood Council	Essex Wildlife Trust	The Royal Society for the Protection of Birds (RSPB)
Community Alliance for a Rural Environment (CARE) Suffolk	Forestry Commission	South Norfolk Council
Chelmsford City Council	Historic England	Suffolk County Council
Colchester City Council	Low Carbon	Suffolk Preservation Society
Campaign to Protect Rural England (CPRE) Norfolk	Lower Thames Crossing (LTC)	Suffolk Wildlife Trust
CPRE Essex	LUC (On behalf of Thurrock Council)	Tendring District Council
Dedham Vale and Stour Valley Partnership and Suffolk Coast and AONB Partnership	Maldon District Council	Thurrock Council
Diss and District Neighbourhood Plan Steering Group	Mid Suffolk District Council	Woodland Trust
East of England Ambulance Service	Ministry of Defence (MOD)	Writtle University College
East Suffolk County Council	National Highways	

## Non-section specific feedback

Table 3.2- Summary of general consultee comments and National Grid's response

Ref no.	Summary of matters raised	National Grid's response
Agricultura	al land	
3.2.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the potential impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.
Communit	ty / Social impact	
3.2.2	Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.  We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.  The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:  • Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)  • Email us: contact@n-t.nationalgrid.com  • Write to us: FREEPOST N TO T (No stamp or further address details are required)
3.2.3	Local communities have the impacts, but don't benefit / The Projects only benefits those living elsewhere (e.g. London)	There is a need to reinforce the existing high voltage electricity network in the East Anglia region. It does not currently have the capability needed to reliably, and securely, transport the electricity that will be generated and connected to the electricity transmission network by 2030, while working to the required standards. The proposal will benefit the UK as a whole including local communities by contributing to our energy security in the future, ensuring that the national grid meets future power demands.

Ref no.	Summary of matters raised	National Grid's response
3.2.4	Request that benefits are contributed to communities that are impacted by the Project / National Grid provide a voluntary Community Benefit Contribution package / Local community fund	We know that our responsibility as a business goes beyond safely building new energy infrastructure to enable a cleaner, fairer, and affordable future. We want to leave a lasting positive impact where we build our projects, to help those areas and communities thrive and to support a sustainable future. Our Responsible Business Charter sets out our commitments and ensures that responsibility is woven through every we do. It focusses on five key areas where we believe we can really make a difference: the environment, our communities, our people, the economy, and our governance.
		We are working with stakeholders and communities to understand what is important to them and will endeavour to deliver initiatives in the region to support those priorities. There are four key areas where we believe we can bring benefit to those who are hosting the infrastructure that supports the green energy transition:
		<ul> <li>Natural Environment – we will build partnerships with environmental groups and NGOs where we can support initiatives that enhance the landscape, biodiversity, and availability of green space within the areas we are constructing our projects.</li> </ul>
		<ul> <li>Net Zero – we will help to support the region in achieving its own net zero priorities.</li> </ul>
		<ul> <li>Skills and employment – we are extending our Grid for Good programme, and building other partnerships, to deliver training and skills development in the region, to encourage the next generation of green energy workers</li> </ul>
		<ul> <li>Community Grant Programme – when projects are in construction, through our Community Grant Programme, charities and not- for- profit organisations can apply for a grant towards community-based initiatives that deliver social, economic, and environmental benefits.</li> </ul>
		In addition, the government recently ran a consultation seeking views on how community benefits should be delivered for communities that host onshore electricity transmission infrastructure. We continue to engage with government on this topic and will work with communities and stakeholders to implement the outcome of this consultation.
3.2.5	Request that construction infrastructure (e.g. bridges and tracks) are retained to improve public access to the area	We would welcome the identification of location specific areas where this kind of benefit can be realised. This is obviously dependant on landowner agreements and local authorities agreeing to these items remaining in situ. Furthermore, being able to leave a lasting legacy of improving the Public Rights of Way (PRoW) network in the area is something National Grid is vested in exploring further, endeavouring to include this within our overall plans where possible.
Construct	tion impacts	
3.2.6	Need to mitigate the impacts of construction and minimise disruption	National Grid, as part of our iterative design process, will undertake an assessment to gain an understanding of the existing local road network which the Project may need to utilise during both the construction and operation phases. As part of this assessment, we will work closely with the relevant highway authorities to understand and gain information on the local road network.

Ref no.	Summary of matters raised	National Grid's response
		This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required, control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable. Where temporary haul roads are required, for example to access the location of a substation, these will be carried out in consultation with the landowners and the local highway authority, to reduce impacts to local road users
3.2.7	Concerned about noise and other disturbances resulting from construction (e.g. mud on roads, dust etc.) Use screening and	National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during project development, assessed according to the appropriate UK standards, and mitigated where necessary.
	mitigation measures for these where possible	We set strict technical standards for the equipment we install on our network. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.
		As part of the Development Consent Order (DCO) application, a Construction Traffic Management Plan (CTMP) will be submitted which will outline the best practice and standard control measures relating to the movement of construction related vehicle movements. These measures will include wheel washing of vehicles and the correct and tidy management of works areas to reduce as far as practicable dust and mud entering the local road network in the form of 'track-out'.
3.2.8	Ensure that any environmental damage as a result of construction is mitigated (e.g. replanting / rewilding / habitat replacement)	Mitigation will be proposed as part of the Environmental Impact Assessment (EIA), where appropriate. An assessment of soils and agriculture will be included in the EIA. This will include the requirement for soil management measures to be detailed in a Soil Resource Plan (SRP) which will form part of the Code of Construction Practice (CoCP). Measures would include how the topsoil and subsoil will be stripped and stockpiled and include suitable conditions for when soil handling will be undertaken, for example avoiding handling of waterlogged soil. Where land is being returned to agricultural use, the appropriate soil conditions (for example through the replacement of stripped layers and the removal of any compaction) will be recreated. Habitat will be reinstated considering a commitment of 10% Biodiversity Net Gain (BNG).
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all available options.
3.2.9	Concern about cumulative effect on development in East Anglia	National Grid will, as part of the Environmental Impact Assessment (EIA) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This, in summary, is a

Ref no.	Summary of matters raised	National Grid's response
	(housing developments, road works, etc)	four step process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments. Identified effects and any subsequent mitigation measures (if necessary) will be presented within the Environmental Statement (ES).
		We will engage with stakeholders such as Local Planning Authorities to understand the other relevant proposed developments in the Project area that should be included in the long/short list for assessment, such as solar farms, housing developments and major roads. We will work closely with other developers where there may be a cumulative impact to ensure that we understand their proposals so that these can be considered in our own assessment.
3.2.10	Local road infrastructure is not suitable for heavy construction vehicles and machinery	National Grid will, as part of the iterative design process, undertake an assessment to understand the existing local road network which the Project may need to utilise during both the construction and operation phases. As part of this assessment, we will work closely with the relevant authorities and their highways teams.
		Where temporary haul roads are required to be constructed to access the location of a substation, these will be carried out in consultation with the landowners and the local highway authority, to reduce impacts to local road users.
		This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. Within the CTMP, it will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.2.11	Concerns about disruption in general (no details given)	National Grid notes the concern and will work hard to reduce disruption as far as practicable by implementing standard measures/ processes such as a Construction Traffic Management Plan (CTMP) for construction related vehicle movements on the public highways, through to continual consultation with landowners to accommodate, where possible, existing, and planned agricultural activities when temporary access is required to construct infrastructure within field networks. The measures to reduce and control possible disruption would be presented within the CTMP and the Code of Construction Practice (CoCP) for the Project.
Consultat	ion	
3.2.12	Comment supportive of proposal / engagement that has taken place - feel listened to	National Grid note the respondent's feedback.

Ref no.	Summary of matters raised	National Grid's response
3.2.13	Criticism of consultation questionnaire / questions are misleading	The feedback form provided as part of the consultation is only a guide to enable the consultees to provide feedback on our proposals. The feedback form included a number of open and closed questions. Free text boxes enabled people to provide any other feedback they wanted. Respondents were free to answer any questions they felt most relevant. We have found in the past, that people find a feedback form useful in structuring their responses and that the form has been helpful. However, feedback can be provided in any way that the consultee wishes, either by using the feedback form template, by letter, email, or telephone. All feedback received from the 2022 non-statutory consultation has been read by the Project team and all feedback will continue to be considered as the Project develops. All feedback has been recorded and responded to in this report or in the Project documents supporting the 2023 non-statutory consultation.
		We note concerns about questions 1, 2 and 3 in the feedback form. The responses to these questions will be reported, but support expressed for low carbon generation will not be taken in any way, as being in support of this Project.
3.2.14	Need further information / Clearer information on the Project and its impacts are needed / Improved clear mapping	the work done to date was included in the Project consultation documents including the Corridor and Preliminary Routeing and Siting Study (CPRSS). It was important to us to consult during the early stages of the Project to ensure that people were aware of the Project and had the opportunity to provide feedback in the early stages before f further work was carried out. The level of detail of the information presented at the early stages of the project which included environmental baseline, was proportionate to the Project's current status and stage through the iterative design process. This information was based upon desk-based reviews and freely accessible sources. As the Project's design progresses, detailed environmental baseline will be collected to enable the undertaking of the Environmental Impact Assessment (EIA). This will include but not be limited to, a range of seasonal surveys on flora and fauna, intrusive and non-intrusive archaeological surveys and landscape and visual walkovers to define viewpoint locations and further appreciate the local topography and existing planting arrangements.  All the feedback received has been read and has been and will continue to be considered in how we develop our proposals further. There will be further consultation as the Project develops where we will share more detailed information on our proposals as they continue to develop, including how feedback has shaped the Project. We will also share further information relating to environmental baseline information collected and the potential environmental impacts of our proposals and how these are proposed to be mitigated.  We note the concerns about the mapping. An interactive map was and continues to be available on the Project website so that people can look at our proposals in more detail. Large scale maps were available at all the events
		and copies were posted to members of the public who requested them during and following events. We will review how we can present materials at the next consultation, including maps, and balance this with the scale of the Project.
3.2.15	Criticism of consultation process / Being misled about the Project / Don't trust it will make a difference	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments (see Appendix A of this report) based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable. The Public Consultation Strategy is available in Appendix B and the consultation was undertaken in accordance with this.

Ref no.	Summary of matters raised	National Grid's response
		Feedback has been reviewed by the Project team and responses are published in this Feedback Report. Where feedback has influenced the design of the Project this has also been included.
		Before any further stage of consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
3.2.16	'Green' Project Name is misleading	The acronym GREEN stands for Green Energy Enablement to underline the significant importance of the UK's net zero aspirations. The Project is required to connect important new renewable generation on the east coast to the National Electricity Transmission System (NETS) so that it can be taken to homes and businesses where it will be used. This new generation is an important part of the Government's targets to move to a low carbon future for the country and is required to achieve the goal of 50 gigawatts (GW) offshore wind by 2030.
		National Grid has changed the name of the Project to Norwich to Tilbury to make it clear it's part of The Great Grid Upgrade.
		All projects that are part of the Great Grid Upgrade will include specific locations in their names to make it easy for people to understand what and where we are proposing to build new infrastructure.
		Although the name of the Project has changed the focus remains the same – to bring new sources of renewable energy to homes and businesses across East Anglia and the UK.
3.2.17	Criticism of consultation timing - not enough time to consider the proposals / no face-to-face meetings until late in the process	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected local authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report together with information on how we complied with the strategy. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with local authorities for their views on how we should conduct the consultation.
		All feedback has been reviewed by the Project team and responses are published in this Feedback Report. Where feedback has influenced the design of the Project, this information is summarised in Section 3 of this report. A total of 12 face-to-face events along the proposed route and 12 webinars were held during the consultation period of 8 weeks. Recordings of the webinars were available on the Project website for people to view at any time. The Project team were available and continue to answer questions through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:
		<ul> <li>Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)</li> </ul>
		Email us: contact@n-t.nationalgrid.com
		Write to us: FREEPOST N TO T (No stamp or further address details are required)
3.2.18	Comment supportive of the Project and its aims (e.g.	National Grid note the respondent's feedback.

Ref no.	Summary of matters raised	National Grid's response
	investment in offshore / nuclear / low carbon energy)	
3.2.19	Residents who will be affected by the Project need to be communicated with	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report together with information on how we complied with the strategy. The Consultation Strategy is available as an appendix to this report. Before any future consultation we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
		All feedback has been reviewed by the Project team and responses are published in this Feedback Report. Where feedback has influenced the design of the Project, this information is summarised in Section 3 of this report. A total of 12 face-to-face consultation events along the proposed route and 12 webinars were held during the consultation period. Recordings of the webinars were available on the Project website for people to view at any time. The Project team were and continue to be available to answer questions both during and after the consultation through the Project details on the website, by phone, freepost, or email. The consultation zone for the Project covered the preferred corridor and, as a minimum, an area of 1 km each side of the preferred corridor, and a letter introducing the Project was sent to all addresses in this area, approximately 50,000 addresses.
3.2.20	Need for additional consultation events to be held (e.g. amount of events, evening sessions, etc) and wider publicity / Those within marginalised groups need to be included too	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report together with information on how we complied with the strategy. The Consultation Strategy is available as an appendix to this report. Before any future consultation we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
		A total of 12 face-to-face consultation events along the proposed route and 12 webinars were held during the consultation period. Recordings of the webinars were available on the Project website for people to view at any time. The face-to-face events and webinars were at varying times through the day (including weekend and evening sessions) and events were held on four Saturdays over the consultation period. The Project team were and continue to be available to answer questions either be telephone or email through the Project website. The Project team are happy to discuss any special requirements for marginalised groups for consultation and implement these where practicable.
3.2.21	Criticism of National Grid	All comments and feedback are welcomed and noted.
3.2.22	Make sure that you listen to feedback	In response to the 2022 non-statutory consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities, and technical stakeholders. All responses received have been read and considered by the Project team as we have developed our proposals. Information on how

Ref no.	Summary of matters raised	National Grid's response
		feedback has influenced the Project is available as part of our consultation within this report and other Project documents available on the Project website.
3.2.23	Criticism of Corridor and Preliminary Routeing and Siting Study (CPRSS)	National Grid notes the feedback and considers the Corridor and Preliminary Routeing and Siting Study (CPRSS) to have been an appropriate means for providing information on the work to date and basis for progressing the Project. We continue to review the approach to reporting to enhance the ease of information dissemination.
3.2.24	Criticism of Option Identification and Selection Process / Criticism of the 'Least Worst Regret' methodology used for Options Selection	We consider the process to have been an appropriate means for providing information on the work to date and basis for progressing the Project set within the duties and policy framework within which we must work. We will continue to review the Project, including back-checking. The strategic options that have been assessed are subject to review on an ongoing basis. In addition to the work already done, including assessment on Least Worst Regret basis which we believe to be a robust method (used by the ESO and accepted and adopted by Ofgem) we have conducted the back check and review in accordance with National Grid's document 'Our Approach to Consenting', which was published in April 2022. The Norwich to Tilbury Strategic Options Backcheck and Review (SOBR) appraises the ability of both onshore and offshore options to meet the system need while balancing cost, technical performance and environmental and socio-economic effects.
		The Norwich to Tilbury SOBR has been prepared by National Grid Electricity Transmission plc (NGET) as part of the ongoing strategic options assessment and decision-making process involved in promoting new transmission projects.
		The report explains that, without reinforcement, the transmission system in East Anglia will have insufficient capacity to accommodate contracted and predicted growth in generation connecting in the area.
		The Norwich to Tilbury SOBR concludes that we should continue take forward an onshore combination of options:
		<ol> <li>EAN 4 – Overhead Line from Norwich Main to Bramford; and</li> </ol>
		<ol> <li>EAS 2 – Overhead Line from Bramford via a new substation to Tilbury, with undergrounding through the Dedham Vale Area of Outstanding Natural Beauty (AONB).</li> </ol>
3.2.25	Residents affected by the Project should have been directly consulted / The Primary Consultation Zone (PCZ) should be widened	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback these comments where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any stage of consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
		All feedback has been reviewed by the Project team and responses are published in this Feedback Report. Where feedback has influenced the design of the Project this information is summarised in Section 3 of this report.
		The consultation zone included the preferred corridor and an area of a minimum of 1 km each side of the preferred corridor (the PCZ). We sent the Project newsletter to approximately 50,000 addresses along the preferred corridor within an area of approximately 1 km either side. We also wrote briefing letters to Parish Councils both within the PCZ and in a wider area. We also published a series of newspaper advertisement setting out information on the

Ref no.	Summary of matters raised	National Grid's response
		consultation. During the consultation period 12 face-to-face events and 12 webinars were held, several of which were undertaken in the early evening or were at the weekend. Recordings of the webinars were made available on the Project website for people to watch at any time. The Project communication channels including a telephone line, freepost address and an email address remain available for people to ask questions about our proposals.
3.2.26	Request to generally hasten the process (e.g. including the	National Grid has to follow a due process to achieve consent and that includes considering all the responses received from each stage of consultation.
	consultation, construction, etc.)	We take into consideration the feedback received, gather survey data to understand the environment along the proposed route and identify how we can reduce the impacts of our projects.
		This process is time consuming, but necessary. We believe we are working as efficiently as possible, whilst maintaining compliance with the overall Development Consent Order (DCO) application process, to help achieve the Government target of 50 GW of offshore wind by 2030.
3.2.27	Advertising is misleading due to there being no pylons in the pictures / Misleading images used on brochure	The 2022 non-statutory consultation materials, including the newsletter and Project Background Document, showed a mix of photographs including images of infrastructure such as pylons. At the public events a range of materials were available including photographs of infrastructure both in construction and operation. We note the comment and continue to bear this in mind as we develop materials for the next consultation.
3.2.28	Suggestion that the 'graduated swathe' terminology is exaggerates the impact that the Project will have / Suggest that the width of the 'graduated swathe' is reduced	We note this feedback and will reflect on whether there are better approaches to communicating clear information when there remains uncertainty on design detail.
3.2.29	Criticism of the webinar (e.g. lack of preparation, poor level of knowledge, programme manager dismissive, lack of empathy, etc)	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any stage of consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
		All feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Section 3 of this report.
		The National Grid Project team has been, and continues to be available, to engage with both the public and stakeholders, about the Project and all webinars were led by the Project team. The Project team members have developed the proposals and work on the Project every day and therefore are well placed to answer any questions that may arise. We do understand that people have strong opinions about our proposals, and it is of utmost importance to us that we build a strong relationship with the communities where we propose to develop new

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		connections and understand their concerns/ thoughts on our proposals. We note the comment and will consider our approach.
3.2.30	Criticism of "piecemeal approach" i.e. splitting the Project into different areas	In presenting the proposals for the 2022 non-statutory consultation we felt it was important to not only have an overview of the proposals but also an approach that enabled people to look for information on the area where they lived in more detail. We presented information by Local Authority area as we felt this would be something that people were most familiar with. Most people found this approach helpful. We note the comment and will continue to consider the best approach for the next consultation to balance information about the Project overall, but also to ensure people can understand the proposals in their local area.
3.2.31	No consideration given to the alternative provision for Sizewell C or Bradwell - no plan to integrate or consider the connection of Sizewell C or Bradwell	New connections for new offshore wind and nuclear power generation projects and for interconnectors into East Anglia are expected to continue in addition to the current contracted position. These are being constructed or expected to be fed into existing substations at Necton, Norwich Main, Bramford, Friston and Sizewell. Although connection for nuclear generation does not currently form part of this Project, the Project will provide capacity for future generation from various generators, including Sizewell C, to be transmitted across electrical boundaries within East Anglia and the wider transmission network. In relation to the Bradwell B project, this in the feasibility stage. There is an existing overhead line connection to the Bradwell B site. However, this has been operating at lower voltage (132 kilovolts (kV)) and has not been used for a few years and is in generally poor condition. This would need to be rebuilt if connections were made at Bradwell and some sections may need to be re-routed. We would also still need to upgrade the existing network through Norfolk, Suffolk, and Essex to transport the electricity due to come onto the network in the Norwich area.
		Several options were considered in developing the Project through Norfolk, Suffolk and Essex to transport the electricity due to come into the network in the Norwich and Tendring peninsula area, and information on these is available in the Corridor and Preliminary Routeing and Siting Study (CPRSS). Following the close of consultation and review of feedback we have backchecked our previous work and considered other potential routeing options in this area and felt they had different impacts and offered no benefit over the option we are taking forward.
		In particular, given that there is no certainty about the Bradwell B proposals we do not consider a connection via Bradwell to be preferred. There would need to be reinforcement from Norwich to Bramford and from there to Bradwell requiring connections to cross the Special Protection Area (SPA) designated Blackwater Estuary (3 km to 7 km tunnel likely to be required at much greater cost) as well as interact with other Special Area of Conservation (SAC) / SPA designations. The onward connection from Bradwell via Rayleigh to Tilbury is also constrained by urban development (including around South Woodham Ferrers) and further environmental designations. Taken together routeing of the Project via Bradwell requires a greater amount of new infrastructure and is therefore less economic and efficient and expected to be associated with greater environmental effects and on this basis is less preferred.
		Should Bradwell B progress at some point in the future then we will consider how to best meet the connection requirements and amend or add to the Project as appropriate.
3.2.32	Criticism of the use of "Graduated Swathe" / Suggests it gives National Grid the power to	National Grid has developed several new connection projects over the last 10 years. Following consultation, we have previously received comments from communities about route corridors and requests for greater clarity on where our proposals may be within the proposed route corridors. The graduated swathe approach is an attempt to show

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	relocate the Project as they see fit	indicatively within the preferred corridor where our work to date indicates the connection may be made. The swathe is only indicative, and the proposals may change following feedback received, either within the indicative swathe or corridor or wider. We will show how feedback has influenced the design as the Project develops. We expect to submit our final designs to the Planning Inspectorate in 2025 who will then examine our proposals before making a recommendation to the Secretary of State (SoS) who will make the final decision on whether to give planning consent for the proposals.
3.2.33	Consultation advertising was not adequate / More consultation advertising needed	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We incorporated these comments where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation. We note the comment and will keep this under review at the next stage of the Project.
3.2.34	Criticism of Consultation Team / Lack of knowledge	The National Grid Project team has been and continues to be available to engage with both the public and stakeholders about the Project. The Project team have developed the proposals and work on the Project every day and therefore are well placed to answer any questions that may arise.
3.2.35	Request for impact surveys (ground, ecological harm, aesthetics, health impacts, air, archaeology, heritage, economic, tourism, agricultural etc) / Criticism of process	There is a staged approach to the process of collection of environmental data as any major project develops. National Grid is undertaking an Environmental Impact Assessment (EIA), which will consider the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022. This provided technical statutory bodies the opportunity to comment on the scope of the proposed environmental survey work. Outputs of the environmental surveys will be detailed within the Environmental Statement (ES) and/ or standalone documents to support the application for Development Consent Order (DCO).
3.2.36	Consider Sea Link consultation - a new consultation must not take place before the Offshore Transmission Network Review (OTNR), the new (accompanying) Network Options Assessment (NOA) and the Sea Link consultation have taken place	The SeaLink consultation ran from the 24 October to 16 December 2022. Feedback from this consultation will be published in a feedback report. Information on this project is available on the project website <a href="https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink">https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink</a> The Government's Offshore Transmission Network Review (OTNR) looks into the way that the offshore transmission network is designed and delivered, consistent with the ambition to deliver net zero emissions by 2050. The Energy Minister announced the scope of a review into the existing offshore transmission regime to address the barriers it presents to further significant deployment of offshore wind, with a view to achieving net zero ambitions. The need for development of the Project pre-dates the commencement of the OTNR and therefore is not considered as part of this work, which focuses on Round 4 offshore wind.  The Network Options Assessment (NOA) 2021/2022 Refresh replaces the previously published NOA 2021/2022 and incorporates the recommended offshore network design set out in the Holistic Network Design (HND).

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		In order to meet the meet the Government's ambitious net zero targets and help to tackle energy security it is important that projects like this Project are progressed. National Grid will continue to backcheck and review its proposals for the Project in light of any new or updated information (such that might be contained in the HND and NOA publications for instance).
3.2.37	Consultation is not fit for purpose and should be rerun / A new consultation is required	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
		All feedback has been reviewed by the Project team and responses are published in this Feedback Report. Where feedback has influenced the design of the Project this information is summarised in Section 3 of this report. Feedback on the way the consultation was run will also be considered for future consultations.
3.2.38	The Project is in breach of policy guidance (Electricity Act, EN-1 and EN-5)	National Grid considers that its proposals (subject to detailed siting of Cable Sealing End (CSE) compounds and other mitigation) are consistent with relevant policy framework within National Policy Statements (NPSs) EN-1 and EN-5 and its duties under the Electricity Act 1989. Further details can be found in the Design Development Report, published as part of the 2023 non-statutory consultation.
3.2.39	Land surveys have been undertaken without the landowners knowledge	No land surveys will be undertaken without landowners' prior consent and/or knowledge. Before surveys are carried out from private land, National Grid will first try to obtain voluntary agreement from the relevant landowner. Where an agreement in relation to taking access to land for engineering, ecological and environmental surveys cannot be reached voluntarily, Section 172 of the Housing and Planning Act 2016 authorises National Grid as an acquiring authority, to take access to land for the purpose of surveys and/or valuation where there is a proposal to acquire an interest in or right over land. Where access is taken to land under the Act the relevant landowner and occupier will be given two weeks' notice.
3.2.40	Suggest that the consultation is extended to allow consultees to consider the Holistic Network Design (HND) document / Criticism that HND document has not been applied	In Summer 2022, National Grid ESO published the Holistic Network Design (HND) report.  The HND provided a recommended offshore and onshore design for a 2030 electricity network to help facilitate Government's ambition for 50 GW of offshore wind by 2030.  The HND enables investment and delivery of infrastructure, including locations in North and South Wales, the Scottish Islands and West Coast, and the East Coast of Scotland and Aberdeenshire, Lancashire, North-East
		England, and Yorkshire and the Humber, opening the door for more jobs and economic growth in these regions.  The HND primarily includes Round 4 offshore wind projects. Further reinforcements in electricity transmission network infrastructure, beyond those set out in the HND, will be required to achieve net zero and therefore the timing of the consultation was deemed appropriate.

Ref no.	Summary of matters raised	National Grid's response
3.2.41	Suggestion that a 'Distribution System Options Report' should be produced	National Grid is responsible for the National Transmission Network within East Anglia. We are working closely with the local distribution company (UK Power Networks) and our regulator to identify shared opportunities that may be created as part of the Project.
3.2.42	Criticism of inconsistent mapping between online and printed versions (e.g. Great Horkesley; Aldham; swathe is located further south, closer to the A12 and further from the Area of Outstanding Natural Beauty (AONB) on the paper map compared to the interactive online map)	Accurate large-scale maps were available to view both online and at the public information events. The overview map provided in the newsletter was intended as indicative.  We note the feedback and will ensure that we carefully consider how to show maps in future stages of consultation.
3.2.43	I strongly oppose the consultation process as implemented by National Grid	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report.
		The consultation zone included the preferred corridor and an area of a minimum of 1 km each side of the preferred corridor (the PCZ). We sent the Project newsletter to approximately 50,000 addresses along the preferred corridor within an area of approximately 1 km either side. We also wrote briefing letters to Parish Councils both within the PCZ and in a wider area. We also published a series of newspaper advertisement setting out information on the consultation. A total of 12 face-to-face events along the proposed route and 12 webinars were held during the consultation period. Recordings of the webinars were available on the Project website for people to view at any time. The Project team were and continue to be available to answer questions both during and after the consultation through the Project details on the website, by phone, freepost or email.
		All feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report. Before any future consultation, we will update our Consultation Strategy and engage with Local Authorities.
3.2.44	Not a real consultation; no alternative options set out; lack of transparency as to costings and as to rejection of alternative routes; contravention of the Gunning Principles; breaches Green Claims Code	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project, and a draft of this was shared with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.

# Ref no. Summary of matters raised

## **National Grid's response**

All feedback has been reviewed by the Project team and responses are published in this Feedback Report. Where feedback has influenced the design of the Project this information is summarised in Section 3 of this report. This Project, as it is currently proposed, comprises a proposed overhead line connection over 2 km in length and therefore is classified as a Nationally Significant Infrastructure Project (NSIP). Therefore, the Project will require consent under the Planning Act 2008. The Planning Inspectorate publish guidance and advice on developing an NSIP project for developers to follow. We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:

1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers

The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.

2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response

We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.

- 3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation

  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
- 4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account.

In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities, and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website.

The acronym GREEN stands for Green Energy Enablement to underline the significant importance of the UK's net zero aspirations. National Grid has changed the name of the Project to Norwich to Tilbury to make it clear it's part of The Great Grid Upgrade.

All projects that are part of the Great Grid Upgrade will include specific locations in their names to make it easy for people to understand what and where we are proposing to build new infrastructure.

#### **Summary of matters** Ref no. **National Grid's response** raised Although the name of the Project has changed the focus remains the same – to bring new sources of renewable energy to homes and businesses across East Anglia and the UK. 3.2.45 The National Grid routeing study The SeaLink Project commenced consultation on the 24 October which ran until the 18 December 2022. Feedback (CPRSS) is premature given the from this consultation will be published in a feedback report. Information on this project is available from the project imminent arrival of the Sea Link website https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-Consultation, a new National projects/sealink Policy Statement (NPS) and the The Department for Business, Energy and Industrial Strategy (BEIS) confirmed that for any application accepted for Offshore Transmission Network examination by the Planning Inspectorate before any update to the existing National Policy Statements (NPSs), the Review (OTNR); there is no clear extant 2011 suite of NPSs should have effect. The draft NPSs, which are themselves, subject to consultation case for need made out, and feedback, will therefore have effect only on applications accepted for examination after their designation. The overall the documents make no Government position set out in the 2011 EN-5 NPS (for Electricity Networks Infrastructure) is reinforced in the extant sense draft EN-5 that overhead lines should be the strong starting presumption for electricity networks development in general, this presumption is reversed only when proposed developments will cross part of a nationally designated landscape. The Government's Offshore Transmission Network Review (OTNR) looks into the way that the offshore transmission network is designed and delivered, consistent with the ambition to deliver net zero emissions by 2050. The Energy Minister announced the scope of a review into the existing offshore transmission regime to address the barriers it presents to further significant deployment of offshore wind, with a view to achieving net zero ambitions. The need the Project was identified prior to the commencement of the OTNR. However, the need will be back checked as part of the evolution of the project. If there changes to the context of the project which eliminates the need for it, then the Project would not be promoted. The OTNR focuses on Round 4 offshore wind with this Project therefore being out of scope. The Project is currently proposed to fulfil connection offers for two offshore windfarms, North Falls and Five Estuaries which will contribute to the Government's 50 GW offshore wind target and, more recently, from Tarchon Energy for an interconnector linking with Germany. The Project will also provide capacity for future generation from various generators to be transmitted across electrical boundaries within East Anglia and the wider transmission network. Details on the need case, strategic options, the currently preferred option and routeing and siting work are set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) and the Project Background Document published as part of the consultation exercise. Limited publicity of consultation 3.2.46 Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set locally; many unaware; mailshot out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local too narrow; misleading Authorities who provided us with comments based on their knowledge and experience of consultation in the area. presentation (absence of pylons We amended the Strategy based on feedback where practicable and information on this is available in this report. in photographs; claims to be The Consultation Strategy is available as an appendix to this report. Before any stage of consultation, we will update green); insufficient time to the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consider and respond consultation.

#### **Summary of matters** Ref no. **National Grid's response** raised The consultation materials, including the newsletter and Project Background Document, showed a mix of photographs including images of infrastructure such as pylons. At the public events a range of materials were available including photographs of infrastructure both in construction and operation. We note the comment and continue to bear this mind as we develop materials for the next consultation. The consultation zone included the preferred corridor and an area of a minimum of 1 km each side of the preferred corridor (the PCZ). We sent the Project newsletter to approximately 50,000 addresses along the preferred corridor within an area of approximately 1 km either side. We also wrote briefing letters to Parish Councils both within the PCZ and in a wider area. We also published a series of newspaper advertisement setting out information on the consultation. The consultation ran between 21 April 2022 until 16 June 2022. Although some feedback was received after the close of consultation, all responses received up to a month after the consultation closing (up to the 16 July 2022) have been considered in the reporting of feedback in this report. Where feedback has influenced the design of the Project this information is summarised in Section 3 of this report. Comments received after the 16 July 2022 until the publication of this report have been summarised in Section 3.9 but were not considered as feedback to the nonstatutory consultation. We will continue to take account of feedback as we develop our proposals during subsequent stages of consultation. The Office of Gas and Electricity National Grid is regulated by the Office of Gas and Electricity Markets (Ofgem). During the development of our 3.2.47 proposals, we regularly report to Ofgem on the work we are doing, and they provide feedback. Markets (Ofgem) and independent review must be Our proposals will be examined through the planning process. Our proposals are currently classed as a Nationally performed throughout the Project Significant Infrastructure Project (NSIP) and therefore require consent under the Planning Act 2008. We are process. proposing to submit our application for consent to the Planning Inspectorate in 2025 who will then examine our proposals before making a recommendation to the relevant Secretary of State (SoS), who will make the final decision as to whether the consent is granted. Design Change 3.2.48 Suggest greater use of National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the underground cables (no location alternatives available, and other factors including our duties and obligations. These duties include balancing the need under The Electricity Act 1989 to be economic and efficient, which includes keeping costs down in the interests given) of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape, and visual quality. The National Policy Statement (NPS) EN-5 makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. Whilst we are not proposing to underground the whole route, our proposals include underground cable within the Dedham Vale Area of Outstanding Natural Beauty (AONB) in accordance with NPS EN-5. We have also identified the need to extend the underground cable beyond the AONB boundary because of potential effects and identified an

approximately 5.3 km section near Great Horkesley as meeting the particularly sensitive criteria where underground

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		cable is also proposed. Additionally underground cable is also proposed at Fairstead for a 400 kV overhead line crossing and for around 4.6 km for the crossing of the Lower Thames Crossing (LTC) proposals and line entry to Tilbury Substation.
3.2.49	Suggest underground cables should be used on the entire proposed route / the whole of the Project should be undergrounded	National Grid is required under the Electricity Act 1989, to find a balance, developing proposals that are efficient, coordinated, and economical, and which have regard to people and places. Each network upgrade must be considered on its individual merits, as required in planning law.
		The National Policy Statement (NPS) which covers building electricity networks infrastructure (EN-5) states that the Government expects overhead lines will often be appropriate. It does, however, recognise that there will be cases where this is not so, for example, at particularly sensitive locations, where potential adverse landscape and visual impacts of an overhead line may make it inconsistent with our duties and relevant planning policy, taking account of the specific local environment and context.
		National Grid's duties and obligations include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape, and visual quality. Whilst National Grid is not proposing to underground the whole route, our proposals include underground cable within the Dedham Vale Area of Outstanding Natural Beauty (AONB) in accordance with NPS EN-5. We are also proposing to extend the use of underground cables beyond the AONB boundary, and in a further location near Great Horkesley considered to meet the particularly sensitive threshold. We also propose the use of underground cable for crossing 400 kV overhead line infrastructure and for the line entry at Tilbury Substation.
3.2.50	Suggest routeing the cables offshore out at sea / Should consider routeing the power cables undersea	Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Study (CPRSS) examines several strategic options that were considered for the Project that might achieve the required reinforcement including offshore and subsea options. These options were not taken forward as they did not fully address technical or physical/geographical constraints or enable the network to operate to the required standards.
		An offshore subsea connection (each currently has a maximum capacity of 2 GW) would have a third of the capacity of the proposed overhead line connection and therefore to transfer the anticipated levels of power generation, three subsea connections would be required including associated infrastructure such as convertor stations. This would make the connection significantly costlier to energy bill payers.
		In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich. Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area.
3.2.51	Existing overhead lines in this section should be removed / undergrounded	The existing electricity transmission network provides power, via the local distribution network, into the local area where it is used in homes and businesses. The need case and funding for the Project is to deliver the new network reinforcement needed, rather than to remove existing overhead lines by undergrounding them. Unless required for mitigation, undergrounding existing overhead lines on the transmission network would not be in accordance with National Policy Statement (NPS) EN-5 and would result in substantial cost to bill payers. There may also be

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		significant environmental impacts due to the removal works on sensitive ecological and archaeological receptors as well as constraints from either existing buildings or unsuitable ground conditions.
3.2.52	The installation of underground cables should be carried out via Horizontal Directional Drilling (HDD) rather than open trenches (cut and cover) / Oppose cut and cover construction	Horizontal Directional Drilling (HDD) is used as an alternative to a trenched (cut and cover) approach to install underground cables where a trenched solution may not be assessed as being the most appropriate installation methodology. The benefits of using directional drilling need to be carefully considered to ensure ground conditions are suitable and that the balance of potential environmental effects is achieved. National Grid will assess ground conditions and any potential effects resulting from drilling or trenching, before deciding on where HDD should be used.
3.2.53	The Project should use T-pylon / modern pylon technology	For the purposes of this initial assessment, the preferred draft alignment reflects the use of standard lattice pylons and where we might locate pylons, underground cables, Cable Sealing End (CSE) compounds (where underground cables join with overhead lines) and the proposed East Anglia Connection Node (EACN) substation. The use of other pylon designs is still under consideration, if an overhead line route is progressed. We will be carrying out further assessments on pylon design. Our assessments will include visual impacts and mitigation, environmental and ecological considerations, construction, and lifetime maintenance effects.  Different designs in use in the UK include:  • standard lattice;
		lower height lattice; and
		T-pylons.
		We will present the findings from our assessments at our statutory consultation.
3.2.54	Suggest that the existing overhead lines are reinforced / upgraded instead	The existing transmission network in the region is currently being upgraded to ensure the system is running at its most efficient performance. The existing assets networks are not able to be upgraded sufficiently to cope with the new future demands expected on the network. As a result, new lines and substations will be required to accommodate the changing demands on the network.
3.2.55	Oppose the use of underground cables / Underground cables are too expensive and have issues relating to heat / damages food	The proposed use of underground cables is limited given the significant increase in cost, and as such they are only intended for use where policy dictates, for example, where crossing the Area of Outstanding Natural Beauty (AONB) or where overhead lines are not suitable based on other legitimate local constraints.  With regards to concerns that residual heat from underground cables may affect crops, the underground cable
	production	installation shall be designed to limit any temperature increases to an absolute minimum which typically is no detriment to crops.
3.2.56	Suggest the use of local generation of power from renewable sources in communities and from individual	In its Energy White Paper (EWP), the Government states they are committed to phasing out coal in line with its commitments for Net Zero by 2050. At the same time, the Government modelling suggests that the overall electricity demand could double by 2050 largely as a result of the electrification of cars and vans and the increased use of clean electricity replacing gas for heating. The EWP states that "as a result, electricity could provide more than half"

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	properties / Suggest distributive generation solution	of the final energy demand in 2050, up from 17% in 2019 and would require a 4-fold increase in clean electricity generation". To meet demand on this scale, the Government is targeting to increase energy from offshore wind to 50 GW by 2030 and under its transmission licence, National Grid has a statutory duty to respond to generation customers wanting to connect to the transmission network. The Project is currently proposed to fulfil connection offers for two offshore wind farms, North Falls and Five Estuaries and, more recently, from Tarchon Energy for an interconnector linking with Germany.
3.2.57	The Project should run in closer to / parallel to the existing 400 kV overhead lines	National Grid note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, there are constraints and features than mean that overall, we consider close paralleling in this area to lead to greater effects and therefore would be considered, to be inconsistent with relevant policy.
		Several residential properties are present in close proximity to the existing 400 kV overhead line, meaning that if the lines were close paralleled it would result in the properties having an overhead line close to both sides. There are also some locations where the combination of existing physical and environmental features (railway and road infrastructure, commercial and residential property, woodlands and orchards etc) present very substantial challenges to routeing and siting.
		As a result, whilst close paralleling may appear beneficial in some locations, overall, the increased environmental effects where overhead lines must converge and diverge, and the increased effects on properties with overhead lines to both sides are considered greater than those introduced by a new route alignment separated from existing 400 kV overhead lines.
		Whilst crossings to avoid positioning properties between overhead lines and the use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties under the Electricity Act 1989 and relevant policies such as National Policy Statement (NPS) EN-5.
3.2.58	Seek alternative routeing (no route specified)	National Grid considered alternative strategic proposals as well as alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published in support of the 2022 non-statutory consultation. We have updated our proposals in the light of non-statutory consultation feedback, and we will continue to reflect on the detail of any feedback and back-check and update the Project as appropriate and necessary.
3.2.59	Suggest that the Project is routed as far away from populated / residential areas as possible	Deciding where and how to build new high voltage electricity lines is a complex issue and National Grid is mindful of the potential effects this infrastructure may have on local communities and the concerns these may bring. National Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise and potential health impacts. It has sometimes been suggested that minimum distances between properties and overhead lines should be prescribed.
		We do not consider this appropriate since each instance must be dealt with on its merits. However, we have always sought to route new lines away from residential property on grounds of general amenity where possible.
		We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate UK standards,

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and mitigated where necessary. We set strict technical standards for the equipment we install on our network. These will apply to the proposed new East Anglia Connection Node (EACN) substation located in the Tendring District, and extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.

Noise from overhead lines is predominately determined by the conductor design, voltage and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types be used, consideration for this would be assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers, and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the Environmental Statement (ES).

In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an assessment on both landscape character and visual amenity.

The health and safety of the public, local communities and employees is central to everything that we do. The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. The exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. Our approach is to ensure that our network comply with those policies, which are set by Government on the advice of their independent advisors. The Project will be designed to ensure it is fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed.

Policies for both noise and EMF are incorporated into the decision-making process for development consent as set out in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment complies fully with those policies and guidelines. The application for a Development Consent Order (DCO) will include assessments against these polices, including both construction and operational noise and EMF.

## 3.2.60 Cumulative effect of the Project alongside existing overhead lines

National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.

For the LVIA, information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.

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3.2.61	Suggest underground cables in populated / residential areas	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, and the duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape, and visual quality.
		National Policy Statement (NPS) EN-5 makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. At this stage no locations have been proposed to be underground cable based on residential effects alone although potential effects on residential property occupiers have formed part of the decision-making in some cases. Underground cable is proposed through the Area of Outstanding Natural Beauty (AONB), at Great Horkesley near the AONB as well as for a crossing of the 400 kV overhead line at Fairstead and for the crossing of the Lower Thames Crossing (LTC) and line entry to Tilbury Substation. A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation if required, this may include measures at particular locations to reduce a change in views due to the Project or to better integrate infrastructure into the wider landscape.
3.2.62	Alternative designs / plans should be presented	The option we have taken forward meets the technical and physical/geographical constraints and enables the network to operate to the required standards. More information on these options and the process of consideration can be found in our Corridor and Preliminary Routeing and Siting Study (CPRSS).
		Other options were not taken forward as they did not fully address technical or physical/geographical constraints or enable the network to operate to the required standards.
		We have published the work done to date to support the consultation and this sets out details of the evaluation we have undertaken to identify alternatives and chose our preferred route and site. This approach is compliant with our statutory duties to be economic and efficient and to have regard to amenity and aligns with national policy and guidance which we are required to consider as we develop our proposals. It would be disingenuous of us to consult on alternatives, which we would not choose to take forward as it did not best meet the need case or best comply with our statutory obligations and policy.
		We will continue to backcheck and review our proposals including alternative designs in response to feedback and technical assessment as the Project develops.
3.2.63	Request that National Grid work with Department for Business, Energy and Industrial Strategy (BEIS; now known as the Department for Energy Security and Net Zero) and Offshore Electricity Grid Task Force	We note the comment and work hard to ensure that our stakeholders including the Department for Energy Security and Net Zero (formerly known as the Department for Business, Energy and Industrial Strategy (BEIS)) ) and the Office of Gas and Electricity Market (Ofgem) are aware of public comments on our proposals.

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	(OffSET) to develop an alternative to the Project	
3.2.64	Criticism of routeing the Project through (Area of Outstanding Natural Beauty) AONB	The Corridor and Preliminary Routeing and Siting Study (CPRSS) considered alternatives that avoid routeing through the Area of Outstanding Natural Beauty (AONB). On balance these were less preferred as they would be longer and therefore lead to effects over a much greater connection length to other receptors at greater cost than the connection route through the AONB. Undergrounding the route through the AONB is consistent with National Policy Statement (NPS) EN-5. The siting of Cable Sealing End (CSE) compounds (the transition sites between the overhead line and underground cable) will be located to minimise effects and we will consider the use of Horizontal Directional Drilling (HDD) - subject to ground conditions - to reduce certain construction effects.
3.2.65	A joined up approach needs to be taken by National Grid to power generation / facilities / transmission / infrastructure	The Electricity System Operator (ESO), Holistic Network Design (HND) and Network Options Assessment (NOA) has looked at such solutions and concluded that the proposed option represents the most economic, efficient, and coordinated approach to the proposed connections.
3.2.66	Locations for Cable Sealing End (CSE) Compound sites to facilitate end point of underground section must be carefully chosen and subject to further consultation	National Grid agrees with the respondent and acknowledges the requirement to carefully chose the location of Cable Sealing End (CSE) compounds to respond to constraints, environmental features and the potential for effects and will consult on its proposals and consider any feedback provided as the Project develops.
3.2.67	A new consultation must not take place before the Offshore Transmission Network Review (OTNR), the new (accompanying) Network Options Assessment (NOA) and the SeaLink consultation have taken place.	The SeaLink project commenced consultation on the 24 October 2022 which ran until the 18 December 2022. Feedback from this consultation will be published in a feedback report. Information on this project is available from the project website <a href="https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink">https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink</a> SeaLink is part of the overall regional strategy to increase the network capacity in East Anglia but is in a separate geographical area with different programme drivers and detailed needs case.
		The Government has said:
		The Government's Offshore Transmission Network Review (OTNR) looks into the way that the offshore transmission network is designed and delivered, consistent with the ambition to deliver net zero emissions by 2050. The Energy Minister announced the scope of a review into the existing offshore transmission regime to address the barriers it presents to further significant deployment of offshore wind, with a view to achieving net zero ambitions.
		The current approach to designing and building offshore transmission was developed when offshore wind was a nascent sector and industry expectations were as low as 10 GW by 2030. It was designed to de-risk the delivery of offshore wind by leaving the project developers in control of building the associated transmission assets to bring the energy onshore. This approach has contributed to the maturing of the sector, the significant reduction in costs of offshore wind energy and has helped position the UK at the forefront of global offshore wind deployment.

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		However, in the context of increasingly ambitious targets for offshore wind, constructing individual point to point connections for each offshore wind farm may not provide the most efficient approach and could become a major barrier to delivery given the considerable environmental and local impacts, particularly from the associated onshore infrastructure required to connect to the national transmission network. Offshore wind is expected to play an important role in delivering net-zero emissions by 2050, and it is right that the framework for delivering offshore transmission connections is reviewed in the context of our increased ambition.
		An update was published in July 2022. The need for development of The East Anglia Green Energy Enablement project predates the commencement of the OTNR and therefore is not considered as part of this work which focuses on Round 4 offshore wind.
		In order to meet the meet the Government's ambitious net zero targets, help to tackle energy security it is important that projects like this Project are progressed. National Grid will continue to backcheck and review its proposals for the Project in light of any new or updated information (such that might be contained in the Holistic Network Design (HND) and Network Options Assessment (NOA) publications for instance).
3.2.68	National Grid must present options with full cost breakdown, setting out environmental, socioeconomic, heritage and health impact of each, plus impact to the Area of Outstanding Natural Beauty (AONB).  Cost must be presented in a transparent, accurate and unbiased manner. Cost of mitigation must be included within each option	substantial. In response to a request by Essex County Council on behalf of all host local planning authorities, National Grid has agreed to fund an independent review of cost options. As part of the backcheck and review process, costs are reviewed and updated in accordance with the latest costing information. These may therefore, in some cases, supercede previously published costings.  An offshore option would also still require development of onshore infrastructure between the coast and Norwich.
3.2.69	An offshore route would avoid any damage to the Area of Outstanding Natural Beauty (AONB)	It is not disputed that an offshore option connecting only between Norwich to Tilbury would avoid the Area of Outstanding Natural Beauty (AONB), but the additional costs mean an offshore option is less preferred and not consistent with National Grid's duties and the relevant policy framework. Offshore options are also noted to lead to their own effects on different receptors both on the onshore routes to the coast as well as the sections within the marine environment. Any offshore option connected into Bramford to aid system flexibility would itself require routes through the AONB potentially more extensively than those proposed for the Project.

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#### Design question

3.2.70 Has a notional cost been applied to all impacts (landscape, environment, quality of life, tourism, wellbeing etc) and formally weighted against financial cost?

The methodology for assessing the environmental impacts of a development does not generate a notional cost that can be used as part of a wider cost weighting exercise.

The Environmental Impact Assessment (EIA) process focuses on identifying whether the impacts of the Project would result in significant or not significant environmental effects.

In the event that significant effects are generated, mitigation measures such as planting, or the creation of biodiversity habitat may be required. These measures will have an intrinsic financial cost associated with them (such as purchasing and/ or construction) but these are not a material consideration within the remit of the EIA process.

We note that National Grid are 3.2.71 running an innovation project in conjunction with SSE, on harnessing waste energy from transformers. It is stated that this has the potential to save millions of tonnes of carbon dioxide emissions. Will this innovative technology be available for the new substations planned for as part of the EAG project?

We are only able to plan to use equipment that is already approved for use on the network. If new equipment becomes available that is approved for use and not deemed to have a detrimental impact on any permissions and/or constraints imposed on the Project from a planning decision perspective, then potentially it may be something that can be investigated. It is not initially considered that such technology would be immediately beneficial in relation to the currently proposed East Anglia Connection Node (EACN) substation location given its remote nature and lack of local potential beneficiaries who could connect into any kind of heat exchange system. For example, this kind of solution is more likely to be of benefit where amenities such as a school, leisure centre or large-scale housing are located nearby.

## Economic / Employment impact

3.2.72 the area

Negative impact on businesses in Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.

> Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include: traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).

3.2.73 The Project will negatively impact proposed development / The Project will restrict future development

National Grid has obtained information on development proposals within the planning system for the area potentially impacted by the Project and considered whether its proposals need to be amended. The nature of response varies as in some cases proposals in the early stage of design can be amended to be designed around the National Grid infrastructure but in other cases the National Grid proposals have been amended in response. We consider this can be done through detailed alignment design rather than change to the preferred corridor. We do not consider the proposals unreasonably restrict known housing plans.

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3.2.74 National Grid should provide local job / employment opportunities as part of the Project / National Grid should produce a 'Skills and Employment Strategy' to accompany the Project

National Grid should provide local National Grid are at the heart of the UK's transition to a clean, green electricity network. During construction, we will job / employment opportunities as work with our suppliers to develop opportunities for local employment and to bring benefit to the local economy part of the Project / National Grid through our projects. There are also huge opportunities in the renewable energy sector that our proposals support.

As the Government explain in the Energy White Paper (EWP), fighting climate change offers huge opportunity for growth and job creation. The global markets for low-carbon technologies, electric vehicles and clean energy are fast growing. The Government estimate zero emission vehicles could support 40,000 jobs by 2030 and 40 GW of offshore wind in the same period will support up to 60,000 jobs.

Altogether the UK Government's Net Zero Strategy sets out a vision that will support up to 440,000 jobs by 2030 and see every home in the country powered by offshore wind. Our own analysis in our <u>Job That Can't Wait report</u> shows that the country needs to fill 400,000 jobs in the energy sector in the next three decades to deliver Net Zero by 2050.

At National Grid, we are investing around £1.3 billion every year, wiring up our communities to the next generation clean electricity network, so that every household can be powered by renewable energy by 2030. Where we are delivering those network investments, aside from opportunities for local suppliers, we work with schools and local authorities to encourage the next generation of engineers and help the long term unemployed develop new skills. When operating in an area, we have a Community Grant Programme which offers grants to local community groups and charities. This allows local charities and not-for-profit groups to apply for support for community-based initiatives that deliver social, economic, or environmental benefits.

We know that our responsibility as a business goes beyond safely building new energy infrastructure to enable a cleaner, fairer, and affordable future. We want to leave a lasting positive impact where we build our projects, to help those areas and communities thrive and to support a sustainable future. Our Responsible Business Charter sets out our commitments and ensures that responsibility is woven through every we do. It focusses on five key areas where we believe we can really make a difference: the environment, our communities, our people, the economy, and our governance.

We are working with stakeholders and communities to understand what is important to them and will endeavour to deliver initiatives in the region to support those priorities. There are four key areas where we believe we can bring benefit to those who are hosting the infrastructure that supports the green energy transition:

- Natural Environment we will build partnerships with environmental groups and NGOs where we can support initiatives that enhance the landscape, biodiversity, and availability of green space within the areas we are constructing our projects.
- Net Zero we will help to support the region in achieving its own net zero priorities.
- Skills and employment we are extending our Grid for Good programme, and building other
  partnerships, to deliver training and skills development in the region, to encourage the next generation of
  green energy workers

# Ref no. Summary of matters raised

## **National Grid's response**

• Community Grant Programme – when projects are in construction, through our Community Grant Programme, charities and not- for- profit organisations can apply for a grant towards community-based initiatives that deliver social, economic, and environmental benefits.

In addition, the government recently ran a consultation seeking views on how community benefits should be delivered for communities that host onshore electricity transmission infrastructure. We continue to engage with government on this topic and will work with communities and stakeholders to implement the outcome of this consultation.

#### **Environmental impact**

3.2.75 The Project will cause a negative impact on landscape / amenity

National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.

Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value such as the Dedham Vale Area of Outstanding Natural Beauty (AONB), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.

We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.

The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.

As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.

3.2.76 Other areas should be protected too, not just the Area of Outstanding Natural Beauty (AONB)

National Grid recognises that even after careful routeing and siting and consideration of other measures, there will be a need for additional use of undergrounding to achieve compliance with its duties and the relevant policy framework within which it operates.

Following further assessment further undergrounding is proposed extending around 1 km from the north of the Area of Outstanding Natural Beauty (AONB) for approximately 14 km through to the East Anglia Connection Node (EACN) substation, as well as an additional section of around 5.3 km close to the AONB near Great Horkesley. Underground cabling is also proposed for short section for a 400 kV overhead line crossing near Fairstead and approximately 4.6 km from just north of the Lower Thames Crossing (LTC) through to Tilbury Substation.

Ref no.	Summary of matters raised	National Grid's response
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation if required, this may include measures at particular locations to reduce a change in views due to the Project or to better integrate infrastructure into the wider landscape.
3.2.77	Consideration needs to be given to the carbon footprint of the Project during construction (e.g. construction methods, materials, transport, etc)	National Grid has set challenging targets to reduce the carbon emissions of our organisation, including a specific commitment to deliver carbon neutral construction by 2025/26. Key to the delivery of this commitment is to measure the carbon footprint of our projects through concept, detailed design and into delivery and construction using a range of best practice carbon tools and data sets.
		Prior to construction, and as part our procurement process, carbon management and carbon reduction forms a key award criteria for all projects. At tender stage National Grid require all contractors to calculate a detailed carbon footprint of the project using our Carbon Interface Tool (CIT), this provides a Capital Carbon baseline in Tonnes of CO2 from which the contactors are then incentivised (via Key Performance indicators) and quarterly reviews to reduce the carbon footprint of the project during construction. Contractors are contractually required to provide carbon data on a quarterly basis to demonstrate performance against carbon reduction commitments agreed at contract award.
		We also have a range of Net Zero working groups within Electricity Transmission that explore low carbon innovations and approaches, these groups bring together our contactors and our supply chain to help to reduce the carbon footprint of the materials and resources required to deliver National Grid Projects. These groups are: Low-carbon concrete, Low-carbon steel, and aluminium, Net Zero construction and Low Carbon cables these working groups all report progress to an overarching Net Zero forum.
		The carbon calculations derived from the CIT are used to inform progress against National Grid's overall strategic commitments to reducing carbon emissions across its portfolio of projects and meeting its Net Zero targets for construction projects.
3.2.78	The Project will result in a negative impact on the environment generally (no details given)	National Grid will be undertaking an Environmental Impact Assessment (EIA), this will consider the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.
3.2.79	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated. National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.
		The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.
3.2.80	Concerned about future sustainability of energy (general	With the move away from large coal fired power generating stations to more numerous onshore and offshore generation sites, the electricity network is now becoming more decentralised. The Government recognises the

Ref no.	Summary of matters raised	National Grid's response
	concern, not limited to the Project)	complexities with balancing supply and demand from renewables generation and securing this flexibility will increasingly come from energy storage systems and interconnected capacities with other electricity markets and consumer/ smart technologies. The Government's Energy White Paper (EWP) states that "renewables now account for over one third of electricity generation, up from 7% in 2010". To meet the predicted doubling in electricity demand by 2050 and the Government's 2050 Net Zero target, the EWP, whilst not planning for a specific technology solution predicts that "low cost, Net Zero consistent system is likely to be composed predominantly by wind and solar" but also complementing intermittent renewables with technologies including nuclear and gas with carbon capture and storage.
3.2.81	Oppose the disturbance of existing mature woodlands	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity, which includes areas of existing mature woodland. Route design progression takes account of existing biodiversity features, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation, as informed by the Environmental Impact Assessment (EIA).
3.2.82	The Project is unsustainable and doesn't address the 17 United Nations (UN) sustainable development goals	Goal 7 of the United Nations (UN) Sustainable Development Goals is for 'Affordable and Clean Energy' with an emphasis on progress in energy efficiency and an increase in renewable energy generation over fossil fuels. Goal 13 relates to Climate Change. One of the top five key messages from the 2012 Report 'Making Peace with Nature' emphasises that "the coming decade is crucial. Society needs to reduce carbon dioxide emissions by 45% by 2030 compared to 2010 levels and reach Net Zero emissions by 2050". The Project is required to provide sufficient capacity to accommodate the growth in new energy generation from offshore wind, nuclear power, and interconnection with other countries. This is in accordance with the UK Government's ambition to achieve Net Zero emissions by 2050 and considered in line with that of the UN goal.
3.2.83	Long term environmental benefits of other options (underground cables / undersea) would outweigh the initial higher cost	Environmental benefits of any option need to be balanced against costs and whilst undergrounding overhead lines may have landscape and visual benefits, this is not always the case with other environmental factors.  The National Grid response to the Offshore Electricity Grid Task Force (OffSET) (available on the Project website) gives lifetime costs of an offshore option as £3,713 m compared to the preferred onshore option at £1,136 m.  National Grid consider this difference to be substantialNational Grid set out capital and lifetime cost summaries for Project options in their response to the Offshore Electricity Grid Task Force (OffSET) group (available on the Project website). The lifetime cost for the onshore option between Norwich Substation, Bramford Substation and Tilbury Substation were at the time identified as £1,136 m compared to the offshore High Voltage Direct Current (HVDC) option between Norwich Substation, Bramford Substation and Tilbury Substation of £5,099.83 m. This cost differential was considered by National Grid to be substantial. An offshore option would also still require development of onshore infrastructure between the coast and Norwich, Bramford and Tilbury Substations.  In response to a request by Essex County Council on behalf of all host local planning authorities, National Grid has agreed to fund an independent review of cost options. As part of the backcheck and review process, costs are reviewed and updated in accordance with the latest costing information. These may therefore, in some cases, supercede previously published costings.

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		Offshore options also have the potential to impact the environment and would need to be constructed within internationally designated sites. National Grid will continue to develop the preferred option with stakeholders, using the principles of the Holford Rules and careful routeing and siting, to find a solution that least affects the environment. We will be undertaking an Environmental Impact Assessment (EIA), which is a formal exercise that considers the likely significant effects on sensitive environmental receptors that may be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered.
		Onshore undergrounding also has potential effects on the environment, particularly ecology and archaeology. The effects on different environmental aspects need to be balanced, along with socio-economic and cost factors. The National Policy Statement (NPS) EN-5 states that "The Government does not believe that development of overhead lines is generally incompatible in principle with developers' statutory duty under section 9 of the Electricity Act to have regard to amenity and to mitigate impacts. In practice new above ground electricity lines, whether supported by lattice steel towers/pylons or wooden poles, can give rise to adverse landscape and visual impacts, dependent upon their scale, siting, degree of screening and the nature of the landscape and local environment through which they are routed. For the most part these impacts can be mitigated, however at particularly sensitive locations the potential adverse landscape and visual impacts of an overhead line proposal may make it unacceptable in planning terms, taking account of the specific local environment and context". The Dedham Vale Area of Outstanding Natural Beauty (AONB) is considered a sensitive location in landscape and visual terms and, hence, the balance of competing factors at this location has resulted in an emerging preference for utilising underground cable.
3.2.84	Concern about the geological impacts the Project will have on water drainage / general geological impacts	A hydrology and land drainage assessment will be undertaken as part of the Environmental Impact Assessment (EIA). This will consider the ground conditions, which will be a consideration in the drainage design, and the suitability of sustainable drainage systems (SuDs) where required. The EIA will also include an assessment on geology and hydrogeology, identifying any potential impacts and introducing mitigation, where required.
3.2.85	The Project will impact designated sites - e.g. Site of Special Scientific Interest (SSSI), Ancient Woodland and an Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Sites of Special Scientific Interest (SSSI) and Ancient Woodland.
		The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required mitigation requirements.
		We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
3.2.86	Suggestion that National Grid set up and financially support an Environmental Improvement Fund to be used on local initiatives	We know that our responsibility as a business goes beyond safely building new energy infrastructure to enable a cleaner, fairer, and affordable future. We want to leave a lasting positive impact where we build our projects, to help those areas and communities thrive and to support a sustainable future. Our Responsible Business Charter sets out our commitments and ensures that responsibility is woven through every we do. It focusses on five key areas where

Ref no.	Summary of matters raised	National Grid's response
		we believe we can really make a difference: the environment, our communities, our people, the economy, and our governance.
		We are working with stakeholders and communities to understand what is important to them and will endeavour to deliver initiatives in the region to support those priorities. There are four key areas where we believe we can bring benefit to those who are hosting the infrastructure that supports the green energy transition:
		<ul> <li>Natural Environment – we will build partnerships with environmental groups and NGOs where we can support initiatives that enhance the landscape, biodiversity, and availability of green space within the areas we are constructing our projects.</li> </ul>
		<ul> <li>Net Zero – we will help to support the region in achieving its own net zero priorities.</li> </ul>
		<ul> <li>Skills and employment – we are extending our Grid for Good programme, and building other partnerships, to deliver training and skills development in the region, to encourage the next generation of green energy workers</li> </ul>
		<ul> <li>Community Grant Programme – when projects are in construction, through our Community Grant Programme, charities and not- for- profit organisations can apply for a grant towards community-based initiatives that deliver social, economic, and environmental benefits.</li> </ul>
		In addition, the government recently ran a consultation seeking views on how community benefits should be delivered for communities that host onshore electricity transmission infrastructure. We continue to engage with government on this topic and will work with communities and stakeholders to implement the outcome of this consultation.
3.2.87	Suggest that residual emissions resulting from the project are mitigated (e.g. local retrofitting programmes, new renewable energy installations, significant tree-planting and habitat creation measures)	An Environmental Impact Assessment (EIA) will be undertaken for the Project. As part of the assessment process mitigation will be identified to reduce environmental effects / any emissions from the Project.
		Mitigation (including tree planting and habitat creation) will be included where required within the design and within a Code of Construction Practice (CoCP) which will need to be implemented as part of the Project. The CoCP will be secured by a Requirement in the Development Consent Order (DCO).
		At present the Project does not anticipate the provision of new renewable energy installations or retrofitting programmes to be likely components of the mitigation requirements.
3.2.88	Flood risk / drainage needs to be taken into account with respect to both temporary and permanent construction works	A Flood Risk Assessment (FRA) for temporary and permanent works will be undertaken as part of the Environmental Impact Assessment (EIA) for the Project, the findings of which will be presented within the Environmental Statement (ES). In the event mitigation in the form of flood compensation land is required, this will be presented in the Project submission.
3.2.89	Within the Area of Outstanding Natural Beauty (AONB) undergrounding still causes	The installation of underground cabling would broadly adopt the following process: initially the removal of topsoil and storage of a width sufficient to allow for construction machinery to work and the digging of the trenching required for underground cabling would be engineered. The underground cabling would then be laid in the trench, soils would be

#### **Summary of matters** Ref no. **National Grid's response** raised significant damage and blight, backfilled and hedgerows and shrubs reinstated where practicable. At this point a typical grass seed mixture would with swathes up to 100 metres be scattered to encourage regrowth. wide dug up It is anticipated that within 6-12 months upon completion of the construction of the underground cabling, there would be minimal visibility of the works at ground level and the landscape would return to pre-construction views and settinas. A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project, including the undergrounding, and will identify any need for additional mitigation if required, this may include screening at particular locations to reduce a change in views due to the Project or to better integrate infrastructure into the wider landscape. In the event mitigation is required, these will be presented within the Code of Construction Practice (CoCP) for the Project. Financial compensation 3.2.90 The Project will devalue my National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value property / Impact on property known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in value (no location given). accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works. If there are any specific concerns about the devaluation of property, please contact the Project team: Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314. Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ. 3.2.91 Request for adequate financial All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a compensation / Impacted case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. individuals need to be Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with compensated affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works. If there are any specific concerns, please contact the Project team:

Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.

#### **Summary of matters** Ref no. raised

## **National Grid's response**

Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.

#### Health and Safety

- 3.2.92 Concerned about health risks associated with overhead lines (EMFs), Cancer)
- The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific (e.g. Electric and Magnetic Fields bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. All the equipment which forms part of this Project, will be fully compliant with these polices, set to protect everyone. This will be fully and publicly documented in the Development Consent Order (DCO) submission.
- 3.2.93 The Project may result in a negative impact on mental health / health and wellbeing of residents

National Grid recognises people may have concerns about the health effects of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.

We have sought to reduce potential effects on communities and residents through routeing and design. We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.

The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to gueries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:

- Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am 5:30pm)
- Email us: contact@n-t.nationalgrid.com
- Write to us: FREEPOST N TO T (No stamp or further address details are required)

The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all of its equipment comply fully with those exposure limits.

Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed overhead lines, underground cables and substation will be designed to ensure they are fully compliant with these policies and guidelines. This ensures that health concerns relating to EMFs are properly and adequately addressed.

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3.2.94	Concerns about the safety of overhead lines	400 kV overhead lines are designed to remain robust and operational in the worst weather conditions in the UK. Although overhead lines are more susceptible to disruption from lightning and high winds, they are also comparatively easy and cost-effective to repair and maintain compared to underground cables. It should also be noted that the majority of the existing National Grid network is made up of overhead lines, which have been demonstrated to be a reliable form of electricity transmission in the UK climate.
3.2.95	Overhead lines and related infrastructure can be dangerous to construct and maintain / Overhead lines are unsafe for the workers / operatives of whom build and maintain them	Any form of construction has built in risk associated with different activities. All our contractors undertake risk assessments and follow safe systems of work as per the specific Method Statement, regardless of technology type being constructed, which in turn will be independently reviewed by National Grid. This Risk Assessment and Method Statement (RAMS) will follow industry standard practice.
3.2.96	Consideration needs to be given to the operation of light aircraft that could be impacted by the Project	Our review of airfields within 4 km of the preferred corridor identified 10 General Aviation (GA) sites, one military site (Wattisham Flying Station) and the Mid and South Essex National Health Service (NHS) Broomfield Hospital which receives helicopters from a helipad on the roof of the main hospital building.  The airfield operators will be consulted as the design of the Project evolves and we will endeavour to design a solution that safely accommodates airfield operations as far as practicable.
Heritage		
3.2.97	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. If impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.  Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).
		We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
3.2.98	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking a Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify likely significant effects on archaeological sites arise. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.

Ref no.	Summary of matters raised	National Grid's response
Mitigation		
3.2.99	Suggest additional planting and screening / The visual impacts of the overhead lines and related infrastructure need to be mitigated (e.g. made unobtrusive)	Through the routeing and siting exercise, National Grid has sought to, and will continue to seek to maximise the use of existing landform and vegetation to screen the Project as far as practicable as it passes through the wider landscape.  Where new infrastructure is required as part of the Project and the Environmental Impact Assessment (EIA) concludes that additional mitigation would be appropriate, measures to reduce effects can include the use of underground cables in the areas of highest amenity value (e.g. the Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
3.2.100	Not convinced by mitigation plans to offset the environmental impact of the Project / Need for further discussion of mitigation plans with relevant stakeholders	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.  We will continue to engage with Statutory Environmental Bodies (SEBs) and the applicable local planning authorities on aspects relating to the Project, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.2.101	Need more information on the mitigation (e.g. planting and screening) of the impacts of substations	The Environmental Impact Assessment (EIA) which will be submitted with the Development Consent Order (DCO) application will include an assessment of the effects of the Project on the environment. The assessment will identify the potential for significant effects and highlight where mitigation is required to reduce likely significant effects. National Grid is working closely with the relevant statutory bodies, for example Natural England. The current design would allow for landscape planting around Cable Sealing End (CSE) compounds and the East Anglia Connection Node (EACN) substation, which would reduce effects on views and landscape setting.
3.2.102	Request that mitigation is put in place prior to construction	An Environmental Impact Assessment (EIA) will be undertaken for the Project. As part of the assessment process mitigation will be identified to reduce environmental effects where they arise.  Mitigation will be included within the design and form part of the construction works for the Project. The majority of mitigation will be implemented during the construction period, these typically include planting, reinstating hedgerows and landform. Some mitigation can be implemented pre-construction, but these typically relate to ecology and cultural heritage, where for example, protected species are translocated to areas where construction activities are not occurring, to the completion of trial trenching and the recording of archaeological assets found.  The mitigation requirements and control measures identified for the Project will be documented within the Environmental Statement (ES) for the Project, which will form part of the Development Consent Order (DCO) application.

Ref no.	Summary of matters raised	National Grid's response	
Needs ca	Needs case		
3.2.103	Criticism of needs case / The Project is not needed or wanted	National Grid has a statutory duty to facilitate new connections and maintain a safe National Electricity Transmission System (NETS). The Project would facilitate the connection agreements that are in place with two offshore wind farm projects and an interconnector project based on their connection into a new East Anglia Connection Node (EACN) substation. The Project will also reinforce the local transmission network which currently does not have the capacity needed to reliably and securely transport all the energy that is likely to be connected in the future – driven by the Government's plan to increase offshore wind from the current 8.5 GW to 50 GW by 2030 to meet the increased demand.	
		The needs case is reviewed at each critical stage of the Project and without a robust demonstrable need the Project would be revised or fall away. Currently the contracted generation supported by Future Energy Scenarios (FES) show a clear need for the Project.	
3.2.104	General comments to scrap / rethink / change the Project	National Grid has a statutory duty to facilitate new connections and maintain a safe National Electricity Transmission System (NETS). The Project would facilitate the connection agreements that are in place with two offshore wind farm projects and an interconnector project based on their connection into a new East Anglia Connection Node (EACN) substation. The Project will also reinforce the local transmission network which currently does not have the capacity needed to reliably and securely transport all the energy that is likely to be connected in the future – driven by the Government's plan to increase offshore wind from the current 8.5 GW to 50 GW by 2030 to meet the increased demand, potentially doubling by 2050 according to the Government's Energy White Paper (EWP).	
		National Grid has presented its strategic options and its approach to routeing and siting of the Project in the published 'Project Background Document' and Corridor and Preliminary Routeing and Siting Study (CPRSS), both dated April 2022. The process of options appraisal of all the identified options is undertaken using guidance (National Grid's Approach to Consenting) which provides a thorough, consistent, and transparent framework to inform the appraisal of project options and decision-making. Its aim is to ensure that decisions regarding the Project design (route, location, or technology option) are based on a full understanding and balance of the technical, socioeconomic, environmental, and cost implications of each option. Once all identified options have been appraised, the option or options that best meet National Grid statutory duties and obligations are selected as the preferred option or options. National Grid has taken into consideration comments made to date in the development of the Project (as provided in this document) and will continue to engage with the relevant stakeholders and members of the public prior to the submission.	
3.2.105	Criticism of Government green agenda / policy	The Government, in its Energy White Paper (EWP), states its ambition to achieve Net Zero emissions by 2050 whilst meeting a large increase in future demand (potentially doubling by 2050). To achieve this the EWP has outlined a plan to increase energy from offshore wind to 40 GW by 2030 (target increased to 50 GW in April 2022) although it is recognised that whilst a low cost, Net Zero consistent system is likely to be composed predominantly by wind and solar it also likely to require complementing intermittent renewables with technologies including nuclear and gas with carbon capture and storage. Under its transmission licence, National Grid has a statutory duty to respond to generation customers wanting to connect to the transmission network, whether this be for wind, solar, nuclear, tidal or from other forms of generation.	

Ref no.	Summary of matters raised	National Grid's response
Project Fi	nance / Costs	
3.2.106	Cost is the main factor driving the proposed Project design / economic priority in Project design	Cost is one of the factors that needs to be considered in making decisions on the Project.  The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances. However, the Government is aware that overhead lines may not be appropriate in particularly sensitive areas. The process of appraising different identified options is undertaken using guidance (National Grid's Approach to Consenting). Its aim is to ensure that decisions regarding the scheme design (route, location, or technology option) are based on a full understanding and balance of the technical, socio-economic, environmental, and cost implications of each option. Once all identified options have been appraised, the option or options that best meet National Grid statutory duties and obligations are selected as the preferred option or options. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers to whom the costs are eventually passed, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape, and visual quality.
		The consideration of cost within the decision-making process is therefore one of National Grid's statutory duties and is not something that National Grid could make representation to the Office of Gas and Electricity Markets (Ofgem) to waive.
3.2.107	Acknowledge that there is a need to find a balance between the Project design (i.e. undergrounding, new overhead lines, upgrading existing lines, etc) and cost	The process of options appraisal of all the identified options is undertaken using guidance (National Grid's Approach to Consenting) which provides a thorough, consistent, and transparent framework to inform the appraisal of project options and decision-making. Its aim is to ensure that decisions regarding the project's design (route, location, or technology options) are based on a full understanding and balance of the technical, socio-economic, environmental, and cost implications of each option. Once all identified options have been appraised, the option or options that best meet National Grid statutory duties and obligations are selected as the preferred option or options. The existing overhead lines cannot be further adapted safely and securely to enable them to carry more power or additional conductors (wires) added to take the amount of power being proposed in East Anglia.
3.2.108	An (independent) review of the financial costs of the options for the Project should be undertaken, taking into account all costs through the whole of the Project lifecycle.	In response to a request by Essex County Council on behalf of all host local planning authorities, National Grid has agreed to fund an independent review of cost options.
Project Hi	story	
3.2.109		The Project is one of several essential network reinforcements needed to deliver on the UK's Net Zero target – without it, cleaner, greener energy generated offshore would not be able to be transported to homes and businesses across the country. To meet the predicted doubling in electricity demand by 2050 and the Government's 2050 Net Zero target, the Government's Energy White Paper (EWP), whilst not planning for a specific technology solution,

Ref no.	Summary of matters raised	National Grid's response
		predicts that "a low cost, Net Zero consistent system is likely to be composed predominantly by wind and solar" but also complementing intermittent renewables with technologies including nuclear. This mix of energy production is considered to provide a more sustainable approach in line with the United Nations (UN) Sustainable Development Goals and would be facilitated by this Project.
Public Rig	ghts of Ways (PRoW).	
3.2.110	Concern around disruption of Public Rights of Ways (PRoW)/	Through routeing and siting, National Grid has sought and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).
	Mitigation must be put in place for pedestrians / equestrians directly or indirectly impacted	The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. If mitigation is required, measures may include, the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.
		Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
Technolog	gy / Operations	
3.2.111	Oppose use of overhead lines as they are an outdated and inefficient technology	National Grid is constantly looking into new innovations and investigating alternative technology types. These are explored and assessed for suitability. Alternative technologies were investigated for the Project, these included an offshore connection using direct current (DC) technology, and various onshore connection options including: increasing operational voltages on existing network to above 400 kV; alternating current (AC) overhead lines (established technology); alternative pylon types; AC underground technology; high voltage direct current (HVDC) overhead line and underground cables; and gas insulated line (GIL).  Currently, overhead lines offer the most economic and efficient solution to transmit electricity over long distances.
3.2.112	Overhead lines / substations are noisy and disruptive	Noise from overhead lines is predominately determined by the conductor design, voltage, and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Pylon fittings, such as insulators, dampers, spacers, and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the Environmental Impact Assessment (EIA).
3.2.113	Overhead lines are susceptible to weather events and vulnerable to terrorism / warfare / sabotage	The majority of the existing National Grid transmission network is constructed from overhead lines, these are a demonstrated and reliable form of electricity transmission in the UK. They are designed to meet current design and safety standards and to operate in a range of typical and abnormal weather conditions found in the UK. Standards

Ref no.	Summary of matters raised	National Grid's response
		are regularly reviewed and any adjustments to these standards (for example with regards to climate change) would need to be applied to the entire network. At this stage no known changes are required for a new overhead line project.
		Unforeseen events of sufficient severity to cause damage to infrastructure are very rare in the UK but do occur. Overhead lines could be subject to adverse weather conditions such as high wind speeds and lightning strikes, and also, due to disruption from an external factor such as sabotage. To reduce sabotage from the ground as far as practicable, we install anti-climb measures such as barb-wiring. However, the possibility of interference remains as pylons are typically situated in isolated locations where constant surveillance is impractical.
		In the unlikely event an overhead line was to be damaged, a network wide monitoring system would detect the fault almost immediately and the circuit would be tripped, and the live current stopped. At the point of repairing any damage, overhead lines are comparatively easier and more cost-effective to repair and maintain than alternative transmission technology.
		National Grid also undertakes regular inspections of the overhead line using thermal imaging to assess damage to the overhead line from weather or other causes. This means low level damage caused would be identified and repaired prior to failure of the line.
3.2.114	The Project should ensure that there is sufficient capacity to meet future needs / future	The Project is one of a number of network reinforcements needed to deliver 50 GW of offshore wind by 2030. There are further onshore reinforcements identified in the region in National Grid's Network Options Assessment (NOA) that are needed in addition to the Project.
	proofing the capacity	The current proposal would ensure the maximum capability is provided, when compared with alternatives and other technologies at the most efficient, economic and co-ordinated way.
		Together these network reinforcements will provide capacity for future generation from various generators to be transmitted across electrical boundaries within East Anglia and the wider transmission network.
3.2.115	Concerns about disruption caused by (and cost of) ongoing maintenance of equipment	National Grid has thousands of kilometres of overhead lines, underground cable and supporting infrastructure such as Cable Sealing End (CSE) compounds. We have well established and standardised practices to undertake maintenance works as outlined above. By the implementation and adherence to such practices, cost and time efficiencies across the network have been identified and maximised where possible.
		The typical lifespan of an overhead line and the underground cable elements of a project would be approximately 40 years, depending on use and location.
		Maintenance inspections of overhead line routes are typically undertaken using a helicopter or small aircraft to monitor their condition on an annual basis.
		Additionally, thermal images are taken every six to eight years, which capture high-definition imagery of each pylon and allows for a detailed assessment of the condition of the pylon.
		To supplement the aerial photography and inspections, routine ground level walking inspections are also undertaken.
		The CSE compounds would contain equipment that can be accessed remotely to monitor the condition of the underground cabling.

Ref no.	Summary of matters raised	National Grid's response
Tourism		
3.2.116	Concerned about impact of the Project on leisure and tourism	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure. Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (e.g. the Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.
		Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include: traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
Visual imp	pact	
3.2.117	Support for undergrounding the Project when passing through sensitive areas	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient (including adhering to the Electricity Act 1989), National Grid's Licence Conditions and Planning Policy), which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. Our current proposals include underground cable within, and in close proximity to, the Dedham Vale Area of Outstanding Natural Beauty (AONB) in accordance with NPS EN-5.  The Environmental Impact Assessment (EIA) will assess the impacts on sensitive areas and inform mitigation
		measures to be adopted by the Project which will be presented in the Environmental Statement (ES).
3.2.118	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable Sealing End (CSE) Compounds	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.
	and Substations)	In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.

Ref no.	Summary of matters raised	National Grid's response
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.2.119	Cumulative effect of onshore National Grid Projects within East Anglia	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.
3.2.120	Using of application of the 'Holford Rules' to lessen visual impact is an outdated methodology / The Project does not meet the Holford Rules	National Grid disagrees that the Holford Rules are outdated as these are referenced within the policy framework which is relevant to the Project. We would note that application of the Holford Rules typically involves balancing alternative solutions which can present conflicting Holford compliance. We use the Environmental Impact Assessment (EIA) process to inform the balance and define our proposals that we take forward, and which are also informed by feedback. Further details on the proposed routeing and siting of the Project can be found in the Design Development Report, published as part of the 2023 non-statutory consultation.
3.2.121	Consider potential alternative colour schemes for the pylons / Consider alternative aesthetic of pylons to complement the landscape	National Grid uses a standard industrial grey paint colour across the majority of its assets.  It is a colour we have used for several years as it provides a sympathetic balance between pylons blending into landscapes and skylines when seen from differing views and natural lighting.  The new T-pylon differs in colour from the lattice pylons given its bulkier appearance. If there are areas where there are specific requirements to mitigate visual impacts and it is considered that a different paint colour may reduce the visual impact further, these will be looked at and reviewed on a case-by-case basis with the findings presented within the Environmental Statement (ES) for the Project.
Wildlife / E	Ecology impact	
3.2.122	Negative impact of the Project on available land for grazing animals and horses	

Ref no.	Summary of matters raised	National Grid's response
		matters can also be written into voluntary land agreements. There will also be mitigation put in place where wild animal grazing maybe affected.
		As well as possible effects on humans, possible effects of Electric and Magnetic Fields (EMFs) on various animals have been studied a number of times. No detectable effects of EMFs have been found on, for example, health, milk production, fertility, and behaviour. This is confirmed in National Policy Statement (NPS) EN-5 which states: "There is little evidence that exposure of crops, farm animals or natural ecosystems to transmission line EMFs has any agriculturally significant consequences."
		As well as the potential direct biological or health effects addressed above, indirect effects such as micro shocks can occur as a result of electric fields. Micro shocks are small spark discharges which are similar to a static shock after walking across a nylon carpet for example. The Project will be designed in accordance with the principles of the Government's Code of Practice 'Power Lines: Control of Micro shocks and other indirect effects of public exposure to electric fields' to ensure these are mitigated.
3.2.123	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology - including protected species	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver Biodiversity Net Gain (BNG) and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.2.124	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands, and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.

Ref no.	Summary of matters raised	National Grid's response
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.2.125	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.
		We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques, to take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.2.126	Minimise potential impact on flying birds from the overhead lines	Overwintering birds will be assessed in the biodiversity assessment as part of the Environmental Impact Assessment (EIA). Survey work for wintering /passage birds commenced in September 2022 and the scope of survey has been agreed with Natural England. The potential for collision with new overhead lines and risk of mortality through electrocution will also be assessed in the EIA. Should adverse impact be identified, they will be minimised as far as possible, where practicable.
3.2.127	Suggested target for Biodiversity Net Gain (BNG) / Requested ecological enhancements	The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.

Ref no.	Summary of matters raised	National Grid's response
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.2.128	Suggestion that opportunities for mitigation including river restoration or enhancements should be explored to reprofile/naturalise riverbanks, improve fish passage for migratory species, and contribute to natural flood risk management through creation of new wetland areas	The Environmental Statement (ES) will include consideration of potential impacts of flood risk and on watercourses, in terms of their physical form and other Water Framework Directive (WFD) attributes. A Flood Risk Assessment (FRA) and Water Framework Directive (WFD) Screening assessment will also be produced to support the ES and will be submitted with the Development Consent Order (DCO) application. Any enhancements or mitigations such as river restoration, reprofiling and river naturalisation, identified as required following these assessments will be incorporated into the design process.
3.2.129	Request that consideration is given to minimising the impact that the Project has on Local Wildlife Sites (LWS) / County Wildlife Sites (CWS)	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity, including designated sites of ecological value. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Statement (ES) for the Project will present the effects on biodiversity and where required, mitigation requirements.
		As part of the Environmental Impact Assessment (EIA) process for the Project, a suite of ecological surveys have been and will continue to be undertaken, the findings of which will inform the design and approach to mitigation. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
		We will continue to engage with the relevant stakeholders and local planning authorities on aspects relating to Local Wildlife Sites (LWS) and County Wildlife Sites (CWS), including appropriate mitigation measures and techniques (should they be required) and to take their views into account as the Project continues to develop.
3.2.130	Request that a sufficient buffer zone (30 m distance suggested as precautionary) is maintained between the Project and designated Ancient Woodland	The process of route design takes account of biodiversity and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation, including Ancient Woodland. Consideration of direct and/or indirect effects on Ancient Woodland will be assessed within the Environmental Impact Assessment (EIA) with regards to biodiversity, landscape and visual effects and air quality.

Ref no.	Summary of matters raised	National Grid's response
		Control measures such as 'working exclusion zones' identified as part of the EIA process will be presented within the Code of Construction Practice (CoCP) for the Project for the construction contractors to adhere to.
3.2.131	Request that notable trees recorded on the Ancient Tree Inventory within the Project corridor are identified, retained and afforded suitable root protection areas	An arboricultural survey will be undertaken to obtain data on woodlands, veteran/ancient trees, Tree Preservation Orders (TPO) and noteworthy trees and groups of trees within the study area. Data obtained through desk top studies (including use of the Ancient Tree Inventory) will inform the design development and the Arboricultural Impact Assessment (AIA) to be produced for the Project, which would set out mitigation measures to reduce the impact on retained arboricultural features. Mitigation measures, such as root protection measures, would feed into the outline Construction Code of Practice (CoCP) (submitted within the Development Consent Order (DCO) application).

# Section 1: South Norfolk feedback

Figure 3.16 - South Norfolk section map

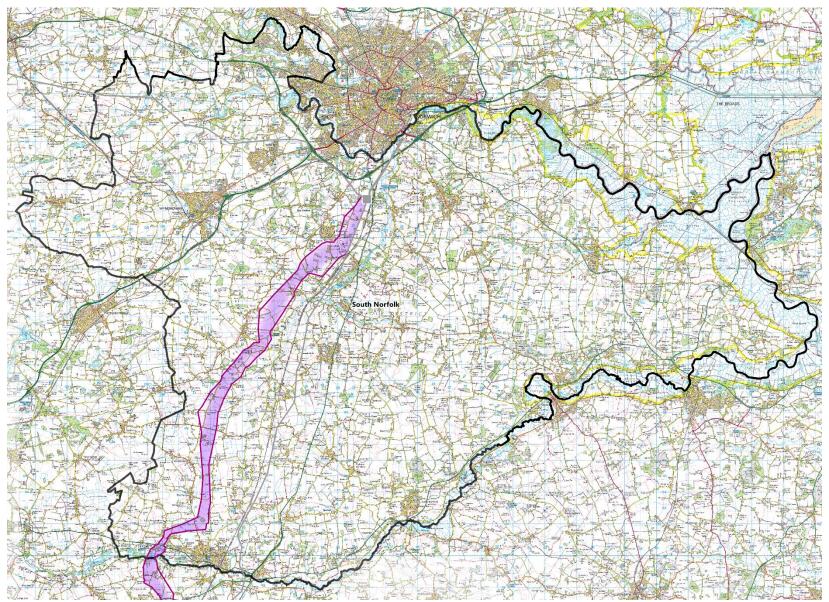


Table 3.3 - Summary of consultee comments on Section 1: South Norfolk and National Grid's response

Ref no.	Summary of matters raised	National Grid's response
Communit	ty / Social impact	
3.3.1	Concerned about impact of the Project on children / families /	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.
	residents	We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.
		The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:
		• Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)
		Email us: contact@n-t.nationalgrid.com
		<ul> <li>Write to us: FREEPOST N TO T (No stamp or further address details are required)</li> </ul>
Constructi	ion impacts	
3.3.2		National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
Design Ch	nange	
3.3.3	Cumulative effect of the Project alongside existing overhead lines	National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.
		For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to

Ref no.	Summary of matters raised	National Grid's response
		reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.
3.3.4	Concern around the Project causing communities to become encircled by overhead lines	The current, preferred corridor, has been routed to achieve some separation from the existing 400 kV overhead lines, such that villages are not encircled by overhead lines to both sides. Separation is inevitably reduced in certain locations due to the presence of constraints to routeing and environmental features. Detailed assessment reported in the Environmental Impact Assessment (EIA) will identify any measures considered to be necessary to reduce potential effects which will also consider the potential for effects potentially arising from close paralleling existing 132 kV overhead line and new 400 kV overhead line infrastructure.
3.3.5	Suggest routeing the Project offshore out at sea / Should consider routeing the Project undersea	Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Study (CPRSS) examines several strategic options that were considered for the Project that might achieve the required reinforcement including offshore options. These options were not taken forward as they did not fully address technical or physical/ geographical constraints or enable the network to operate to the required standards.
		An offshore connection (which has a maximum 2 MW capacity) would have a third of the capacity of the proposed overhead line connection and therefore to transfer the anticipated levels of power generation, three offshore connections would be required including associated infrastructure such as convertor stations. This would make the connection significantly costlier to energy bill payers.
		In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich, Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area.
3.3.6	Suggestion that the Project is routed away from specific location	Further assessment and technical appraisal has been undertaken following feedback received from non-statutory consultation which has resulted in several changes to the current preferred corridor. Further details on these changes can be found in the Design Development Report, published as part of the 2023 non-statutory consultation. Further changes to the current preferred corridor and draft alignment will be considered as the Project develops.
3.3.7	Suggestion that the Project is routed away from the Waveney Valley	National Grid has considered the feedback, however, note that a crossing of the Waveney Valley cannot be avoided in developing a connection between Norwich and Bramford without an undue diversion to the west with a longer, less direct route. We have applied the guidelines on overhead line routeing known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report. A longer and less direct route would be expected to transfer effects to a greater number of other receptors and be less consistent with the Rules and would therefore be considered less preferable.
Economic	c / Employment impact	
3.3.8	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well

Ref no.	Summary of matters raised	National Grid's response
		as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.
		Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include: traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
Environme	ental impact	
3.3.9	The South Norfolk landscape needs to be protected	The process of route design will take account of potential significant impacts on landscape and where practicable, will continue to seek to reduce impacts through routeing and other embedded mitigation. National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment of the likely significant effects of the Project on the fabric and character of the South Norfolk landscape.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
		National Grid will also submit a Landscape and Ecology Management Plan (LEMP) setting out landscaping proposals with the Development Consent Order (DCO).
3.3.10	The Project will impact designated sites - e.g. Site of Special Scientific Interest (SSSI), Ancient Woodland and an Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Sites of Special Scientific Interest (SSSI) and Ancient Woodland.
		The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required mitigation requirements.
		We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.3.11	The Project will result in a negative impact on the	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely

Ref no.	Summary of matters raised	National Grid's response
	environment generally (no details given)	effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.
3.3.12	The Project will cause a negative impact on landscape / amenity	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
		Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (e.g. the Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
		We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
Health an	d Safety	
3.3.13	Consideration needs to be given to the operation of light aircraft and gliders from airfields in the area (e.g. Norfolk Gliding Club, Priory Farm and Tibenham /	Our review of airfields within 4 km of the preferred corridor identified 10 General Aviation (GA) sites, one military site (Wattisham Flying Station) and the Mid and South Essex National Health Service (NHS) Broomfield Hospital which receives helicopters from a helipad on the roof of the main hospital building.  The airfield operators will be consulted as the design of the Project continues and reasonable and we will endeavour
	Brook Farm / Wattisham Airfield) / The siting of overhead lines presents a risk to light aircraft in the area	to design a solution that safely accommodates airfield operations as far as practicable.
Heritage		
3.3.14	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. If impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.

Ref no.	Summary of matters raised	National Grid's response
		Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).
		We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
Public Rig	ghts of Ways (PRoW).	
3.3.15	Concern around disruption of Public Rights of Way (PRoW) /	Through routeing and siting, National Grid has sought and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).
	Mitigation must be put in place for pedestrians / equestrians directly or indirectly impacted	The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. If mitigation is required, measures may include, the temporary closure of PRoWs during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.
		Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
Tourism		
3.3.16	Concerned about impact of the Project on leisure and tourism (e.g. Bressingham Garden Centre and Steam Museum)	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure. Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism.
		We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.
		Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include: traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
Visual imp	pact	
3.3.17	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.

Ref no.	Summary of matters raised	National Grid's response
	Sealing End (CSE) Compounds and Substations)	In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.  A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact
		Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
Wildlife / I	Ecology impact	
3.3.18	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology - including protected species	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.3.19	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants, woodland and hedgerows) and where required appropriate mitigation measures.
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater

Ref no.	Summary of matters raised	National Grid's response
		in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.3.20	Suggestion to mitigate potential impacts to waterfowl using the Waveney Corridor	Potential impacts on wildfowl will be assessed in the biodiversity assessment as part of the Environmental Impact Assessment (EIA). Survey work for wintering/ passage birds commenced in September 2022 with the scope of survey being agreed with Natural England. A full desk study of local bird data will also be undertaken. The potential for collision with new overhead lines will be assessed in the EIA.
3.3.21	Concerned about the potential impact of overhead lines on the area identified for a Nature Recovery Network (along the Waveney and Little Ouse to the west of Diss), and suggest that this could provide opportunities for Biodiversity Net Gain (BNG) and for further habitat enhancements	Through the routeing and siting exercise National Grid has sought to, and will continue to, reduce as far as practicable impacts on biodiversity which includes areas considered part of the Nature Recovery Network. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
		As part of this process locations will be identified that provide enhancement that links to Nature Recovery Network sites.

# Section 2: Mid Suffolk feedback

Figure 3.17- Mid Suffolk section map

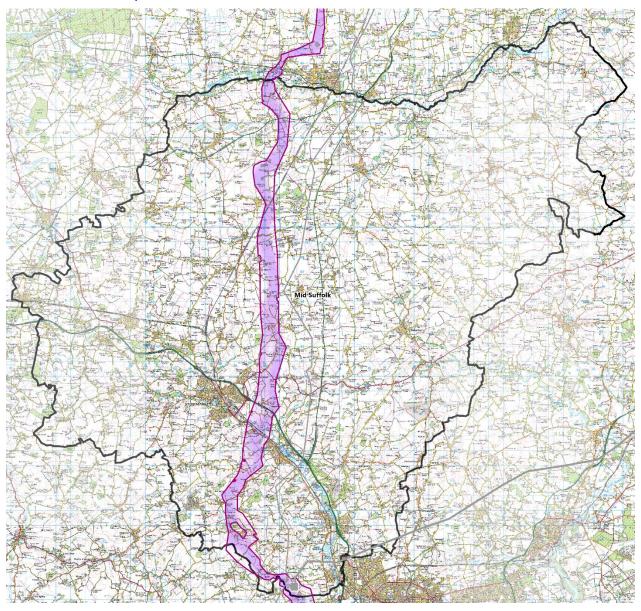


Table 3.4- Summary of consultee comments on Section 2: Mid Suffolk and National Grid's response

	Cummany of matters		
Ref no.	Summary of matters raised	National Grid's response	
Agricultura	Agricultural land		
3.4.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.	
Communit	ty / Social impact		
3.4.2	Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.	
		We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.	
		The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:	
		Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)	
		Email us: contact@n-t.nationalgrid.com	
		Write to us: FREEPOST N TO T (No stamp or further address details are required)	
Design Ch	nange		
3.4.3	Underground cables should be used in this section	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive	

Ref no.	Summary of matters raised	National Grid's response
		locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONB), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV overhead line infrastructure.
		No such designations or crossing locations have been identified in this section which is, at this stage, therefore proposed as an overhead line. We will undertake an Environmental Impact Assessment (EIA) to assess the potential impact of the Project, and this will identify the need for any additional mitigation.
3.4.4	Cumulative effect of the Project alongside existing overhead lines	National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.
		For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.
3.4.5	Concern around the Project causing communities to become encircled by overhead lines	The currently preferred corridor, has been routed to achieve some separation from the existing 400 kV overhead line, such that villages are not encircled by overhead lines to both sides. Separation is inevitably reduced in certain locations due to the presence of constraints to routeing and environmental features. Detailed assessment reported in the Environmental Impact Assessment (EIA) will identify any measures considered to be necessary to reduce potential effects which will also consider the potential for effects potentially arising from close paralleling existing 132 kV overhead line and new 400 kV overhead line infrastructure.
3.4.6	Concerned about over development of area (e.g. cumulative impact of solar farms, new residential and business development)	With regards to multiple developments impacting specific areas and/ or receptors through overdevelopment, planning applications for each development would be considered on their own merit by the determining authorities. Any such application would be considered in accordance with planning policy and material considerations, such as scale, suitability, and need.
		Where there is certainty of a development, such as a new residential development, being constructed, and there is adequate information in the public domain to understand the impacts of that development on the receiving environment, these will be considered within the cumulative impact assessment of the Project. We will continue to engage with other developers who are proposing development in proximity of the Project to understand their requirements.
3.4.7	Suggestion that underground cables are used in the Waveney Valley and Gipping Valley	National Grid has carefully considered the feedback received during consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape, and visual quality. The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government expects overhead lines

Ref no.	Summary of matters raised	National Grid's response
		to be appropriate in most instances, although it recognises that that there may be, at particularly sensitive locations, which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONB), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV overhead line infrastructure.
		No such designations have been identified in the two identified locations and therefore at this stage the Project in this section is proposed as overhead line.
		An Environmental Impact Assessment (EIA) will assess the impact of the Project and will identify any need for additional mitigation.
3.4.8	Request that the Project is routed to the north of Flowton Roadside Nature Reserve (RNR) 92, or alternatively the Project is undergrounded through the RNR using Horizontal Directional Drilling (HDD)	The current proposals avoid the Flowton Roadside Nature Reserve.
3.4.9	Suggestion that the Project is routed away from specific location	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation which has resulted in several changes to the current preferred corridor, further information on these changes can be found in the Design Development Report published as part of the 2023 non-statutory consultation. Further changes to the current preferred corridor and draft alignment will be considered as the Project develops.
3.4.10	Suggestion that the Project is routed away from The Waveney Valley	National Grid has considered the feedback, however, note that a crossing of the Waveney Valley cannot be avoided in developing a connection between Norwich and Bramford without an undue diversion to the west with a longer, less direct route. We have applied the guidelines on overhead line routeing known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process.
		A summary of the Holford Rules is provided within Chapter 1 of this report. A longer and less direct route would be expected to transfer effects to a greater number of other receptors and be less consistent with the Rules and would therefore be considered less preferable.
3.4.11	Suggestion that the Project is routed away from Offton	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Offton. We have concluded that a corridor to the west of Offton Woods would be preferred which requires an alignment to the west of the existing 132 kV overhead line. We also reviewed corridors considered within the Corridor and Preliminary Routeing and Siting Study (CPRSS) as well as a deviation to the preferred corridor from Needham Market to Bramford closely paralleling the existing 400 kV overhead line. We considered these less preferred because of the potential requirement for the use of underground cable (so they are less economic) to avoid effects on heritage assets, Ancient Woodland, and residential amenity inconsistent with policy. We also considered

Ref no.	Summary of matters raised	National Grid's response
		alternative more western alignments but considered these less preferred because of the transfer of effects and potential inconsistency with policy pertaining to the Grade I listed church at Flowton which may have required underground cable as a form of mitigation. The preferred alternative was to broadly adopt the 132 kV overhead line alignment but with increased separation from Offton and Offton castle, going someway to addressing the feedback. We will further consider this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.4.12	Suggestion that the Project is routed away from Cotton	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Cotton. Noting feedback regarding potential impacts on several assets in and around Cotton, including Carters Meadow, Grade II Listed Hemphalls Hall and Grade I Listed St Andrews Church, we are proposing a draft alignment within the graduated swathe as far to the east of the preferred corridor as possible without transferring or increasing potential effects unacceptably on other individual residential properties, environmental and historical assets in and around the villages of Mendlesham and Wickham Skeith, as well as following the guidance in the Holford Rules. Further details on routeing and siting of the current preferred alignment can be found in the Design Development Report published as part of the 2023 non-statutory consultation. We will undertake an Environmental Impact Assessment (EIA) to assess the potential impact of the Project, and this will identify any need for additional mitigation which may potentially include alternative pylon designs. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.4.13	Suggestion that the Project is routed away from Mendlesham Green	The respondents feedback provides a preference for an alternative moved away from Mendlesham Green. In the absence of a specific basis for the change or a proposed alternative corridor, National Grid has considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.4.14	Suggestion that the Project is routed away from conservation areas	Through the routeing and siting exercise, National Grid has avoided conservation areas as far as possible. The Environmental Impact Assessment (EIA) will include an assessment of the effects of the Project on the historic environment, including conservation areas. The assessment will identify the potential for significant effects, due to change in setting, that affects value as a result of the Project, and whether any mitigation is required to offset likely significant effects.
3.4.15	Suggestion that the Project is routed away from Barking	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Barking. We are proposing that a draft alignment to the northwest edge of the preferred corridor should be taken forward. This would increase separation to Barking and reduce effects on residential amenity and on listed buildings including the Grade I Listed church and would position the pylons on slightly lower ground. We also considered other corridors (more closely following the existing 400 kV overhead line but the potential requirement for

Ref no.	Summary of matters raised	National Grid's response	
		the use of underground cable made these less economic and less preferred). We have further considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.	
3.4.16	Locations for Cable Sealing End (CSE) Compound sites to facilitate end point of underground section must be carefully chosen and subject to further consultation	National Grid acknowledges the requirement to carefully site the Cable Sealing End (CSE) compounds paying particular regard to the Horlock Rules and will consult on its proposals and consider any feedback provided as the Project develops.	
Economic	Economic / Employment impact		
3.4.17	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.	
		Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include: traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).	
Environme	ental impact		
3.4.18	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated. National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.	
		The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.	
3.4.19	The Project will impact designated sites - e.g. Site of Special Scientific Interest (SSSI), Ancient Woodland and a Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Site of Special Scientific Interest (SSSI) and Ancient Woodland.	
		The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental	

Ref no.	Summary of matters raised	National Grid's response
		Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required, mitigation requirements.
		We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
3.4.20	The Project will cause a negative impact on landscape / amenity	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
		Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (e.g. the Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
		We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.4.21	Concerned about the impact on Mellis Common Nature Reserve	The Project currently avoids the Mellis Common Nature Reserve and detailed design will look to further reduce any potential impacts. All potential biodiversity impacts will be assessed as part of the Environmental Impact Assessment (EIA) which will include non-statutory designated sites such as Mellis Common Nature Reserve.
Health an	d Safety	
3.4.22	Consideration needs to be given to the operation of light aircraft from airfields at Wortham (e.g. Brook Farm) / The siting of overhead lines presents a risk to	Our review of airfields within 4 km of the preferred corridor identified 10 General Aviation (GA) sites, one military site (Wattisham Flying Station) and the Mid and South Essex National Health Service (NHS) Broomfield Hospital which receives helicopters from a helipad on the roof of the main hospital building.  The airfield operators will be consulted as the design of the Project continues and reasonable and we will endeavour to design a solution that safely accommodates airfield operations as far as practicable.
	overhead lines presents a risk to light aircrafts in the area	to design a solution that safely accommodates airfield operations as far as practicable.

Ref no.	Summary of matters raised	National Grid's response
Heritage		
3.4.23	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. If impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.
		Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).
		We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
3.4.24	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking an Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify any likely significant effects on archaeological sites. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
Public Rig	ghts of Ways (PRoW).	
3.4.25	Concern around disruption of Public Rights of Way (PRoW). / Mitigation must be put in place for pedestrians / equestrians directly or indirectly impacted	Through routeing and siting, National Grid has sought and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).
		The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. If mitigation is required, measures may include, the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.
		Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
Tourism		
3.4.26	Concerned about impact of the Project on leisure and tourism	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure. Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (e.g. the

Ref no.	Summary of matters raised	National Grid's response
		Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.  Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation
		and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include: traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
Visual imp	pact	
3.4.27	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable Sealing End (CSE) Compounds and Substations)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.
		In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.4.28	Cumulative effect of onshore National Grid projects within East Anglia / within this section	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.
3.4.29	Negative visual impact on the Gipping Valley	National Grid has a duty to have regard to the desirability of (amongst other things) preserving natural beauty and to do what it reasonably can to mitigate any effects. Embedded measures include the use of underground cables in the areas of highest amenity (e.g. the Dedham Vale Area of Outstanding Natural Beauty (AONB)) which will reduce the

Ref no.	Summary of matters raised	National Grid's response
		effects of the project. Landscape and visual impacts will be assessed as part of the Environmental Impact Assessment (EIA) to be submitted with the Development Consent Order (DCO) application.
		At this stage the proposal is based on the use of overhead line technology but with the potential for mitigation to be identified by the EIA.
Wildlife /	Ecology impact	
3.4.30	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.  The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.
		We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques, to take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.4.31	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology - including protected species	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be

Ref no.	Summary of matters raised	National Grid's response
		identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.4.32	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands, and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.4.33	Negative impact of the Project on available land for grazing animals and horses	National Grid recognises that there is the potential for impacts. We are and will continue to work with all landowners including farmers and equestrian facilities who may be affected by the proposals to understand the impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements. There will also be mitigation put in place where wild animal grazing may be affected.
		As well as possible effects on humans, possible effects of Electric and Magnetic Fields (EMFs) on various animals have been studied a number of times. No detectable effects of EMFs have been found on, for example, health, milk production, fertility, and behaviour. This is confirmed in National Policy Statement (NPS) EN-5 which states: "There is little evidence that exposure of crops, farm animals or natural ecosystems to transmission line EMFs has any agriculturally significant consequences."
		As well as the potential direct biological or health effects addressed above, indirect effects such as micro shocks can occur as a result of electric fields. Micro shocks are small spark discharges which are similar to a static shock after walking across a nylon carpet for example. The Project will be designed in accordance with the principles of the Government's Code of Practice 'Power Lines: Control of Micro shocks and other indirect effects of public exposure to electric fields' to ensure these are mitigated.

# Section 3: Babergh, Tendring and Colchester feedback

Figure 3.18- Babergh, Tendring and Colchester section map

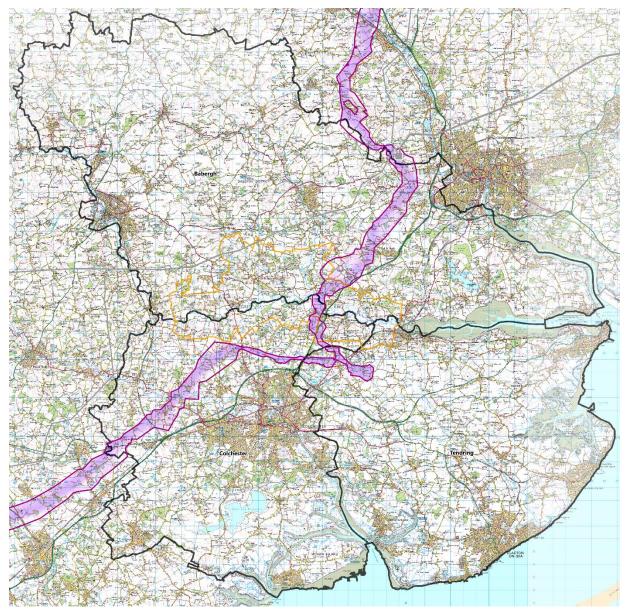


Table 3.5- Summary of consultee comments on Section 3: Babergh, Tendring and Colchester and National Grid's response

Ref no.	Summary of matters raised	National Grid's response
Agricultura	al land	
3.5.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.
Area of Ou	utstanding Natural Beauty (AONB)	
3.5.2	Ensure protection of the Area of Outstanding Natural Beauty (AONB) / avoid detrimental impact on the Dedham Vale AONB	National Policy Statement (NPS) EN-5 makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology will be adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the Natural Beauty of Dedham Vale AONB. Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
		We will also submit a Landscape and Ecology Management Plan (LEMP) setting out landscaping proposals with the Development Consent Order (DCO) submission.
3.5.3	The proposed undergrounding is inadequate to mitigate adverse visual impacts of pylons and	National Policy Statement (NPS) EN-5 states that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations,

Ref no.	Summary of matters raised	National Grid's response
	overhead lines on views to and from the Dedham Vale Area of	potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy.
	Outstanding Natural Beauty (AONB)	The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology will be adopted with the extent of cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the defining characteristics and 'special qualities' of the Natural Beauty of Dedham Vale AONB. Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB including a section at Great Horkesley.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.5.4	Only the Area of Outstanding Natural Beauty (AONB) has been considered and not the areas in the immediate vicinity of the	National Policy Statement (NPS) EN-5 states that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy.
	AONB	The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology is adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the Natural Beauty of the AONB. Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley to reduce the changes in views and setting of the AONB from within and adjacent to its designated boundary.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project on the AONB and the areas in the immediate vicinity of the AONB, amongst other receptors and will identify the need for mitigation.
3.5.5	Criticism of routeing the Project through Area of Outstanding Natural Beauty (AONB)	The current preferred corridor is through the Dedham Vale Area of Outstanding Natural Beauty (AONB) with the use of underground cable (both within the AONB and beyond the AONB boundaries) to protect the natural beauty and special qualities of the AONB. This is in accordance with relevant policies and National Grid duties. We also considered routes that avoid the AONB and consider the additional effects arising from alternatives, such as a third line from Bramford to the Twinstead area and a connection from the Twinstead area to Tilbury via an East Anglia Connection Node (EACN) substation, to be greater than those arising from the preferred corridor and less compliant with our duties and relevant policies.
3.5.6	Concerned the section of the Project near the A134 will be visible from the Area of Outstanding Natural Beauty (AONB)	National Policy Statement (NPS) EN-5 states that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology is adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the Natural Beauty and defined special qualities of the AONB. The current proposals include a total of

Ref no.	Summary of matters raised	National Grid's response
		approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB which includes a section in the vicinity of Great Horkesley and the A134.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.5.7	Overhead lines will be seen from the Area of Outstanding Natural	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity that are both important factors to the Dedham Vale Area of Outstanding Natural Beauty (AONB).
	Beauty (AONB)	Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the AONB, including at Great Horkesley to reduce the changes in views and setting of the AONB from within and adjacent to its designated boundary.
		We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects. Measures to reduce such effects have included the use of underground cables in the areas of highest amenity value (e,g, the Dedham Vale AONB), sympathetic siting of infrastructure and pylons within the existing landform, and where necessary a range of planting for the purpose of screening.
		We will continue to engage with Natural England, the Dedham Vale and Stour Valley Partnership and the relevant stakeholders on aspects relating to the Dedham Vale AONB, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
3.5.8	Need more information on the mitigation in the Area of Outstanding Natural Beauty (AONB)	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity that are both important factors to the Dedham Vale Area of Outstanding Natural Beauty (AONB).
		We will continue to consider both landscape character and amenity value as we develop our proposals and seek to identify the impacts and reduce effects, these will be assessed within a Landscape and Visual Impact Assessment (LVIA).
		Measures to reduce such effects have included the use of underground cables in the areas of highest amenity value (e,g, the Dedham Vale AONB and in its vicinity at Great Horkesley), sympathetic siting of infrastructure and pylons within the existing landform, and where necessary a range of planting for the purpose of screening. When the mitigation requirements are finalised, we will share these with Natural England and the relevant stakeholders to take their views into account as the Project continues to develop.
Communi	ty / Social impact	
3.5.9	Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.
		We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.
		The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised

Ref no.	Summary of matters raised	National Grid's response
		and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:
		• Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)
		Email us: contact@n-t.nationalgrid.com
		Write to us: FREEPOST N TO T (No stamp or further address details are required)
3.5.10	Concern around the Project causing communities to become encircled by overhead lines	The currently preferred corridor, has been routed to achieve some separation from the existing 400 kV overhead line, such that villages are not encircled by overhead lines to both sides. Separation is inevitably reduced in certain locations due to the presence of constraints to routeing and environmental features. Detailed assessment reported in the Environmental Impact Assessment (EIA) will identify any measures considered to be necessary to reduce potential effects which will also consider the potential for effects potentially arising from close paralleling existing 132 kV overhead line and new 400 kV overhead line infrastructure.
3.5.11	Concern regarding schools / There should be a greater distance between schools and the Project	National Grid uses the guidance in the Holford Rules as the basis for routeing. These rules provide guidance regarding routeing away from various features such as residential areas where schools are often located. As a result, we would expect route development to achieve appropriate separation from schools and we will continue to respond to feedback as the Project design develops.
3.5.12	Concerned about over development of area (e.g. cumulative new residential development)	With regards to multiple developments impacting specific areas and/ or receptors through overdevelopment, planning applications for each development would be considered on their own merit by the determining authorities. Any such application would be considered in accordance with planning policy and material considerations, such as scale, suitability, and need.
		Where there is certainty of a development, such as a new residential development, being constructed, and there is adequate information in the public domain to understand the impacts of that development on the receiving environment, these will be considered within the cumulative impact assessment of the Project.
		We will continue to engage with other developers who are proposing development in proximity of the Project to understand their requirements.
3.5.13	Concern over multiple developments impacting the area (e.g. multiple active wind farm applications, business parks)	With regards to multiple developments impacting specific areas and/ or receptors, planning applications for each development would be considered on their own merit by the determining authorities. Any such application would be considered in accordance with planning policy and material considerations, such as scale, suitability, and need.
		Where there is certainty of a development such as a wind farm and business parks being constructed and there is adequate information in the public domain to understand the impacts of that development on the receiving environment, these will be considered within the cumulative impact assessment of the Project.
		We will continue to engage with other developers who are proposing development in proximity of the Project to understand their requirements.

Ref no.	Summary of matters raised	National Grid's response
3.5.14	The local area should be protected from infrastructure related to the North Fall, and Five Estuaries wind farms which will be built off of Clacton-on-Sea	The Government has set targets to increase the generation of the country's energy needs with offshore wind forming a part of that. Those wind farms need to be connected to the National Electricity Transmission System (NETS) to connect homes and communities that will use the renewable power they provide so the connection must be made onshore. National Grid has a duty to provide the connections and does this by considering alternatives in developing its proposals to provide the proposed connection with the most economic and efficient solution integrated with wider requirement to strengthen the NETS elsewhere.
Compulso	ory Purchase Order	
3.5.15	Criticism of use of compulsory purchase orders	National Grid may have to rely on compulsory purchase powers as a last resort if voluntarily agreements for land rights cannot be reached with landowners. We will work hard with landowners to reach an agreement. However, if this is not possible when submitting the Development Consent Order (DCO) application, we will also apply for compulsory purchase powers. This will ensure that if the DCO is granted we will be able to obtain all land rights needed to construct and subsequently operate the new electricity transmission assets.
Construct	ion impacts	
3.5.16	Concerned about damage to landscape resulting from installation of underground cables	The installation of underground cabling would broadly adopt the following process: initially, the removal of topsoil and storage of a width sufficient to allow for construction machinery to work and the digging of the trenching required for underground cabling would be engineered. The underground cabling would then be laid in the trench, soils would be backfilled, and hedgerows and shrubs reinstated where practicable. At this point a typical grass seed mixture would be scattered to encourage regrowth.
		It is anticipated that within 6-12 months upon completion of the construction of the underground cabling, there would be minimal visibility of the works at ground level and the landscape would return to pre-construction views and settings.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project, including the undergrounding, and will identify any need for additional mitigation if required, this may include screening at particular locations to reduce a change in views of the Project or to better integrate infrastructure into the wider landscape.
3.5.17	Adverse impact on traffic levels in local are a caused by construction works (e.g. construction traffic travelling along local roads, road closures, etc)	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.5.18	Geological risks and hazards exist in the Great Wenham / Raydon area, with the foundations of structures from the	Through the routeing and siting exercise National Grid has sought to and will continue to seek to minimise as far as practicable the potential disruption and disturbance of known contaminated land.

Ref no.	Summary of matters raised	National Grid's response
	WW2 airbase that was previously sited, and unexploded munitions	Ground investigation works will be undertaken, including trail pits and boreholes, to inform design and to identify areas of likely contamination. In the event that unknown geological risks, or contamination are encountered during the construction phase of the Project, this will be managed in accordance with current legislation and best practice remediation measures.
		In addition to the above, we will be undertaking unexploded ordnance (UXO) surveys in areas of moderate and high risk of disturbing historical munitions and to propose specific mitigation measures to be adopted during the construction phase for the safety of the workforce.
3.5.19	Consideration needs to be given to gas pipelines that the Project	In developing its projects National Grid maps all known utility considerations that will inform the routeing and siting, these include gas pipelines.
	intersects and / or follows	The Project has been developed to avoid or minimise impacts on the gas pipeline.
		We will engage with all utilities suppliers that the Project interacts with including the gas transmission network and we will continue to do so as the Project design progresses.
3.5.20	Suggestion that construction traffic is routed from the A12 via Holton St Mary (or via Raydon to the north)	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform the drafting of the Construction Traffic Management Plan (CTMP) for the Project. Within the CTMP, it will define the local road network which may be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
Consultat	ion	
3.5.21	Comment supportive of proposal / engagement that has taken place - feel listened to	National Grid note the respondent's feedback.
3.5.22	Request for exact location of the Cable Sealing End (CSE) Compounds at either end of the undergrounding through the Area of Outstanding Natural Beauty (AONB)	The Dedham Vale Area of Outstanding Natural Beauty (AONB) and its setting is a sensitive area and we felt it important to undertake further assessment before siting of the Cable Sealing End (CSE) compounds at either end of the undergrounding through the AONB.  We received several suggestions in the consultation for areas that people thought were important to protect in the setting of the AONB and this information has been used to shape our proposals for locating the transition from overhead line to underground cable.
		More information on what factors we have considered in making the decision on the site of the CSE compounds, including how feedback has influenced our decisions will be published at our 2023 non-statutory consultation.
3.5.23	Further consultation on the location of the substation is needed	National Grid ran its first consultation on the Project from the 21 April to the 16 June 2022. Responses to that consultation have now been reviewed and used to inform the siting of the East Anglia Connection Node (EACN) substation. Further consultation will be held in 2023. This consultation will provide further information on the substation site and design and will allow people to provide us with further feedback on the Project in this area.

Ref no.	Summary of matters raised	National Grid's response
3.5.24	Concern that planning applications for elements of the Tendring Substation are being progressed prematurely as the consultation is still ongoing	No planning applications for the East Anglia Connection Node (EACN) substation on the Tendring Peninsula are being progressed. We believe this comment may relate to work associated with National Grid's Bramford to Twinstead Reinforcement which is located some distance from the Tendering Peninsula. Further information about the Bramford to Twinstead Reinforcement can be found at: <a href="https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/bramford-twinstead">www.nationalgrid.com/electricity-transmission/network-and-infrastructure/bramford-twinstead</a>
3.5.25	The Babergh and Tendring session should have been recorded for those of who could not attend	To support our 2022 non-statutory consultation, we held 12 face-to-face events along the route of the Project and 12 webinars. Six of the webinars contained information on the whole Project, and six were more focused on defined locations along the preferred corridor. The session for Babergh and Tendring was recorded and made available on the Project website for people who were not able to attend.
3.5.26	Concerned that there was no consultation event held in Capel Saint Mary	Prior to commencement of the 2022 non-statutory consultation, we prepared a Consultation Strategy, this document sets out the details of how we proposed to consult on the Project. The Strategy was shared with Local Authorities for comment and where possible we took on board their comments to inform how the consultation was carried out. The consultation was run in accordance with the published strategy. During the consultation we held 12 face-to-face events along the route of the Project and 12 webinars to allow people to attend an event convenient to them. A face-to-face event was held on the 17 May 2022 in Holton St Mary which is approximately three miles from Capel St Mary.
Design Ch	nange	
3.5.27	The Project should run in closer to / parallel to the existing 400 kV overhead lines	We note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, in this section there is no existing 400 kV overhead line connecting to the currently proposed East Anglia Connection Node (EACN) substation location and the existing 132 kV overhead line through the Area of Outstanding Natural Beauty (AONB) and where National Grid would consider overhead line to be inconsistent with relevant policy.  Closer paralleling of existing infrastructure would only be possible by the installation of a third line from Bramford to the Twinstead area as well as paralleling the overhead line from the Twinstead area towards Braintree. It would also
		either need a double connection to the EACN substation location or require customer connections to be routed to a re-located EACN substation. There are constraints and features that mean that overall, in the context of the Project we consider close paralleling in this area would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. Several residential properties are present in close proximity to the existing 400 kV overhead line meaning that close paralleling would result in the property having overhead lines close to both sides. There are also some locations where the combination of existing physical and environmental features (road infrastructure, commercial and residential property, rivers, conservation areas and woodlands) present very substantial challenges to routeing and siting. In addition, we consider either a relocation of the EACN substation or connection of customer connections to a relocated EACN substation to lead to a greater level of adverse environmental effects and be less compliant with Holford guidance.

### **Summary of matters** Ref no. **National Grid's response** raised 3.5.28 Suggest that the Project is routed Deciding where and how to build new high voltage electricity lines is a complex issue and National Grid is mindful of as far away from populated / the potential effects this infrastructure may have on local communities and the concerns these may bring. National residential areas as possible Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise and potential health impacts. It has sometimes been suggested that minimum distances between properties and overhead lines should be prescribed. We do not consider this appropriate since each instance must be dealt with on its merits. However, we have always sought to route new overhead lines away from residential properties on grounds of general amenity. We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate UK standards, and mitigated where necessary. We set strict technical standards for the equipment we install on our network. These will apply to the proposed new East Anglia Connection Node (EACN) substation located in the Tendring District, and extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected. Noise from overhead lines is predominately determined by the conductor design, voltage, and weather conditions. The overhead line will be designed using a relatively guiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types being used, consideration for this would be assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers, and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the Environmental Statement (ES). In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an assessment on both landscape character and visual amenity. The health and safety of the public, local communities and employees is central to everything that we do. The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. Our approach is to ensure that our network comply with those policies, which are set by Government on the advice of their independent advisors. The Project will be designed to ensure it is fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed. Policies for both noise and EMF are incorporated into the decision-making process for development consent as set

out in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment complies fully

Ref no.	Summary of matters raised	National Grid's response
		with those policies and guidelines. The Development Consent Order (DCO) application will include assessments against these polices, including both construction and operational noise and EMF.
3.5.29	Suggest that the Project is aligned south of the A12	The Corridor and Preliminary Routeing and Siting Study (CPRSS) reports on consideration of alternative corridors south of the A12 and none were preferred. Whilst potentially feasible, the extent of residential development restricts potential routeing of overhead lines. In addition, they were considered to lead to greater adverse effects on different receptors most notably on locations such as Flatford Mill (heritage and socio-economic effects) and were also considered more likely to affect a Special Area of Conservation (SAC).
3.5.30	Suggestion that the Project runs adjacent to motorways and built up areas to avoid more overhead lines in rural areas	Whilst appreciating the potential benefits of infrastructure being concentrated geographically, i.e., by routeing the Project in close proximity to existing road infrastructure, we do not consider this to provide benefits in this section. Major roads potentially align (at least in part) with the general routeing of the Project. However, in this section there are constraints and features that mean that we do not consider close paralleling with them will reduce environmental effects, improve compliance with the Holford Rules or be more consistent with the policy to be economic and efficient. Several residential properties (isolated as well as hamlets, villages and towns are present in close proximity to the existing transport infrastructure necessitating multiple diversions of an overhead line. There are also some locations where the combination of existing physical and environmental features (railway and road infrastructure, commercial and residential properties, woodlands and orchards) present very substantial challenges to routeing and siting. As a result, whilst close paralleling of transport infrastructure may appear beneficial in some short sections, overall, the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new corridor separated from existing transport infrastructure. More generally, routeing is undertaken in accordance with the Holford Rules which guide to a balanced decision rather than favouring urban areas over rural areas as proposed.
3.5.31	Underground cables should be used wherever the Project falls within 3 miles / 5 km of the boundary of the Area of Outstanding Natural Beauty (AONB)	National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. National Grid therefore adopts underground cable technology as mitigation within areas such as AONBs. Policy identifies no set distance by which such mitigation should be extended outside the AONB boundary.  National Grid identifies the requirement for mitigation (whether by additional planting, type of pylon or choice of alternative technology such as underground cable) based on consideration of the potential effects that may arise on a case-by-case basis. This considers the specific details of the designation (including special qualities, key views etc) and local circumstances including landform and existing vegetation. This approach allows consideration of the predicted effects arising from underground cable or overhead line technology and the Cable Sealing End (CSE) compounds (the transition sites between overhead line and underground cable) rather than applying an arbitrary distance that may be too great or too small for the specific circumstances.
3.5.32	Suggest that Tendring Substation is sited at the old Langham	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and

Ref no.	Summary of matters raised	National Grid's response
	Airfield / Suggest that the direct route from Bramford to Tilbury is considered / Suggest that substation is sited on a direct route from Bramford to Tilbury (rather than deviating into Tendring)	customer connections across potential sites (including industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS). We have updated our proposals and considered alternative locations for the East Anglia Connection Node (EACN) substation including the former Royal Air Force (RAF) Boxted (near Langham) in light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or which would require multiple corridors to be used with greater environmental effects. We consider the EACN substation location close to Lawford 132 kV Substation to be the preferred basis to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.5.33	Suggest that the Project is routed to the west of Colchester between Bramford and Chelmsford	The Project is routed to the west of Colchester between Bramford and Chelmsford.
3.5.34	The Project should run adjacent to existing transport infrastructure (e.g. A12, A14 and A140)	Whilst there could be potential benefits from infrastructure being concentrated geographically, i.e., by routeing the Project in close proximity to existing road and rail infrastructure, we do not consider these benefits arise for the whole route. Rail lines or roads potentially align (at least in part) with the general routeing of the Project. However, there are constraints and features that mean that we do not consider close paralleling will reduce environmental effects or improve compliance with the Holford Rules or be more consistent with the policy requirement to be economic and efficient.
		Several residential properties, as well as hamlets, villages and towns, are present in close proximity to the existing transport infrastructure necessitating multiple diversions of an overhead line. There are also some locations where the combination of existing physical and environmental features (railway and road infrastructure, commercial and residential property, woodlands and orchards) present very substantial challenges to routeing and siting. As a result, whilst close paralleling of transport infrastructure may appear beneficial in some short sections, overall, the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new route alignment.
3.5.35	Support for alternative route proposed (grey route) from Bramford to Hadleigh	National Grid is already progressing separate proposals that involve replacing this existing 132 kV connection with a 400 kV connection (the Bramford to Twinstead Reinforcement). Adoption of a similar route for a third connection has been considered (as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS)) and is less preferred due to greater environmental effects and costs from a longer connection and the potential for a longer double connection route to the north of Colchester.
3.5.36	Suggest that power should be brought ashore from the offshore wind sites at the old Bradwell power station, routed towards Basildon and then connected to	Several options were considered in developing the Project and information on these is available in the Corridor and Preliminary Routeing and Siting Study (CPRSS). Following the close of the 2022 non-statutory consultation and review of feedback we have backchecked our previous work and considered other potential routeing options in this area and felt they had different impacts and offered no benefit over the option we are taking forward.

Ref no.	Summary of matters raised	National Grid's response
	the 'green' route or an alternative route from Bromley to Langham is used	In respect of connecting at the old Bradwell power station, there is an existing overhead line to the Bradwell B site. This has been operating at lower voltage (132 kV) and has not been used for a few years and is in generally poor condition. This overhead line would need to be rebuilt, however this onward connection via Rayleigh to Tilbury is also constrained by urban development, further designations and some sections may need to be re-routed if connections were made at Bradwell. In addition, any connection point also requires two points of connection to the National Electricity Transmission System (NETS) (to meet compliance standards) requiring either a double overhead line through the Bradwell peninsula and onwards to separate locations or a connection back to Bramford (in addition to one towards Tilbury). A connection to Bramford would require connections to cross the Special Protection Area (SPA) designated Blackwater Estuary (3 km to 7 km tunnel likely to be required at much greater cost) as well as interact with other Special Area of Conservation (SAC) and SPA designations.
		The existing network through Norfolk, Suffolk and Essex would also still need to be upgraded to transport the electricity due to come into the network in the Norwich area and provide the necessary two points of connection to the NETS. Taken together, a Bradwell point of connection requires a greater amount of new infrastructure and is therefore less economic and efficient and expected to be associated with greater environmental effects.
3.5.37	Suggestion that the use of underground cables is extended further south to the A12	Informed by the feedback from the 2022 non-statutory consultation and further study, National Grid is proposing to extend the use of underground cable through the Area of Outstanding Natural Beauty (AONB) through to the East Anglia Connection Node (EACN) substation. This extends to the south of the A12 as proposed by the feedback. The Project will then continue west from the EACN substation on overhead line.
3.5.38	Suggest routeing the Project east of Hadleigh	National Grid set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) the basis for route option selection and has updated the Project in the light of the 2022 non-statutory consultation feedback. This included various options routeing in the vicinity of Hadleigh and all were considered less preferred due to additional effects arising from introducing a third connection between Bramford to the Twinstead Tee area, overall longer routes and particularly given the need to route two connections (to Bramford and to Tilbury) from the East Anglia Connection Node (EACN)) substation. With no specific additional information provided in the feedback we do not consider further change is required. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.5.39	Suggestion that the Project is relocated to be further west of Capel St Mary - the route should be aligned to the north and then west of Notley Industrial Park and / or through the Brett Vale golf course	National Grid has undertaken further studies to inform the siting of the Cable Sealing End (CSE) compound, to the north of the Area of Outstanding Natural Beauty (AONB) and listened to feedback. We are now proposing a CSE compound to the south of Notley Enterprise Park where it is adjacent to other large structures and where it will be at around 2 km from Holton St Mary. The overhead line from Bramford is proposed to be routed to the north of Notley Enterprise Park with underground cable passing Holton St Mary in open fields close to Brett Vale Golf Club.
3.5.40		National Grid remains of the view that routeing via corridor H (along the approximate alignment of the A12 including crossing the A134) does not provide a deliverable solution given the extent of consented development proposals and

Ref no.	Summary of matters raised	National Grid's response
	A12 bridge, contrary to National Grid findings	the constraints these create to achieving an overhead line corridor appropriately separated from the proposed development.
3.5.41	The Project should run through the lighter part of the graduated swathe (north through open farmland where the impact will affect fewer people directly)	The graduated swathe provided an initial interpretation of the application of the Holford Rules. We have responded to feedback and revised the graduated swathe at Aldham where we propose a less direct diversion to pass to the south of the village. We consider an alignment within that swathe provides an appropriate interpretation of the Holford Rules and is in line with National Grid's duties and relevant policy framework.
3.5.42	Seek to route the Project through arable farmland where possible	National Grid develop proposals according to the Holford Rules by avoiding residential property we have sought to reduce impacts on people. Where we are in farmland, we will work closely with the landowner to seek to accommodate their feedback on the siting of our infrastructure to reduce impacts on their farming business.
3.5.43	Suggestion that Cable Sealing End (CSE) Compounds are sited outside of the Area of Outstanding Natural Beauty (AONB)	National Grid has undertaken further studies to inform the siting of the Cable Sealing End (CSE) compounds, to the north and south of the Area of Outstanding Natural Beauty (AONB) and listened to feedback. To the north of the AONB we propose a CSE compound to the south of Notley Enterprise Park where it is adjacent to other large structures and where it will be at around 2 km from Holton St Mary. To the south we propose to extend the use of underground cable through to the East Anglia Connection Node (EACN) substation, which removes the requirement for a CSE compound at this location. We are also proposing to underground a section of the route near the AONB in the vicinity of Great Horkesley with CSE compounds sited outside the AONB.
3.5.44	Consider undergrounding the transmission line to the south of the Area of Outstanding Natural Beauty (AONB), including the route to and from the substation site and as it runs east to west to the south of the Dedham Vale AONB	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology is adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the development to unacceptably affect the Natural Beauty of the AONB. In particular we are proposing that the connection from Bramford is installed as underground cable from the northern edge of the AONB through to the East Anglia Connection Node (EACN) substation. This responds to both the potential for overhead line and/or Cable Sealing End (CSE) compounds to have effects on the AONB and the effects of a double overhead line for the last few km into the EACN substation. The current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley.
		Extending the undergrounding from the EACN substation east to west along the south of the AONB was considered, however following further assessment, we are not proposing to utilise underground cable in this section as the landscape and visual impacts from an overhead line on the setting of the AONB in this area were not considered to be inconsistent with relevant planning policy.
3.5.45	Minimise the amount of land taken to deliver the Project	National Grid will be minimising the land taken to deliver the Project so far as practicable.

Ref no.	Summary of matters raised	National Grid's response
3.5.46	Avoid routeing the Project to north or east of Home Farm	National Grid has considered the respondents feedback which suggested avoiding a route to the north or east of Home Farm, Sproughton due to this being higher ground. We are currently proposing a change to the graduated swathe to facilitate an alignment to the east of the preferred corridor to the south of Bramford Substation, this is in response to feedback to move the route away from Burstall. The draft alignment would then continue south and pass to the west of Home Farm and meeting the requested change to the extent possible. Due to several constraints further west within the preferred corridor, opportunities to route the alignment further west are limited, however we will continue to update our proposals as the Project develops following further assessment and feedback.
3.5.47	Suggest underground cables should be used between Lawford and Marks Tey (close to Area of Outstanding Natural Beauty (AONB) and Stour Valley)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology is adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the Natural Beauty of the AONB. In particular we are proposing that the connection from Bramford is installed through the AONB as underground cable with the underground cable continuing from the northern edge of the AONB through to the East Anglia Connection Node (EACN) substation. This responds to both the potential for overhead line and/or Cable Sealing End (CSE) compounds to have effects on the AONB and the effects of a double overhead line for the last few km into the EACN substation. The current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley.
3.5.48	Suggest that the Project is routed to the north of the A12 is pushed further West of Colchester through landscape of lower or moderate value	The current preferred corridor in the area identified is outside any designated landscapes and as such National Policy Statement (NPS) EN-5 notes the general acceptability of overhead lines. A route further west of Colchester would be a less direct and longer route than the preferred corridor and less consistent with Holford Rule 3. Any potential benefits perceived in landscape terms in one location must be considered against the additional effects arising from a longer connection with more pylons. In this case we consider there to be a preference for the more direct preferred corridor. A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation if required, this may include screening at particular locations to reduce a change in views due to the Project or to better integrate infrastructure into the wider landscape
3.5.49	Underground cables should be used where the Project leaves Lawford substation, returning towards Colchester and the A12	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy.  We have considered the use of underground cable from Great Horkesley to the East Anglia Connection Node (EACN) substation however following further assessment and in view of the proposal to continue the underground cable through the Area of Outstanding Natural Beauty (AONB) all the way to the EACN substation, a single, overhead line in this section was considered consistent with policy.

Ref no.	Summary of matters raised	National Grid's response
3.5.50	Move the connection point to the west towards north Colchester	National Grid has considered potential locations in the area suggested and specifically on the former Royal Air Force (RAF) Boxted (also known as Old Langham Airfield) in light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it (and locations in similar areas to the north of Colchester) present a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or would require the use of multiple corridors with greater environmental effects. We consider the currently proposed East Anglia Connection Node (EACN) substation location close to Lawford 132 kV Substation to be the preferred basis to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.5.51	Suggest that the Project is routed to the east side of the A12 from Copdock past Capel St Mary and on to the west side of East Bergholt	National Grid considered various potential alternative corridors in developing the corridor options described within the Corridor and Preliminary Routeing and Siting Study (CPRSS) which include elements forming part of the change proposed. We considered these alternatives less preferred because of greater effects on an extensive area of woodland to the west of East Bergholt and the effects expected to arise from routes either east or west of Dedham. East of Dedham, effects on locations such as Flatford Mill were much greater and west of Dedham routeing is highly constrained by numerous residential properties. We will continue to consider feedback and back-check our proposals as the Project progresses.
3.5.52	Suggest that the proposed underground cables in the vicinity of Boxhouse Lane, Parney Heath, Dedham, CO7, should be located as far west as possible, close to the existing A12 corridor and distant from residential properties in Boxhouse Lane	National Grid note the feedback and have considered this in developing the proposed underground cable route which must also consider the potential for effects on other environmental features (such as woodland) and other residential properties and not simply transfer effects from one group of residential properties to another. We consider that the draft alignment for the underground cable balances potential effects whilst not unduly increasing the length of the Project through diversion. We will continue to reflect on feedback as the Project develops.
3.5.53	Seek alternative routeing (no route specified)	National Grid considered alternative strategic proposals as well as alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published in support of the 2022 non-statutory consultation. We have updated our proposals in the light of 2022 non-statutory consultation feedback, and we will continue to reflect on the detail of any feedback and back check and update the Project as appropriate and necessary.
3.5.54	Suggest that the Project should avoid Dedham Vale (Area of Outstanding Natural Beauty) AONB	National Grid considered route corridors that avoid the Dedham Vale Area of Outstanding Natural Beauty (AONB) (as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS)) and consider that the additional effects arising from alternatives, such as a third overhead line from Bramford to the Twinstead area and a connection from the Twinstead area to Tilbury via an East Anglia Connection Node (EACN) substation, to be greater than those arising from the preferred corridor and to be less compliant with its duties and relevant policies.
		The current preferred corridor through the AONB, with the use of underground cable (both within the AONB and beyond the boundaries) to protect the natural beauty and special qualities of the AONB is in line with relevant policies and our duties.

Ref no.	Summary of matters raised	National Grid's response
3.5.55	Underground cables should be used in this section	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations (which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONB)), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV overhead line infrastructure.
		National Grid is proposing approximately 19.3 km of underground cable at areas that are identified as of highest landscape value for example within the Dedham Vale AONB and within the vicinity of the AONB near Great Horkesley. Elsewhere along the preferred corridor, the higher cost of underground cables to bill-paying consumers, and the environmental implications of installing and maintaining them, are not considered to be justifiable in the context of national policy or National Grid's statutory duties.
		Nevertheless, an Environmental Impact Assessment (EIA) will assess the impact of the Project and will identify any need for additional mitigation.
3.5.56	Suggest use of underground cables in residential areas	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, and the duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. The National Policy Statement (NPS) EN-5 makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. At this stage no locations have been proposed as underground cable on the basis of residential effects alone although potential effects on residential property occupiers have formed part of the decision-making in some cases. Underground cable is proposed through the Area of Outstanding Natural Beauty (AONB) and in some locations near the AONB as well as for a crossing of the 400 kV overhead line at Fairstead and for the line entry to Tilbury Substation. A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation if required, this may include measures at particular locations to reduce a change in views due to the Project or to better integrate infrastructure into the wider landscape.
3.5.57	Suggest that the cables should be underground along Langham Road and across Straight Road in Colchester	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology is adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the

Ref no.	Summary of matters raised	National Grid's response
		development to unacceptably affect the Natural Beauty of the AONB. In particular we are proposing that the connection from Bramford is installed as underground cable from the northern edge of the AONB through to the East Anglia Connection Node (EACN) substation. This responds to both the potential for overhead line and/or Cable Sealing End (CSE) compounds to have effects on the AONB and the effects of a double overhead line connection for the last few km into the EACN substation. The current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley.
		Extending the undergrounding from the EACN substation east to west along the south of the AONB, including across Langham Road and Straight Road was considered, however following further assessment, we are not proposing to utilise underground cable in this section as the landscape and visual impacts from an overhead line on the setting of the AONB in this area were not considered to be inconsistent with relevant planning policy.
3.5.58	Propose that Tendring Substation is re-located away from the Green Belt / Suggest that Tendring Substation is re-located to a brownfield site / industrial land	The proposed new East Anglia Connection Node (EACN) substation is not within, or close to, any designated Green Belt land. We also considered other 'brownfield' land but have identified no preferred alternatives.
3.5.59		National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to National Grid infrastructure and customer connections across potential sites (including the potential for siting of infrastructure on industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS). National Grid has updated its proposals and also considered alternative locations for the EACN substation in the light of 2022 non-statutory consultation feedback.
		No additional areas of industrial/brownfield land have been identified. Although the former Royal Air Force (RAF) Boxted site was identified in the feedback and the site has some potential, the connection corridor is too constrained for the multiple customer connections that need to be made to it, requiring multiple corridors to be used (two of which would be through the Area of Outstanding Natural Beauty (AONB)) and increasing the level of environmental effects. We consider the EACN substation location close to Lawford 132 kV Substation to be the preferred site to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.5.60	Tendring Substation should be built underground	The currently proposed East Anglia Connection Node (EACN) substation location has been identified at least partly because it benefits from existing vegetation screening and is consistent with the guidance in the Horlock Rules. Substation elements may be in the order of 20 m above ground level necessitating very extensive depth and extent of excavation if the site were to be placed underground. This would lead to a range of environmental effects (from the construction works and disposal of material) and be at substantive additional cost. As such this would be less compliant with National Grid's duties and policies and has therefore not been taken forward.

Ref no.	Summary of matters raised	National Grid's response
3.5.61	Suggest that the existing overhead line that crosses the A134 at Assington is upgraded / replaced instead	National Grid is already progressing separate proposals that involve replacing this existing 132 kV overhead line that crosses the A134 at Assington with a 400 kV connection (the Bramford to Twinstead Reinforcement).  Adoption of a similar route for a third connection has been considered and is less preferred due to greater level of environmental effects and reduced compliance with our duties and relevant policies.
3.5.62	Existing overhead lines in this section should be removed / undergrounded	The existing electricity transmission network provides power, via the local distribution network, into the local area where it is used in homes and businesses. The need case and funding for the Project is to deliver the new network reinforcement needed, rather than to remove existing overhead lines by undergrounding them.  Unless required for mitigation, undergrounding existing overhead lines on the transmission network would not be in accordance with National Policy Statement (NPS) EN-5 and would result in substantial cost to bill payers. There may also be significant environmental impacts due to the removal works on sensitive ecological and archaeological receptors as well as constraints from either existing built form of unsuitable ground conditions.
3.5.63	Suggestion that Tendring Substation is built on an existing brownfield site	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS) in the 2022 non-statutory consultation. We have updated our proposals for the 400 kV connections and also considered alternative locations for the EACN substation (the former Royal Air Force (RAF) Boxted) in the light of the 2022 non-statutory consultation feedback. No additional areas of industrial / brownfield land have been identified. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or which would require multiple corridors to be used through the Area of Outstanding Natural Beauty (AONB) with greater environmental effects. We consider the EACN substation location close to Lawford 132 kV Substation to be the preferred basis to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.5.64	Suggestion that the Tendring Substation be located away from the Tendring Peninsular allowing for a more direct route further West, minimising the impact of overhead lines alongside the Area of Outstanding Natural Beauty (AONB)	The currently proposed East Anglia Connection Node (EACN) substation location was preferred after consideration of the environmental effects, engineering issues and costs associated with the 400 kV connections and customer connections. An EACN substation located further west may potentially shorten the Project but would require multiple customer connections to be extended. The corridor requirements for such multiple customer connections are either similar or potentially greater than for the Project (depending on location chosen). We consider the effects of the proposed location near the UK Power Networks (UKPN) Lawford Substation to be acceptable in policy terms and in greater accordance with National Grid policies and duties than other locations. We would also note that in response to feedback the proposals now include an extension of underground cable through the Area of Outstanding Natural Beauty (AONB) to the EACN substation thus reducing effects on residential amenity by removing the double overhead line section and also include an additional section of underground cable in the vicinity of Great Horkesley where the Project is in close proximity to the AONB.
3.5.65	Suggestion to use / upgrade existing substations	The existing transmission network in the region is currently being upgraded to ensure the system is running at its most efficient performance. The existing networks are not able to be upgraded sufficiently to cope with the future

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		demands expected on the network. As a result, new overhead lines and substations are required to accommodate the changing demands on the network.
3.5.66	Suggest routeing the Project offshore out at sea / Should consider routeing the Project undersea	Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Study (CPRSS) examines several strategic options that were considered for the Project that might achieve the required reinforcement including offshore options. These options were not taken forward as they did not fully address technical or physical/ geographical constraints or enable the network to operate to the required standards.
		An offshore connection would have a third of the capacity of the proposed overhead line connection and therefore to transfer the anticipated levels of power generation, three offshore connections would be required including associated infrastructure such as convertor stations. This would make the Project significantly costlier to energy bill payers.
		In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich. Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area.
3.5.67	Reinforce the existing 132 kV overhead lines from Bramford to avoid the Area of Outstanding Natural Beauty (AONB)	National Grid is already progressing separate proposals that involve replacing this existing 132 kV connection with a 400 kV connection (the Bramford to Twinstead Reinforcement). Adoption of a similar route for a third connection has been considered and we consider it less preferred due to greater level of environmental effects and costs.
		The existing 132 kV connections between Bramford and Lawford all route through Areas of Outstanding Natural Beauty (AONB) and whilst considered, were not progressed either as overhead line options or for underground cable routes because they are inconsistent with policy or would likely result in a greater level of environmental effects.
3.5.68	Consideration should be given to locating the Tendring Substation near Boxted instead	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS).
		We have updated our proposals for the 400 kV connections and also considered alternative locations for the EACN substation including the former Royal Air Force (RAF) Boxted (near Langham) in light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or which would require multiple corridors to be used with greater environmental effects. We consider the EACN substation location close to Lawford 132 kV Substation to be the preferred basis to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.5.69	Oppose the siting of Cable Sealing End (CSE) compound in or near to Holton St Mary	National Grid has undertaken further studies to inform the siting of the Cable Sealing End (CSE) compound to the north of the Area of Outstanding Natural Beauty (AONB) and also listened to feedback. We propose a CSE compound to the south of Notley Enterprise Park where it is adjacent to other large structures and where it will be at

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		around 2 km from Holton St Mary. The overhead line from Bramford is proposed to be routed to the north of Notley Enterprise Park with underground cable passing Holton St Mary.
3.5.70	Suggest the use of the underground ducting already in place from Bullen Power Station	Use of existing underground infrastructure would not be suitable for accommodating 400 kV underground cables. The installation of National Grid underground cables occupies a lot more space due to the need for underground cable cooling considerations. Existing assets that have not been designed with housing 400 kV transmission assets in mind would be ineffective at facilitating the Project. The typical working corridor for a 400 kV underground cable would be approximately 120 m in width to be able to install the 18 underground cables that would make up the circuits on the Project.
3.5.71	Extend use of underground cables from Area of Outstanding Natural Beauty (AONB) (near Birchwood Motel on the A12) through to Old Langham Airfield	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation, this has resulted in several changes to the current preferred corridor. National Grid are now proposing to utilise underground cable beyond the Area of Outstanding Natural Beauty (AONB) into the proposed East Anglia Connection Node (EACN) substation. We have updated our proposals for the 400 kV connections and also considered alternative locations for the EACN substation including the former Royal Air Force (RAF) Boxted (also known as Old Langham Airfield) in light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or requires the use of multiple corridors for the connections with greater environmental effects. We consider the EACN substation location close to Lawford 132 kV Substation to be the preferred basis to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.5.72	The Cable Sealing End (CSE) compound should be sited immediately north or west of Notley Industrial Park	National Grid has reviewed the preferred corridor in this area following further assessment of potential Cable Sealing End (CSE) compound locations. We now propose to extend the underground cable section of the preferred corridor to a CSE compound location to the south of Notley Enterprise Park. The preferred corridor is then proposed to continue on overhead line to the north and east of Notley Enterprise Park.
3.5.73	Suggestion that underground cables must be used in the vicinity of Hall Road, Stitching Wood and Hill House Wood	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. The features identified are not of a type which would typically experience effects to justify the use of 400 kV underground cable technology. However, their presence has influenced routeing and the positioning of a Cable Sealing End (CSE) compound at the southern end of a section of underground cable considered necessary to respond to potential effects on the Dedham Vale Area of Outstanding Natural Beauty (AONB) just to the north of these woods (as design responds to the guidance of the Holford and Horlock Rules).
3.5.74	Suggest that National Grid coordinate proposed infrastructure with other energy	The Project is required to provide sufficient capacity to accommodate the growth in new energy generation from offshore wind, nuclear power and interconnection with other countries, with current connection agreements with two offshore wind farms. The proposed infrastructure will therefore provide capacity for future energy providers. Any energy providers planning to connect to the National Grid network must apply for a connection, this starts a process

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	providers (e.g. at Bramford Substation)	or collaboration between the energy provider and National Grid to form a coordinated plan of the best connection location and establish any enablement works such as reinforcement or extension to the existing network. Therefore, energy providers have been coordinated within the development of proposed National Grid infrastructure.
3.5.75	Concern regarding narrow pinch point at Great Horkesley where the proposed crossing point over the A134 is so narrow as to imply that the Project cannot be moved more than 100 m north or south (in breach of the gunning principles)	National Grid has followed the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:  1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.  2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response We have published a considerable amount of information to support the 2022 non-statutory consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.  3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation The 2022 non-statutory consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.  4. Consideration must be given to the consultation resp
3.5.76	Suggest that consideration is given to routeing the Project to the south of Colchester and the	These potential corridors were considered by National Grid. Corridor H is not considered deliverable for the Project due to the extent of existing and consented development leaving no space to appropriately route a connection. Corridors to the south of Colchester lead to unavoidable effects on qualifying features of designated sites (Special

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	use of Section H alongside the A12, to avoid adverse impact on the Area of Outstanding Natural Beauty (AONB)	Protection Area (SPA) and Special Area of Conservation (SAC)) and as such cannot be taken forward when alternatives without such effects (i.e., the preferred corridor) are available.
3.5.77	Oppose the northern branch of Section F through the Great Horkesley / Little Horkesley / Fordham area	In considering this and other feedback National Grid notes that the alternative southern branch of corridor F would affect features such as Scheduled Monuments and Ancient Woodland along with transferring effects to other similar receptors to the respondent and considers the northern branch to be preferred. In light of further study and considering feedback, we consider that the additional costs of underground cable are justified in the context of its duties and relevant policy framework in the vicinity of Great Horkesley where an approximately 5.3 km section of underground cable is proposed. We consider the northern half of the preferred corridor to be most appropriate given in particular the Ancient Woodland and Scheduled Monument that would be affected by an overhead line in the more southern part of the preferred corridor.
3.5.78	Request that the Project should follow the north western edge of the preferred corridor to avoid impacts on the Marks Tey Brickpit Site of Special Scientific Interest (SSSI) and associated sediments extending from the SSSI (to the north and west of the SSSI boundary)	National Grid has reviewed the preferred corridor in this area to respond to this feedback. A change to the graduated swathe to the northern edge of the preferred corridor was assessed, however an alignment in the northern part of the corridor would be less preferable as it would not be possible to route the alignment in that area without oversailing residential properties or woodland. Therefore, we are proposing to keep the graduated swathe to the southern edge of the preferred corridor.  We will seek to avoid impacts on the Site of Special Scientific Interest (SSSI) at Marks Tey during routeing and siting and any remaining impacts will be assessed in the Environmental Impact Assessment (EIA) and mitigated where appropriate.
3.5.79	Suggestion that the Project is routed away from specific location	Further assessment and technical appraisal has been undertaken following feedback received from non-statutory consultation which has resulted in several changes to the current preferred corridor. Further details on these changes can be found in the Design Development Report, published as part of the 2023 non-statutory consultation. Further changes to the preferred corridor and draft alignment will be considered as the Project develops.
3.5.80	Suggestion that the Project is routed away from Burstall	National Grid has reviewed the preferred corridor in this area to respond to this feedback. We are proposing an amendment to the graduated swathe to facilitate an alignment to the east of the preferred corridor. An easterly alignment whilst marginally less direct and longer, does move the Project further away from Burstall.
3.5.81	Suggestion that the Project is routed away from Aldham	National Grid has reviewed the preferred corridor in this area to respond to this feedback. We are proposing an amendment to the graduated swathe to facilitate an alignment to the south of the preferred corridor, which would move the Project further away from Aldham. A more eastern crossing of the Colne Valley was also considered but was less preferred due to increased effects on woodland, additional changes of direction and greater interaction with floodplain areas.
3.5.82	Suggestion that the Project is routed away from Holton St Mary	National Grid has reviewed the preferred corridor in this area following further assessment of potential Cable Sealing End (CSE) compound locations. We now propose to extend the underground cable section of the preferred corridor

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		beyond Holton St Mary to a CSE compound location to the south of Notley Enterprise Park. This also moves the underground cable further from Holton St Mary.
3.5.83	Suggestion that the Project is routed away from Raydon and Raydon Airfield	National Grid has reviewed the preferred corridor in this area following further assessment of potential Cable Sealing End (CSE) compound locations. We now propose to extend the underground cable section of the preferred corridor to a CSE compound location to the south of Notley Enterprise Park. In proposing this change we have proposed an overhead line alignment approaching from the west that reduces the separation to the runway but remains parallel to the runway (to the south) to allow east and west approaches to and from Raydon Airfield. This change is proposed at least in part to reduce potential effects on Grade I Listed buildings at Little Wenham and because this is a preferred CSE compound siting location.
3.5.84	Suggestion that the Project is routed away from Chattisham	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Chattisham. We have reviewed alternative corridors for the connection to the East Anglia Connection Node (EACN) substation but continue to conclude that this remains the preferred corridor. In the absence of a specific basis for the change or a proposed alternative corridor, we have also considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Whilst this means an alignment is not further away from Chattisham, we consider the preferred corridor is consistent with the Holford Rules. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.5.85	Suggestion that the Project is routed away from Hillhouse Woods	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Hillhouse Wood (near West Bergholt). We can confirm that the preferred corridor can be constrained to avoid this woodland. In considering the feedback we are guided by the Holford Rules specifically avoiding woodland where this is possible without undue diversion. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.5.86	Suggestion that the Project is routed away from The Colne Valley	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from the Colne Valley. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.5.87	Suggestion that the Project is routed away from Great Horkesley	National Grid has reviewed the preferred corridor in this area following further assessment. We have also reviewed alternative corridors considered in the Corridor and Preliminary Routeing and Siting Study (CPRSS) and remain of the view that the preferred corridor should be taken forward at this time. We do however propose to adopt underground cable technology for a distance of around 5.3 km from a Cable Sealing End (CSE) compound in the east between Horkesley Plantation and Harrow Wood and in the west on land to the west of Crabtree Lane and north of the B1508.

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3.5.88	Suggestion that the Project is routed away from Great Wenham and Little Wenham	National Grid has reviewed the preferred corridor in this area following further assessment of potential Cable Sealing End (CSE) compound locations. We now propose to extend the underground cable section of the preferred corridor to a CSE compound location to the south of Notley Enterprise Park. The preferred corridor is then proposed to continue on overhead line to the north and east of Notley Enterprise Park, which would move the Project further away from Great Wenham and Little Wenham.
Design qu	uestion	
3.5.89	Why is the substation required when the new wind farms at North Falls and Five Estuaries could be attached to Bradwell to utilise the unenergised 132 kV overhead line? / Suggest substation is sited at Bradwell / Suggests a more coordinated approach with the North Falls and Five Estuaries developments	There is an existing overhead line to the Bradwell B site. This has been operating at lower voltage (132 kV). This overhead line would need to be rebuilt to be able to operate at 400 kV however this onward connection via Rayleigh to Tilbury is also constrained by urban development and further designations and some sections may need to be rerouted if connections were made at Bradwell. Additionally, any customer connection point also requires two points of connection to the NETS (National Electricity Transmission System) (to meet compliance standards) requiring either a double overhead line through the Dengie peninsula and onwards to separate locations or a connection back to Bramford (in addition to one towards Tilbury). A connection to Bramford, in order to avoid a double overhead line on the Dengie peninsular would require connections to cross the Special Protection Area (SPA) designated Blackwater Estuary (3 km to 7 km tunnel likely to be required at much greater cost) as well as interact with other Special Area of Conservations (SAC) and SPA designations.  The existing network through Norfolk, Suffolk and Essex would also still need to be upgraded to transport the electricity due to come onto the network in the Norwich area and provide the necessary two points of connection to the NETS. Taken together a Bradwell point of connection requires a greater amount of new infrastructure and is therefore less economic and efficient and would be expected to be associated with greater environmental effects.
3.5.90	How will underground cables cross rivers along the Project?	Where underground cables need to pass beneath rivers and watercourses these crossings require individual assessment to determine the best suited construction methodology. These assessments consider physical engineering as well as environmental and ecological constraints.
		Smaller, less complex watercourses may be suitable for the installation of underground cables by utilising an open cut trench excavation. This may require the watercourse to be temporarily dammed upstream and the watercourse temporarily diverted / over pumped around the work area, discharging back into the watercourse downstream thus creating a dry temporary work area to allow the route to be excavated, underground cables laid and backfilled prior to the watercourse being restored to its normal flow path.
		The environmental impacts caused by the Project will be assessed within the Environmental Impact Assessment (EIA) and mitigated where required.
		More complex watercourse may be best suited to a trenchless method of excavation and installation, for example, Horizontal Directional Drilling (HDD). HDD is a method of drilling horizontally beneath the ground / riverbed. The drilled borehole is then ducted, and the underground cables pulled through. This method is regularly used to excavate beneath rivers, railways, roads etc. and ensures minimal disturbance above ground. At each end of the HDD there will be a pit excavated to start and receive the drilling. The HDD section between these pits can be up to

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		750 m apart dependent on the width of the complex crossing 250 m. This will be sufficient for all river widths along the proposed route.
3.5.91	Will there be extensive burying of underground cables along the route from Clacton to the Tendring Substation? If so, what impact will there be to local people, local traffic and to the skyline along the route?	National Grid interprets the feedback question as referring to Clacton-on-Sea (Ordnance Survey (OS) Grid Reference TM17577 14844) to the East Anglia Connection Node (EACN) substation. Whilst we continue to work closely with electricity generation customers who will feed into the national network, it would be for the proponents of that project to consider the use and subsequently identify the impacts on people, local traffic and the skyline of installing extensive underground cabling from Clacton-on-Sea to the EACN substation.
Economic	/ Employment impact	
3.5.92	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.
		Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include: traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
3.5.93	The Project will result in decreased Government revenue via stamp duty revenues	National Grid recognises that development of this Project may cause uncertainty for people wishing to move home. We are keen to work closely with anyone who has concerns about the impacts on their property value or ability to sell their property and we would encourage people to contact us direct if they have concerns through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:
		• Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)
		Email us: contact@n-t.nationalgrid.com
		<ul> <li>Write to us: FREEPOST N TO T (No stamp or further address details are required)</li> </ul>
		It is unlikely that the Project will have any material impact on Government revenue via stamp duty.
3.5.94	Concerned about the Project being in too close proximity to new housing developments / land being considered for potential future housing development	National Grid has obtained information on development proposals within the planning system for the area potentially impacted by the Project. The nature of our response varies as in some cases proposals can be amended to be designed around our proposed infrastructure but in other cases our proposals may need to be amended at a corridor level or factored into detailed route design. Based on known information we consider our proposals are consistent with relevant policy and guidelines and routes designed such that they do not prevent proposed housing developments. It should also be noted that there are no minimum distances prescribed in UK law between overhead

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		lines and homes. Any implications on landscape and visual receptors, residential amenity or from concerns about Electric and Magnetic Fields (EMFs) are robustly assessed and balanced as part of the decision-making process. We will continue to review planning applications and engage with developers to back-check and update our proposals as necessary.
Environm	ental impact	
3.5.95	Other areas within this section should be protected, not just the Area of Outstanding Natural Beauty (AONB)	National Grid develops its proposals informed by National Policy Statement (NPS) EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy.  National Grid has proposed to extend the use of underground cable technology beyond the Area of Outstanding Natural Beauty (AONB) boundary in response to the potential for the development to unacceptably affect the defined special qualities of the AONB. The current proposals include approximately 14 km of underground cable from a Cable Sealing End (CSE) compound around 1 km to the north of the AONB through the AONB and on past Ardleigh to the EACN substation along with a further approximately 5.3 km of underground cable in the vicinity of the AONB around Great Horkesley.  A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.5.96	The Project will impact designated sites - e.g. Site of Special Scientific Interest (SSSI), Ancient Woodland and an Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Site of Special Scientific Interest (SSSI) and Ancient Woodland.  The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required, mitigation requirements.  We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.5.97	The Project will result in a negative impact on the environment generally (no details given)	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.
3.5.98	The pylon design needs to be reviewed in this section to ensure they are sympathetic to their surroundings (e.g. designed to	For the purposes of this initial assessment, the preferred draft alignment reflects the use of standard lattice pylons and where we might locate pylons, underground cables, Cable Sealing End (CSE) compounds (where underground cables join with overhead lines) and the proposed East Anglia Connection Node (EACN) substation. The use of other pylon designs is still under consideration, if an overhead line route is progressed. We will be carrying out further

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	blend in and have minimal impact on the wildlife)	assessments on pylon design. Our assessments will include visual impacts and mitigation, environmental and ecological considerations, construction, and lifetime maintenance effects.  Different designs in use in the UK include:  • standard lattice;
		lower height lattice; and
		T-pylons.
		We will present the findings from our assessments at our statutory consultation.
3.5.99	The Project will cause a negative impact on landscape / amenity	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
		Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
		We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.5.100	Suggest that hedgerows are planted along the length of the underground cables	Where required the planting of hedgerow would form part of the Project's mitigation requirements and/ or Biodiversity Net Gain (BNG) strategy, which will take into account local schemes such as Nature Recovery Networks to maximise the benefits to wildlife. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be

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		identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
		However, it will not be possible or practical to plant hedgerows along the length of the underground cables as in doing so would interfere with the existing farming practice on the land, which will be returned to the landowner at the end of the construction phase.
3.5.101	Engage with wildlife trusts to adopt restored areas and help assist to develop them for wildlife - creating a positive legacy	In developing the Project National Grid will engage with a variety of technical stakeholders including local Wildlife Trusts. We will work with them to understand the effects of the Project and what mitigation and enhancement they feel is appropriate.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.5.102	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated.  National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.
		The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.
3.5.103	Concern regarding disruption of groundwater (e.g., impact on drinking water, drainage and ground stability) / Concern regarding contamination of groundwater	The likely significant effects on groundwater (including levels, flow and quality) from the Project, which may impact e.g. private and public water supplies, will be assessed in the Geology and Hydrogeology chapter of the Environmental Impact Assessment (EIA). This will be based on and supported by a contamination risk assessment in line with relevant guidance contained within Land Contamination Risk Management (LCRM) which will identify areas of potentially contaminated land and the potential risks to sensitive receptors, including groundwater. The Geology and Hydrogeology chapter will also be informed and supported by a preliminary groundwater risk assessment, as appropriate, where impacts on levels and flows are identified. In addition, there will be an assessment of the potential for natural geohazards to be present which may impact on ground stability.
3.5.104	Concern that the Project may not adhere to the Queens Green Canopy (QGC) Initiative	The Queens Green Canopy scheme celebrates the Queens Platinum Jubilee and encourages the planting of trees during 2022 (now extended to 2023 following the passing of the Queen). We will seek to avoid removing trees where practicable in developing the Project. Where we need to remove trees we will replant trees, either in the same location or in the area. We will also work with other stakeholders in the area to identify opportunities for additional tree planting.

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		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
Financial	compensation	
3.5.105	The Project will devalue my property / Impact on property value in this section	National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.
		If there are any specific concerns about the devaluation of property, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>
3.5.106	Need more information on compensation and disruption (e.g. for landowners)	National Grid acknowledges that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. National Grid will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with National Grid's Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works. Any compensation offered by National Grid would comply with all policy requirements as set out above.
3.5.107	Request for adequate financial compensation / Impacted individuals need to be compensated	All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of

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compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.

If there are any specific concerns, please contact the Project team:

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- Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.

### 3.5.108 the level of access license payments provided to compensate landowners

Request that National Grid revise As per National Grid's Land rights strategy, a payment of £250 (advanced compensation) is made to a landowner on signing a survey licence for a 12 month period. Should any losses be incurred by a landowner greater than £250, National Grid will be liable to cover this loss on submission of a valid claim.

### Health and Safety

The Project may result in a 3.5.109 negative impact on mental health / health and wellbeing of residents

National Grid recognises people may have concerns about the health effects of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.

We have sought to reduce potential effects on communities and residents through routeing and design. We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.

The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to gueries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:

- Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am 5:30pm)
- Email us: contact@n-t.nationalgrid.com
- Write to us: FREEPOST N TO T (No stamp or further address details are required)

The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all of its equipment comply fully with those exposure limits. Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed overhead lines, underground cables and substation will be

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		designed to ensure they are fully compliant with these policies and guidelines. This ensures that health concerns relating to EMFs are properly and adequately addressed.
3.5.110	Consideration needs to be given to the operation of light aircrafts from airfields at Nayland and between Wattisham to Colchester / The siting of overhead lines presents a risk to light aircraft in the area	Our review of airfields within 4 km of the preferred corridor identified 10 General Aviation (GA) sites, one military site (Wattisham Flying Station) and the Mid and South Essex National Health Service (NHS) Broomfield Hospital which receives helicopters from a helipad on the roof of the main hospital building.  The airfield operators will be consulted as the design of the Project continues and reasonable and we will endeavour to design a solution that safely accommodates airfield operations as far as practicable.
3.5.111	The Project affects Gliding club (near West Bergholt) and impacts ability to operate due to taking away landing sites	Following our review of airfields within 4 km of the preferred corridor it is not expected that our assets will have any adverse effect on your airfield, noting that your site is approximately 2.3 km away from our proposed assets.  Nevertheless, you will be consulted as the design of the route proceeds and we will endeavour to a solution that accommodates your airfield operations as far as practicable.
Heritage		
3.5.112	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. In the event that impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.
		Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).
		We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.5.113	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking an Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify likely significant effects on archaeological sites arise. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.

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Mitigation		
3.5.114	Visual impacts should be mitigated through planting and screening measures	Through the routeing and siting exercise, National Grid has sought to and will continue to seek to maximise the existing landform and vegetation to screen the Project as far as practicable as it passes through the wider landscape.
		Where new infrastructure is required as part of the Project and the Environmental Impact Assessment (EIA) concludes that additional mitigation would be of benefit, screening in the form of planting would be implemented to further integrate infrastructure into the wider landscape.
3.5.115	Ensure that any environmental damage is mitigated and that areas are returned to their	National Grid will reinstate all land temporarily required for construction to a standard no worse than prior to construction in areas where disturbance has occurred. This includes the creation of additional planting for the purpose of screening views where new infrastructure would be located.
	previous state following construction	In addition to the above, where land would be temporarily impacted during the construction phase, the control measures and processes to reinstate land will be defined within a Soil Resource Plan (SRP) which will be submitted as part of the Development Consent Order (DCO) application.
		Measure to control soil storage and how we would reinstate disturbed land would include; how and where the topsoil and subsoil would be stripped and stockpiled (such as dimensions to maintain soil nutrients and quality), if any stockpiles would be treated to reduce weed growth and where soil is to be reinstated, and the mechanisms how this would be achieved without being to the detriment of soil quality (such as over-compaction).
Project Fi	nance / Costs	
3.5.116	Need full cost breakdowns for all the options for the Project that pass through the Area of Outstanding Natural Beauty (AONB)	The Corridor and Preliminary Routeing and Siting Study (CPRSS), published to support the 2022 non-statutory consultation, provided an overview of the cost information that National Grid used for strategic appraisals to compare feasible transmission system development options. As part of the consideration of strategic options, National Grid prepares indicative capital cost estimates. These include costs for the transmission equipment and also for the installation of that equipment. For any new transmission circuits required as part of a strategic option, National Grid prepares lifetime cost estimates. These lifetime cost estimates include the capital cost estimates and also take account of the transmission losses and maintenance costs for transmission equipment over a 40 year lifetime as well as the associated indicative capital cost estimate.
		At each stage of the Project, as more detailed design information is available, we will review and update the costs of all relevant options and publish these as part of future consultation.
Public Rig	hts of Ways (PRoW).	
3.5.117	Concern around disruption of Public Rights of Way (PRoW) / Mitigation must be put in place for pedestrians / equestrians directly or indirectly impacted	Through routeing and siting, National Grid has sought and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).  The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. In the event that mitigation is

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		required, measures may include, the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.  Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
Substation	n	
3.5.118	Need more information to justify the location of the substation	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors including our infrastructure and customer connections across potential sites throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS).  National Grid has backchecked and reviewed its proposals for the 400 kV connections and also considered alternative locations for the East Anglia Connection Node (EACN) substation (north of Ardleigh and the former RAF Boxted) in the light of the 2022 non-statutory consultation feedback. Whilst the former Royal Air Force (RAF) Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it. We are continuing to take forward the EACN substation location
		close to Lawford 132 kV Substation. We will continue to backcheck our proposals at each stage of the Projects' development and in response to feedback from later stages of consultation.
3.5.119	Proposed location for Tendring substation is invasive / can't be mitigated	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure. The likely significant effects of the proposed EACN substation will be considered in the Environmental Impact Assessment (EIA) including the landscape and visual and cultural heritage assessments. Mitigation will be considered, where appropriate.
3.5.120	The Tendring Substation needs to be re-located (no specific location suggested)	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections. We have reviewed our proposals for the EACN substation in the light of the 2022 non-statutory consultation feedback. We consider the EACN substation location close to Lawford 132 kV Substation to be an appropriate basis to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.5.121	The visibility of the Tending Substation needs to be considered (impact on residents and surrounding area) and appropriate mitigation should be provided (i.e., minimising building	Through the routeing and siting exercise, National Grid has sought to and will continue to seek to maximise the use of existing landform and vegetation to screen the Project including the proposed East Anglia Connection Node (EACN) substation located at Tendring as far as practicable as it passes through the wider landscape.  Where the Environmental Impact Assessment (EIA) concludes that additional mitigation would be of benefit, screening in the form of planting would be implemented to further integrate the proposed EACN substation into the wider landscape.

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	and electrical equipment height of the substation)	
3.5.122	Criticism around the use of the 'Tendring Peninsula' descriptor, due to impact of Tendring Substation on local populations (there are nearby towns / villages including Clacton)	The siting area for the proposed East Anglia Connection Node (EACN) substation is within Tendring District Council area and therefore we feel that this is an appropriate description of the location of the EACN substation. Consultation materials for the 2022 non-statutory consultation included information on the offshore wind farms proposing to connect at the EACN substation and the offshore wind farm developers have subsequently held their own respective consultations which show details of both their proposed landing points near Clacton and their routes/ substation sites required to enable them to connect back to the proposed National Grid EACN substation at Lawford. National Grid continues to work closely with connection customers to ensure that our proposals are coordinated and to share relevant information and will ensure that information on the full scope of the proposals (including offshore wind farms) is shown in its consultation materials.
3.5.123	Suggest that Tendring Substation is located away from residential areas	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors including our infrastructure and customer connections across potential sites throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS).  National Grid has backchecked and reviewed its proposals for the 400 kV connections and also considered alternative locations for the EACN substation (north of Ardleigh and the former Royal Air Force (RAF) Boxted) in the light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it. We are continuing to take forward the EACN substation location close to Lawford 132 kV Substation. We will continue to backcheck our proposals at each stage of the Projects' development and in response to feedback from later stages of consultation.
3.5.124	Route to and from Tendring Substation should be considered (impact on residents and surrounding area)	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure. In response to feedback, we have updated our proposals and propose that the connection from Bramford will be made as underground cable from around 1 km north of the edge of the Dedham Vale Area of Outstanding Natural Beauty (AONB) all the way to the EACN substation. This was informed in part by consideration of the potential effects on residential amenity of a double overhead line arrangement to and from the EACN substation around Ardleigh. We consider the retention of overhead line for the connection to Tilbury to be in accordance with policy. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary in response to assessments and the identification of mitigation requirements.
3.5.125	Suggestion that the Tendring Substation should be located closer to the A12 to minimise impact on the community	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS) at the 2022 non-statutory consultation. We have updated our proposals for the 400 kV connections and also considered alternative locations for the EACN substation (including the former Royal Air Force (RAF) Boxted site closer to the A12) in the light of the

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		2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it. The development of the proposals has also progressed with the proposal that the connection from Bramford is now proposed to be made as underground cable through the Area of Outstanding Natural Beauty (AONB) and all the way to the EACN substation. We consider the EACN substation location close to Lawford 132 kV Substation with one connection as underground cable and one as overhead line to be an appropriate basis to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.5.126	Bramford substation is located in a suitable location	National Grid note the respondent's view.
3.5.127		The Corridor and Preliminary Routeing and Siting Study (CPRSS) reports on the consideration of alternative corridors that would be more direct, but none were preferred. Whilst potentially feasible, the extent of residential development restricts potential routeing of connections and, as well as involving the transfer of effects to other receptors, were considered to lead to greater adverse effects most notably on locations such as Flatford Mill (heritage and socio-economic effects) and were also considered more likely to affect a Special Protection Area (SPA) under the Habitats Directive.
3.5.128	The Tendring Substation does not have sufficient infrastructure in place to justify the location – the building of roads to access rural substation locations will be disruptive	National Grid will, as part of the iterative design process undertake an assessment to understand the existing local road network which the Project may need to utilise during both the construction and operation phases. As part of this assessment, we will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network around the East Anglia Connection Node (EACN) substation.
		Where temporary haul roads are required to be constructed to access the location of a EACN substation, these will be carried out in consultation with the landowners and the local highway authority, to reduce impacts to local road users.
		This information will be used to inform the drafting of the Construction Traffic Management Plan (CTMP) for the Project. Within the CTMP, it will define the local road network which may be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.5.129	Substation is located too close to the village of Ardleigh	National Grid consider the proposed East Anglia Connection Node (EACN) substation to be sited appropriately in accordance with the Horlock Rules (as set out in Chapter 1 of this report). We note that Ardleigh is at approximately 1.5 km distance from the proposed EACN substation with areas of existing vegetation between the village and substation providing screening.
3.5.130	The Tendring Substation should be located in the area its needed – if the power generation is not	National Grid develops its proposals to provide an efficient National Electricity Transmission System (NETS) responding to new connections requirements in the context of the existing system. The proposed East Anglia Connection Node (EACN) substation has been carefully sited considering the customer connections it is providing (located off the Tendring peninsula) and the location of the NETS with which it needs to connect. The Corridor and

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	for Colchester area then it needs to be moved	Preliminary Routeing and Siting Study (CPRSS) described alternative locations that were considered and the reasons why they were less preferred.
3.5.131	Suggest substation located away from Ardleigh / Criticism of substation siting at Ardleigh	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS) at the 2022 non-statutory consultation. We have updated our proposals for the 400 kV connections and also considered alternative locations for the EACN substation including the former RAF Boxted in light of the 2022 non-statutory consultation feedback. Whilst the former Royal Air Force (RAF) Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or which would require multiple corridors to be used with greater environmental effects. We consider the EACN substation location close to Lawford 132 kV Substation to be the preferred basis to take forward the Project at this stage. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary. We would also highlight that our proposals have developed to include the use of underground cable through the Area of Outstanding Natural Beauty (AONB) to the EACN substation which removes the potential for a double overhead line and reduces the potential effects on residential amenity.
3.5.132	Concern regarding size of Tendring Substation (i.e., landtake and height)	The substation proposals and land take requirement will be established based on the requirements for permanent infrastructure along with land for mitigation measures and for temporary construction. The height of infrastructure will be in the order of 20 m for the tension gantries to which overhead lines connect with other equipment being lower. Dimensions will be the minimum necessary to meet the Project design requirements and relevant safety standards.
3.5.133	Build the Tendring Substation at or near to East Bergholt	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS). A location at East Bergholt would require multiple customer connections to be routed through the Area of Outstanding Natural Beauty (AONB) in addition to the Project and is considered to have greater environmental effects potentially including multiple crossings of a Special Area of Conservation (SAC). On this basis it is less preferred.
3.5.134	Tendring Substation should be built west of the A12 on farmland / golf course	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS). We have updated our proposals for the Project and also considered alternative locations for the EACN substation (including the former Royal Air Force (RAF) Boxted site closer to and to the west of the A12) in the light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or which requires multiple corridors to be used with greater environmental effects. The development of the proposals has also evolved from that described in the 2022 non-statutory consultation with the connection from Bramford now proposed

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		to be made as underground cable through the Area of Outstanding Natural Beauty (AONB) and all the way to the EACN substation. We consider the EACN substation location close to Lawford 132 kV Substation with one connection as underground cable and one as overhead line to be the preferred basis to take forward the Project at this stage. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.5.135	Suggestion that the Tendring Substation is located at Bawdsey instead	National Grid considered the use of Felixstowe area landing points as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS), these were considered less preferred due to the additional technical challenges and environmental effects associated particularly with the 400 kV connections required to the north and to the south. Such routes are technically challenging to the north of Ipswich and interact more extensively with Special Area of Conservation (SAC) and Areas of Outstanding Natural Beauty (AONBs) than the currently proposed East Anglia Connection Node (EACN) substation location consulted upon and as such are less consistent with our duties and relevant policy frameworks.
Technolog	gy / Operations	
3.5.136	The existing 132 kV overhead line through Dedham Vale is not used and should be dismantled	The existing 132 kV overhead line is owned by UK Power Network (UKPN) and it is understood to still be in use by them as part of their Electricity Distribution Network and we are in regular discussions with UKPN regarding the interactions between our Project and their network.
3.5.137	Suggest that gantries rather than terminal towers are used for Cable Sealing Ends (CSE) compounds	The detail behind the initial route corridor proposal is currently being investigated and assessed, including for each Cable Sealing End (CSE) compound or substation entry for which is best suited in regard to terminal towers and gantries.  The most appropriate technology will be chosen for each location.
Tourism		
3.5.138	Concerned about impact of the Project on leisure and tourism	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure.
		Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (e.g. Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.
		Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include: traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP).

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Visual imp	pact	
3.5.139	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable Sealing End (CSE) Compounds	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.
	and Substations)	In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.5.140	Cumulative effect of onshore National Grid projects within East Anglia / within this section	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the Environmental Statement (ES).
		We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.
3.5.141	Concern around the siting of Cable Sealing End (CSE) compound/s	The siting of Cable Sealing End (CSE) compounds takes into account of environmental, engineering and cost considerations and the potential for effects. National Grid will be consulting on the locations and will consider any feedback provided as the Project develops.
3.5.142	Cumulative effect of the Project alongside existing overhead lines	National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.
		For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to

Ref no.	Summary of matters raised	National Grid's response
		reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.
3.5.143	View to and from Area of Outstanding Natural Beauty (AONB) need to be considered (e.g. overhead lines on higher ground will increase visibility of the infrastructure)	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity that are both important factors to the Dedham Vale Area of Outstanding Natural Beauty (AONB). Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley to reduce the changes in views and setting of the AONB from within and adjacent to its designated boundary. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to identify the impacts and reduce effects, these will be presented within a Landscape and Visual Impact Assessment (LVIA). Measures to reduce such effects have included the use of underground cables in the areas of highest amenity value (both within and in the immediate geographic location of the Dedham Vale AONB), sympathetic siting of infrastructure and pylons within the existing landform, and where necessary a range of planting for the purpose of screening.
Wildlife / E	Ecology impact	
3.5.144	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.  The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.  We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques, to take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.  As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be
		identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.5.145	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology - including protected species	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.

Ref no.	Summary of matters raised	National Grid's response
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.5.146	Negative impact of the Project on available land for grazing animals and horses	National Grid recognises that there is the potential for impacts. We are and will continue to work with all landowners including farmers and equestrian facilities who may be affected by the proposals to understand the impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements. There will also be mitigation put in place where wild animal grazing maybe affected.
		As well as possible effects on humans, possible effects of Electric and Magnetic Fields (EMFs) on various animals have been studied a number of times. No detectable effects of EMFs have been found on, for example, health, milk production, fertility, and behaviour. This is confirmed in National Policy Statement (NPS) EN-5 which states: "There is little evidence that exposure of crops, farm animals or natural ecosystems to transmission line EMFs has any agriculturally significant consequences."
		As well as the potential direct biological or health effects addressed above, indirect effects such as microshocks can occur as a result of electric fields. Microshocks are small spark discharges which are similar to a static shock after walking across a nylon carpet for example. The Project will be designed in accordance with the principles of the Government's Code of Practice 'Power Lines: Control of Microshocks and other indirect effects of public exposure to electric fields' to ensure these are mitigated.
3.5.147	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.  The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.  As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be
		undertaken. The findings of which will inform the design and approach to mitigation. We are working closely with the relevant statutory bodies, including Natural England.

Ref no.	Summary of matters raised	National Grid's response
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.5.148	Concern about local badger populations and impacts on them	Based on the suitability of habitats and rural location of most of the Project, it is envisaged that badgers (Meles meles) are widespread throughout the areas required for construction and operation related activities. Given the length of programme and the fact that badger setts can appear (as well as be abandoned) at any time, it is proposed that a survey as part of the Environmental Impact Assessment (EIA) will focus on main badger setts as well as existing data from local record centres. Further badger survey work relating to all other badger setts would be undertaken as part of the pre-construction works post submission of the Development Consent Order (DCO) application to ensure adherence to legislation and animal welfare.
		Pre-construction surveys and sett classifications will be undertaken and, where appropriate, agreed working practices will be set out in the Code of Construction Practice (CoCP). These measures will be implemented to minimise potential impacts on badgers as far as practicable.
3.5.149	Local areas have populations of protected species of birds (e.g. Skylarks, nightingales, yellow hammers, Red Kites)	Protected species of breeding birds are included in the biodiversity assessment as part of the Environment Impact Assessment (EIA). It is anticipated that a range of habitats within the land required for the construction of the Project would provide suitable habitat to support nesting birds and particularly those associated with farmland habitat. The requirement for breeding bird surveys would be based on the results of the preliminary assessment, focusing on suitable habitat within the land required for construction. The Biodiversity Net Gain (BNG) strategy will take into account protected/notable species such as those species mentioned.
		The Environment Act 2021 introduces a mandatory requirement for 10% BNG for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.5.150	The Project should aim for a Biodiversity Net Gain (BNG) of at least 10%	The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.

Ref no.	Summary of matters raised	National Grid's response
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.5.151	Consideration should be given to use of tunnelling (HDD) under water courses	Horizontal Directional Drilling (HDD) is used as an alternative to a trenched (cut and cover) approach to installing underground cables, which is more disruptive in terms of the level of disturbance to the landscape and environment. The benefits of using HDD need to be carefully considered to ensure ground conditions are suitable and that the balance of potential environmental effects is achieved. National Grid will assess ground conditions and any potential effects resulting from drilling, before deciding on where HDD should be used.

## Section 4: Braintree feedback

Figure 3.19- Braintree section map

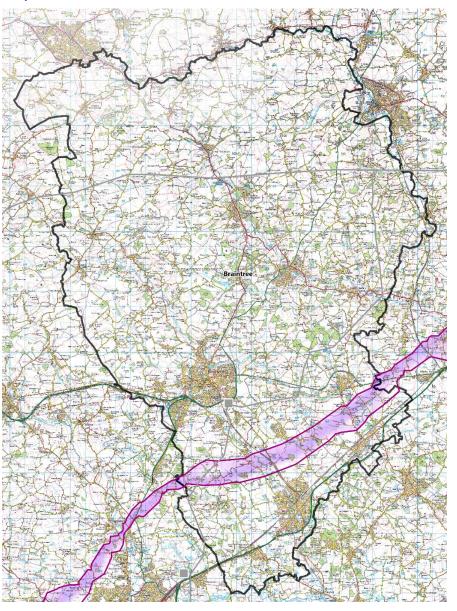


Table 3.6- Summary of consultee comments on Section 4: Braintree and National Grid's response

Ref no.	Summary of matters raised	National Grid's response
Agricultura	al land	
3.6.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.
Communi	ty / Social impact	
3.6.2	Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.  We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.  The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns.  We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:  • Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)  • Email us: contact@n-t.nationalgrid.com  • Write to us: FREEPOST N TO T (No stamp or further address details are required)
3.6.3	Concern about cumulative effect on development in the area (e.g. planned prison, incinerator, solar farm, housing developments, major roads, quarrying)	

Ref no.	Summary of matters raised	National Grid's response
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments. Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will engage with stakeholders such as Local Planning Authorities to understand the other relevant proposed developments in the Project area that should be included in the long/short list for assessment, such as solar farms, housing developments and major roads. We will work closely with other developers where there may be a cumulative impact to ensure that we understand their proposals so that these can be considered in our own assessment.
Construct	tion impacts	
3.6.4	Adverse impact on traffic levels in local are a caused by construction works (e.g. construction traffic travelling along local roads, road closures, etc)	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.6.5	Concerned about damage to landscape resulting from installation of underground cables	The installation of underground cabling would broadly adopt the following process: initially, the removal of topsoil and storage of a width sufficient to allow for construction machinery to work and the digging of the trenching required for underground cabling would be engineered. The underground cabling would then be laid in the trench, soils would be backfilled and hedgerows and shrubs reinstated where practicable. At this point a typical grass seed mixture would be scattered to encourage regrowth.  It is anticipated that within 6-12 months upon completion of the construction of the underground cabling, there would be minimal visibility of the works at ground level and the landscape would return to pre-construction views and settings.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project, including the undergrounding, and will identify any need for additional mitigation if required, this may include screening at particular locations to reduce a change in views due to the Project or to better integrate infrastructure into the wider landscape.
Design Cl	Design Change	
3.6.6	The Project should run in closer to / parallel to the existing 400 kV overhead lines	We note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, in this section there are constraints and features that mean, overall, we consider close paralleling would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. A number of residential properties are present in close proximity to the existing 400 kV overhead line meaning that close paralleling would result in the properties having overhead lines close to

Ref no.	Summary of matters raised	National Grid's response
		both sides. There are also some locations where the combination of existing physical and environmental features (road infrastructure, commercial and residential property etc present very substantial challenges to routeing and siting. It is also noted that further south a corridor parallel to the existing overhead line would lead to greater effects on the Special Protection Area (SPA) designation where legislation is such that alternatives that do not lead to such effects should be followed. As a result, whilst close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the overhead lines have to converge and diverge, and those increased effects on properties with overhead lines to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.6.7	Suggest that the existing overhead lines in this section are reinforced / upgraded instead	The existing transmission network in the region is being upgraded to ensure the system is running at its most efficient performance. The existing networks are not able to be upgraded sufficiently to cope with the future demands expected on the network. As a result, new overhead lines and substations are required to accommodate the changing demands on the network.
3.6.8	Seek alternative routeing (no route specified)	National Grid considered alternative strategic proposals as well as alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published in support of the 2022 non-statutory consultation. We have updated our proposals in the light of 2022 non-statutory consultation feedback, and we will continue to reflect on the detail of any feedback and back-check and update the Project as appropriate and necessary.
3.6.9	Cumulative effect of the Project alongside existing overhead lines	National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.  For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to reduce the effects as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.
3.6.10	Concern around the Project causing communities to become encircled by overhead lines	The current preferred corridor has been routed to achieve some separation from the existing 400 kV overhead line, such that villages are not perceived to be encircled by overhead lines to both sides. Separation is inevitably reduced in certain locations due to the presence of constraints and environmental features. Detailed assessment reported in the Environmental Impact Assessment (EIA) will identify any measures considered to be necessary to reduce potential effects which will also consider the potential for effects potentially arising from close paralleling existing 132 kV overhead line and new 400 kV overhead line infrastructure.

Ref no.	Summary of matters raised	National Grid's response
3.6.11	Suggestion that the Project is aligned south of the A12	The current preferred corridor is routed to the north and west of Colchester and Chelmsford. As set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) alternative corridors to the south (which would be south of the A12) were less preferred mainly due to the greater level of effects on Special Protection Area (SPAs) along the coastal estuaries and other sites. Diversion of the route south of the A12 between Colchester and Chelmsford could be made locally but would be longer and less direct and less compliant with the Holford Rules without material benefit (effects, such as on residential amenity and nature conservation, would be transferred and for some topics increased).
3.6.12	The Project should follow the northerly route (e.g following the route of the existing overhead lines)	National Grid note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, there are constraints and features adjacent to the existing overhead line that mean that overall, we consider close paralleling would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. A number of residential properties are present in close proximity to the existing 400 kV overhead line meaning that close paralleling would result in the properties having overhead lines close to both sides. As a result, whilst close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the lines have to converge and diverge, and those increased effects on properties with an overhead line to both sides are considered greater than those introduced by a new route alignment separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.6.13	Suggest routeing the Project offshore out at sea / Should consider routeing the Project undersea	Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Study (CPRSS) examines several strategic options that were considered for the Project that might achieve the required reinforcement including offshore options. These options were not taken forward as they did not fully address technical or physical/ geographical constraints or enable the network to operate to the required standards.  An offshore connection would have a third of the capacity of the proposed overhead line connection and therefore to transfer the anticipated levels of power generation, three offshore connections would be required including associated infrastructure such as convertor stations. This would make the connection significantly costlier to energy bill payers.  In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich, Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area.
3.6.14	Suggest that the Project are routed as far away from populated / residential areas as possible	Deciding where and how to build new high voltage electricity lines is a complex issue and National Grid is mindful of the potential effects this infrastructure may have on local communities and the concerns these may bring. National Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise and potential health impacts. It has sometimes been suggested that minimum distances between properties and overhead lines should be prescribed.

#### **Summary of matters** Ref no. **National Grid's response** raised We do not consider this appropriate since each instance must be dealt with on its merits. However, we have always sought to route new lines away from residential properties on grounds of general amenity where possible. We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate UK standards, and mitigated where necessary. We set strict technical standards for the equipment we install on our network. These will apply to the proposed new East Anglia Connection Node (EACN) substation located in the Tendring District, and extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected. Noise from overhead lines is predominately determined by the conductor design, voltage and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types be used. consideration for this would be assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the Environmental Statement (ES). In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an assessment on both landscape character and visual amenity. The health and safety of the public, local communities and employees is central to everything that we do. The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. Our approach is to ensure that our network comply with those policies, which are set by Government on the advice of their independent advisors. The Project will be designed to ensure it is fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed. Policies for both noise and EMF are incorporated into the decision-making process for development consent as set out in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment complies fully with those policies and guidelines. The Development Consent Order (DCO) application will include assessments against these polices, including both construction and operational noise and EMF. 3.6.15 Suggestion that the Project Whilst there could be potential benefits from infrastructure being concentrated geographically, i.e., by routeing should run adjacent to existing the Project in close proximity to existing road and rail infrastructure, we do not consider these benefits arise for the whole route. Rail lines or roads potentially align (at least in part) with the general routeing of the Project. transport infrastructure

However, there are constraints and features that mean that we do not consider close paralleling will reduce

Ref no.	Summary of matters raised	National Grid's response
		environmental effects or improve compliance with the Holford Rules or be more consistent with the policy requirement to be economic and efficient.
		A number of residential properties, as well as hamlets, villages and towns, are present in close proximity to the existing transport infrastructure necessitating multiple diversions of an overhead line. There are also some locations where the combination of existing physical and environmental features (railway and road infrastructure, commercial and residential property, woodlands and orchards) present very substantial challenges to routeing and siting. As a result, whilst close paralleling of transport infrastructure may appear beneficial in some short sections, overall, the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new route alignment.
Economic	: / Employment impact	
3.6.16	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.
		Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include: traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
Environm	ental impact	
3.6.17	The Project will impact designated sites - e.g. Site of Special Scientific Interest (SSSI), Ancient Woodland and a Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Sites of Special Scientific Interest (SSSI) and Ancient Woodland.
		The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required, mitigation requirements.
		We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
3.6.18	The Project will result in a negative impact on the environment generally (no details given)	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.

Ref no.	Summary of matters raised	National Grid's response
3.6.19	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated. National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.
		The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.
3.6.20	The Project will cause a negative impact on landscape / amenity	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
		Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (e.g. the Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
		We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
Financial	compensation	
3.6.21	The Project will devalue my property / Impact on property value in this section	National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.  If there are any specific concerns about the devaluation of property, please contact the Project team:

# Ref no. Summary of matters raised

#### **National Grid's response**

- Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.
- Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate
  Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.

# 3.6.22 Request for adequate financial compensation / Impacted individuals need to be compensated

All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.

If there are any specific concerns, please contact the Project team:

- Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.
- Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.

#### Health and Safety

3.6.23 The Project may result in a negative impact on mental health / health and wellbeing of residents

National Grid recognises people may have concerns about the health effects of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.

We have sought to reduce potential effects on communities and residents through routeing and design. We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.

The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns.

We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:

- Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am 5:30pm)
- Email us: <a href="mailto:contact@n-t.nationalgrid.com">contact@n-t.nationalgrid.com</a>
- Write to us: FREEPOST N TO T (No stamp or further address details are required)

Ref no.	Summary of matters raised	National Grid's response
		The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all of its equipment comply fully with those exposure limits.
		Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed overhead lines, underground cables and substation will be designed to ensure they are fully compliant with these policies and guidelines. This ensures that health concerns relating to EMFs are properly and adequately addressed.
Heritage		
3.6.24	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. In the event that impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.  Where impacts on the historic environment are identified these will be presented within a Historic Environment
		assessment which is undertaken as part of the Environmental Impact Assessment (EIA). We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.6.25	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking an Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify any likely significant effects on archaeological sites. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
Mitigation		
3.6.26	Visual impacts should be mitigated through planting and screening measures	Through the routeing and siting exercise, National Grid has sought to and will continue to seek to maximise the existing landform and vegetation to screen the Project as far as practicable as it passes through the wider landscape.
		Where new infrastructure is required as part of the Project and the Environmental Impact Assessment (EIA) concludes that additional mitigation would be of benefit, screening in the form of planting would be implemented to further integrate infrastructure into the wider landscape.

Ref no.	Summary of matters raised	National Grid's response
3.6.27	Need mitigation measures to protect the countryside / measures to minimise impact on the countryside (generally)	Due to the potential scale and nature of the Project, impacts on the countryside and areas designated as Green Belt are anticipated.  Through the routeing and siting exercise, National Grid has sought to and will continue to seek to minimise these impacts as far as practicable and we will continue to refine land take and infrastructure within areas typically referred to as 'countryside' as the Project design develops and seek to reduce effects. To reduce effects, we have included in the design of the Project the use of underground cables in the areas of highest amenity value (e.g., the Dedham Vale Area of Outstanding Natural Beauty (AONB)) and are continuing to appraise the benefits of similar techniques across the Project as a whole.  In the event such effects arise where undergrounding is not a practical mitigation solution, additional measures can include, the sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening to better integrate the Project into the wider landscape and landform.
Public Rig	ghts of Ways (PRoW).	
3.6.28	Concern around disruption of Public Rights of Way (PRoW) / Mitigation must be put in place for pedestrians / equestrians directly or indirectly impacted	Through routeing and siting, National Grid has sought and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).  The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. In the event that mitigation is required, measures may include, the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.  Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
Tourism		
3.6.29	Concerned about impact of the Project on leisure and tourism	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure.  Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (e.g., the Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.  Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include: traffic management, signage and

Ref no.	Summary of matters raised	National Grid's response
		routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
Visual imp	pact	
3.6.30	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable Sealing End (CSE) Compounds and Substations)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.  In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing
		End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.6.31	Cumulative effect of onshore National Grid projects within East Anglia / within this section	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.
Wildlife / Ecology impact		
3.6.32	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.

Ref no.	Summary of matters raised	National Grid's response
		We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques, to take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.6.33	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology - including protected species	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.6.34	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.  The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.  We are working closely with the relevant statutory bodies, including Natural England.

Ref no.	Summary of matters raised	National Grid's response
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.

### Section 5: Chelmsford feedback

Figure 3.20- Chelmsford section map

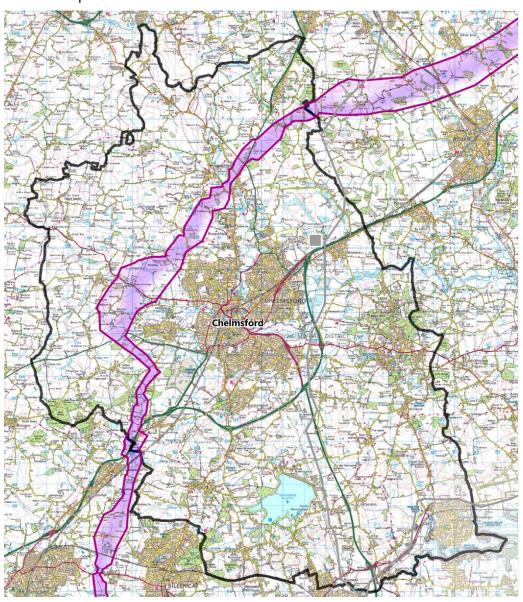


Table 3.7- Summary of consultee comments on Section 5: Chelmsford and National Grid's response

Ref no.	Summary of matters raised	National Grid's response
Agricultura	al land	
3.7.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.
Constructi	on impacts	
3.7.2	Adverse impact on traffic levels in local are a caused by construction works (e.g. construction traffic travelling along local roads, road closures, etc)	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.7.3	Local road infrastructure is not suitable for heavy construction vehicles and machinery	National Grid will as part of the iterative design process undertake an assessment to understand the existing local road network which the Project may need to utilise during both the construction and operation phases. As part of this assessment, we will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network.
		Where temporary haul roads are required to be constructed to access the location of a substation, these will be carried out in consultation with the landowners and the local highway authority, to reduce impacts to local road users.
		This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. Within the CTMP, it will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.7.4	Concerned about damage to landscape resulting from installation of underground cables	The installation of underground cabling would broadly adopt the following process: initially, the removal of topsoil and storage of a width sufficient to allow for construction machinery to work and the digging of the trenching required for underground cabling would be engineered. The underground cabling would then be laid in the trench, soils would be backfilled and hedgerows and shrubs reinstated where practicable. At this point a typical grass seed mixture would be scattered to encourage regrowth.

Ref no.	Summary of matters raised	National Grid's response
		It is anticipated that within 6-12 months upon completion of the construction of the underground cabling, there would be minimal visibility of the works at ground level and the landscape would return to pre-construction views and settings.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project, including the undergrounding, and will identify any need for additional mitigation if required, this may include screening at particular locations to reduce a change in views of the Project or to better integrate infrastructure into the wider landscape.
Consultat	ion	
3.7.5	City Council's Green	In its present form, the Project is a Nationally Significant Infrastructure Project (NSIP) for which the primary policy basis for any decision are National Policy Statement (NPS) EN-1 and EN-5.
	Infrastructure Strategic Plan 2018-2036	The Development Consent Order (DCO) application will consider local planning policy through the Planning Statement and where relevant within the topic chapters in the Environmental Impact Assessment (EIA).
		Local Impact Reports submitted by each local authority will also consider local planning policy. Section 104 of the Planning Act 2008 sets out how the Secretary of State (SoS) must also have regard to any local impact reports submitted by a relevant local authority.
		Issues relating to local planning policy will be discussed with local planning authorities via ongoing engagement as the Project progresses and the Project will seek to minimise and mitigate any local impacts as far as practicable.
Design Cl	nange	
3.7.6	Underground cables should be used in this section	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV overhead lines.
		No such designations or crossing locations have been identified in this section which is therefore proposed as overhead line. We will undertake an Environmental Impact Assessment (EIA) to assess the potential impact of the Project and this will identify any need for additional mitigation.
3.7.7	Existing overhead lines in this section should be removed / undergrounded	The existing electricity transmission network provides power, via the local distribution network, into the local area where it is used in homes and businesses. The need case and funding for the Project is to deliver the new network reinforcement needed, rather than to remove existing overhead lines by undergrounding them. Unless required for mitigation, undergrounding existing overhead lines on the transmission network would not be in accordance with

Ref no.	Summary of matters raised	National Grid's response
		National Policy Statement (NPS) EN-5 and would result in substantial cost to bill payers. There may also be significant environmental impacts due to the removal works on sensitive ecological and archaeological receptors as well as constraints from either existing buildings or unsuitable ground conditions.
3.7.8	The Project should run in closer to / parallel to the existing 400 kV overhead lines	We note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, in this section there are constraints and features that mean, overall, we consider close paralleling would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. A number of residential properties are present in close proximity to the existing 400 kV overhead line meaning that close paralleling would result in the properties having overhead lines close to both sides. There are also some locations (such as at Sandon to the east of Chelmsford) where the combination of existing physical and environmental features (road infrastructure, commercial and residential property etc present very substantial challenges to routeing and siting. It is also noted that further south a corridor parallel to existing overhead lines would lead to greater effects on the Special Protection Area (SPA) designation where legislation is such that alternatives that do not lead to such effects should be followed. As a result, whilst close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the overhead lines have to converge and diverge, and those increased effects on properties with an overhead line to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.7.9	Suggest routeing the Project offshore out at sea / Should consider routeing the Project undersea	Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Study (CPRSS) examines several strategic options that were considered for the Project that might achieve the required reinforcement including offshore options. These options were not taken forward as they did not fully address technical or physical/ geographical constraints or enable the network to operate to the required standards.
		An offshore connection (each has a maximum 2 GW capability) would have a third of the capacity of the proposed overhead line connection and therefore to transfer the anticipated levels of power generation, three offshore connections would be required including associated infrastructure such as convertor stations. This would make the connection significantly costlier to energy bill payers.
		In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich. Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area.
3.7.10	Concerns over the impact of the Project crossing reclaimed land (e.g. reclaimed gravel pits, restored landfill sites, etc)	The current preferred corridor crosses a number of different constraints. The next phase of the Project is to work out how the alignment of the overhead line will fit within the preferred corridor and minimise its impacts as far as reasonably practicable on a number of sensitive receptors such as landfill sites, reclaimed gravel pits and Sites of Special Scientific Interest (SSSIs). The routeing of overhead lines may not be incompatible with many sensitive receptors, for example it may be possible to oversail extraction areas, SSSIs and historic landfill. Likewise, where

Ref no.	Summary of matters raised	National Grid's response
		oversail may not be possible the potential impacts must be considered against the effects arising from possible alternative routes.
3.7.11	Minimum buffers should be applied around major settlements to safeguard the potential for future development / Need to consider impact on future development opportunities	National Grid has obtained information on development proposals within the planning system for the area potentially impacted by the Project and considered whether the Project needs to be amended. The nature of response varies as in some cases proposals can be amended to be designed around our infrastructure but in other cases our proposals may need to be amended. Based on known information we consider our proposals are consistent with relevant policy and guidelines and routes designed such that they do not prevent proposed or future housing developments. It should also be noted that there are no minimum distances prescribed in UK law between overhead lines and homes. Any implications on landscape and visual receptors, residential amenity or from concerns about Electric and Magnetic Fields (EMFs) are robustly assessed and balanced as part of the decision-making process. We will continue to review planning applications and engage with developers to back-check and update our proposals as necessary.
3.7.12	Suggestion that the Project is routed away from Broomfield	In response to feedback a western diversion of the preferred corridor was assessed, that would move the Project away from Broomfield, however due to constraints including a gas pipeline, residential properties and Ancient Woodland, the preferred corridor was considered to be appropriate to take forward. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary. Nonetheless National Grid has considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred or as otherwise amended corridor. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.7.13	Suggestion that the Project is routed away from Chelmsford	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Chelmsford. We have reviewed alternative corridors to the east (as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS)) but continue to consider these less preferred. We have also considered a western diversion of the preferred corridor however due to constraints including a gas pipeline, residential properties and Ancient Woodland the preferred corridor was considered to be preferable to take forward. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.7.14	Suggestion that the Project is routed west of the Writtle University College Land	In response to feedback from Writtle University College, National Grid has noted the request to avoid their land. We have proposed an alignment within the preferred corridor which aims to minimise impacts on the agricultural and equine educational buildings and surrounding land where possible without transferring the effects to adjacent receptors.
3.7.15	Suggestion that the Project is routed north and west of both Bedford Fields and the new Bloor	The respondents feedback provides a preference for an alternative corridor north and west of both Bedford Fields and the new Bloor Homes development (avoiding King Edward VI Grammar School playing fields).

Ref no.	Summary of matters raised	National Grid's response
	Homes development (avoiding King Edward VI Grammar School playing fields).	National Grid is aware of the Bloor Homes development and the preferred corridor avoids both this development and the school playing fields. We will consider this further in developing an alignment informed by the Holford Rules.
3.7.16	Locations for Cable Sealing End (CSE) Compound sites to facilitate end point of underground section must be carefully chosen and subject to further consultation	National Grid acknowledges the requirement to carefully site the Cable Sealing End (CSE) compounds paying particular regard to the Horlock Rules and will consult on its proposals and consider any feedback provided as the Project develops.
Economic	/ Employment impact	
3.7.17	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.
		Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include: traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
Environme	ental impact	
3.7.18	The Project will impact designated sites – e.g. Site of Special Scientific Interest (SSSI), Ancient Woodland and a Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Sites of Special Scientific Interest (SSSI) and Ancient Woodland.
		The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required mitigation requirements.
		We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.7.19	The Project will result in a negative impact on the environment generally (no details given)	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.

Summary of matters raised	National Grid's response
Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated.  National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.
	The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.
The Project will cause a negative impact on landscape / amenity	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
	Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (e.g. the Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
	We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.
	The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
	As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
compensation	
The Project will devalue my property / Impact on property value in this section	National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.  If there are any specific concerns about the devaluation of property, please contact the Project team:
	raised  Negative impact of the Project on green space / Green Belt  The Project will cause a negative impact on landscape / amenity  compensation  The Project will devalue my property / Impact on property

• Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.

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#### **National Grid's response**

- Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office,
   Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.
- 3.7.23 Request for adequate financial compensation / Impacted individuals need to be compensated

All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.

If there are any specific concerns, please contact the Project team:

- Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.
- Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.

#### Health and Safety

3.7.24 The Project may result in a negative impact on mental health / health and wellbeing of residents

National Grid recognises people may have concerns about the health effects of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.

We have sought to reduce potential effects on communities and residents through routeing and design. We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.

The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns.

We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:

- Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am 5:30pm)
- Email us: <a href="mailto:contact@n-t.nationalgrid.com">contact@n-t.nationalgrid.com</a>
- Write to us: FREEPOST N TO T (No stamp or further address details are required)

The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These

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		policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all of its equipment comply fully with those exposure limits.
		Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed overhead lines, underground cables and substation will be designed to ensure they are fully compliant with these policies and guidelines. This ensures that health concerns relating to EMFs are properly and adequately addressed.
3.7.25	Consideration needs to be given to the operation of light aircrafts at Broomfield Hospital / The siting of overhead lines presents a risk to light aircrafts in the area	Our review of airfields within 4 km of the preferred corridor identified 10 General Aviation (GA) sites, one military site (Wattisham Flying Station) and the Mid and South Essex National Health Service (NHS) Broomfield Hospital which receives helicopters from a helipad on the roof of the main hospital building.
		The airfield operators will be consulted as the design of the Project continues and we will endeavour to design a solution that safely accommodates airfield operations as far as practicable. It is noted that the Broomfield Hospital helicopter pad near Chelmsford is situated approximately 500 m from the eastern boundary of the preferred corridor. However, whilst this is relatively close, the climb and manoeuvring performance of twin engine air ambulance helicopters is such that the transmission line should have no detrimental operational impact if it were to be sited anywhere within the route corridor. Discussions will be held with the Essex and Herts Air Ambulance Trust to ensure an agreeable alignment emerges.
3.7.26	Concerns about structural integrity of pylons and overhead lines (i.e. potential for these to collapse / fall down)	Overhead lines are designed to remain robust and operational in the worst weather conditions in the UK. Although overhead lines are more susceptible to disruption from lightning and high winds, they are also comparatively easy and cost-effective to repair and maintain compared to underground cables. It should also be noted that the majority of the existing National Grid network is made up of overhead lines, which have been proven to be a reliable form of electricity transmission in the UK climate.
		Storms of sufficient severity to cause damage to infrastructure are very rare in the UK. Overhead lines could be subject to high wind speeds; however, pylons with overhead lines are designed to meet current safety standards. If in an extreme scenario the overhead line were to be damaged, the monitoring system would detect the fault within milliseconds and the circuit would be tripped and there would be no resulting risk of electrocution or fire. Lightning could potentially strike overhead lines; however, these have earthing protection against lightning strikes. The Project is designed to existing National Grid standards, which include consideration of high temperatures. Overhead lines are also designed to withstand temperatures to as low as -25°C with no effects to operation.
		National Grid undertakes regular inspections of the overhead line using thermal imaging to assess damage to the overhead line from weather. This means damage caused by low or high temperatures or snow/ice would be identified and repaired prior to failure of the line.
Heritage		
3.7.27	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. In the event that impacts on

Ref no.	Summary of matters raised	National Grid's response
		the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.
		Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).
		We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.7.28	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking an Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify likely significant effects on archaeological sites arise. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
Mitigation		
3.7.29	Visual impacts should be mitigated through planting and screening measures	Through the routeing and siting exercise, National Grid has sought to and will continue to seek to maximise the use of existing landform and vegetation to screen the Project as far as practicable as it passes through the wider landscape.
	ū	Where new infrastructure is required as part of the Project and the Environmental Impact Assessment (EIA) concludes that additional mitigation would be of benefit, screening in the form of planting would be implemented to further integrate infrastructure into the wider landscape.
Tourism		
3.7.30	Concerned about impact of the Project on leisure and tourism	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure. Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.  Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation
		and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include: traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP).

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Visual imp	/isual impact		
3.7.31	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable Sealing End (CSE) Compounds and Substations)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.  A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.	
3.7.32	Cumulative effect of onshore National Grid projects within East Anglia / within this section	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.  This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.  We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.	
Wildlife / E	Ecology impact		
3.7.33	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.  The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.	
		We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques, to take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or	

Ref no.	Summary of matters raised	National Grid's response
		greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.7.34	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology – including protected species	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.7.35	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.  The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.

Ref no.	Summary of matters raised	National Grid's response
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.

## Section 6: Basildon and Brentwood feedback

Figure 3.21- Basildon and Brentwood section map

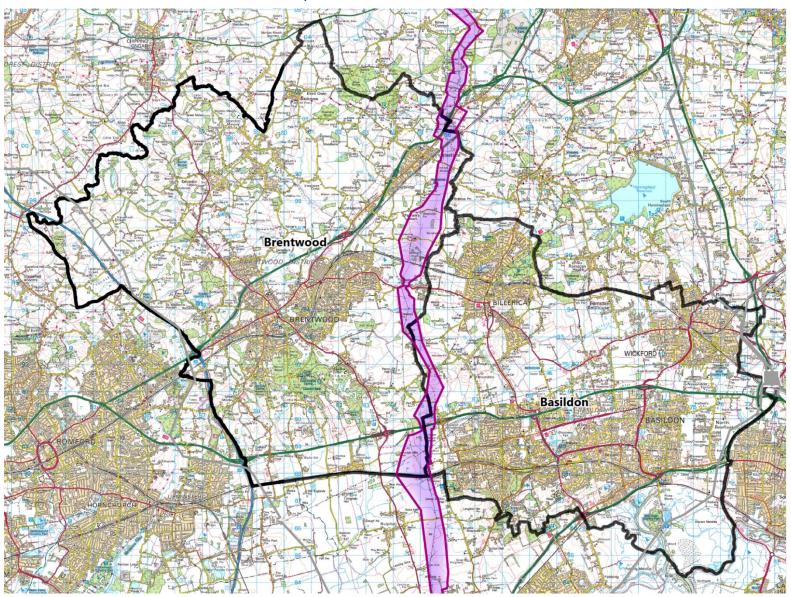


Table 3.8- Summary of consultee comments on Section 6: Basildon and Brentwood and National Grid's response

Ref no.	Summary of matters raised	National Grid's response
Agricultura	al land	
3.8.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.
Communit	ty / Social impact	
3.8.2	Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.  We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.  The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:  • Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)  • Email us: contact@n-t.nationalgrid.com  • Write to us: FREEPOST N TO T (No stamp or further address details are required)
3.8.3	Concern around the Project causing communities to become encircled by overhead lines	The current preferred corridor has been routed to achieve some separation from the existing 400 kV overhead line, such that villages are not perceived to be encircled by overhead lines to both sides. Separation is inevitably reduced in certain locations due to the presence of constraints and environmental features. Detailed assessment reported in the Environmental Impact Assessment (EIA) will identify any measures considered to be necessary to reduce potential effects which will also consider the potential for effects arising from close paralleling existing 132 kV overhead line and new 400 kV overhead line infrastructure.

Ref no.	Summary of matters raised	National Grid's response
3.8.4	Concern that the Project is too near to local hospitals	In developing its proposals National Grid has sought to and will continue to seek to avoid large residential areas and important sites such as hospitals and schools. We feel that the preferred corridor and the currently proposed East Anglia Connection Node (EACN) substation location have avoided these important sites with a suitable standoff area. As we continue to develop our proposals, we will continue to take account of important places such as hospitals and seek to reduce any impacts as far as practicable.
3.8.5	Concern that the Project is going to take away or impact land that could be used for housing development (e.g. proposed garden village and related services)	National Grid has obtained information on development proposals within the planning system for the area potentially impacted by the Project. The nature of our response varies as in some cases proposals can be amended to be designed around our proposed infrastructure but in other cases our proposals may need to be amended at a corridor level or factored into detailed route design. Based on known information we consider our proposals are consistent with relevant policy and guidelines and routes designed such that they do not prevent proposed housing developments. It should also be noted that there are no minimum distances prescribed in UK law between overhead lines and homes. Any implications on landscape and visual receptors, residential amenity or from concerns about electric and magnetic fields are robustly assessed and balanced as part of the decision-making process. We will continue to review planning applications and engage with developers to back-check and update our proposals as necessary.
Construct	ion impacts	
3.8.6	Adverse impact on traffic levels in local are a caused by construction works (e.g. construction traffic travelling along local roads, road closures, etc)	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.8.7	Concerns around accessing the road network during construction	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project.  The CTMP, will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project are reduced as far as practicable.
Consultati	ion	
3.8.8	Comment supportive of proposal / engagement that has taken place – feel listened to	National Grid note the respondent's feedback.

Ref no.	Summary of matters raised	National Grid's response
3.8.9	Justification for the preferred corridor within this section needs to be provided	The Corridor and Preliminary Routeing and Siting Study (CPRSS) presented information about National Grid's decision-making to identify and justify the preferred corridor which was the subject of the 2022 non-statutory consultation. In summary alternative corridors closer to the coast interact with environmental designations, most notably Special Protection Areas (SPAs), and as such are less preferred. Over and above that the corridor is routed as directly as possible between various pinch points between extensive urban areas. We will review feedback provided about the basis for that decision-making and will back check and update the Project as it develops.
3.8.10	Lack of consultation in Brentwood	Prior to commencement of the 2022 non-statutory consultation, we prepared a Consultation Strategy, setting out the details of how we proposed to consult on the Project. The Strategy was shared with the applicable Local Authorities for comment and where possible we took on board their comments to inform the consultation. Approximately 50,000 newsletters were sent to all addresses along the preferred corridor within an area of approximately 1 km either side. We held a series of face-to-face events, spread out along the preferred corridor, during the consultation period. We also held a series of webinars, one of which provided detailed information about our proposals in the Brentwood area. Information was provided to Parish and Town Councils in the area on our proposals and we set up a series of information points at local libraries where information on the Project was available. We note the feedback and will ensure that we carefully consider for the next stage how to share information in the Brentwood area.
3.8.11	The Project is bypassing the usual planning processes	In its present form the Project is a Nationally Significant Infrastructure Project (NSIP) for which the primary policy basis for any decision are National Policy Statement (NPS) EN-1 and EN-5.
		The Development Consent Order (DCO) application will consider local planning policy through the Planning Statement and where relevant within the topic chapters in the Environmental Impact Assessment (EIA).
		Local Impact Reports submitted by each local authority will also consider local planning policy. Section 104 of the Planning Act 2008 sets out how the Secretary of State (SoS) must also have regard to any local impact reports submitted by a relevant local authority.
		Issues relating to local planning policy will be discussed with local planning authorities via ongoing engagement as the Project progresses and the Project will seek to minimise and mitigate any local impacts as far as practicable.
3.8.12	Criticism that Brentwood Local Plan has not been considered	In its present form the Project is a Nationally Significant Infrastructure Project (NSIP) for which the primary policy basis for any decision are National Policy Statement (NPS) EN-1 and EN-5.
		The Development Consent Order (DCO) application will consider local planning policy through the Planning Statement and where relevant within the topic chapters in the Environmental Impact Assessment (EIA).
		Local Impact Reports submitted by each local authority will also consider local planning policy. Section 104 of the Planning Act 2008 sets out how the Secretary of State (SoS) must also have regard to any local impact reports submitted by a relevant local authority.
		Issues relating to local planning policy will be discussed with local planning authorities via ongoing engagement as the Project progresses and the Project will seek to minimise and mitigate any local impacts as far as practicable.

Ref no.	Summary of matters raised	National Grid's response
Design Cl	hange	
3.8.13	Underground cables should be used in this section	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. The National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV overhead lines.
		No such designations or crossing locations have been identified in this section which is therefore currently proposed as overhead line. We will undertake an Environmental Impact Assessment (EIA) to assess the potential impact of the Project, and this will identify any need for additional mitigation.
3.8.14	The Project should run in closer to / parallel to the existing 400 kV overhead lines	We note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, in this section there are constraints and features that mean, overall, we consider close paralleling would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. A number of residential properties are present in close proximity to the existing 400 kV overhead line meaning that if the lines were close paralleled it would result in the properties having an overhead line close to both sides. There are also some locations where the combination of existing physical and environmental features (road infrastructure, commercial and residential property etc present very substantial challenges to routeing and siting. It is also noted that further south a corridor parallel to existing overhead lines would lead to greater effects on the Special Protection Area (SPA) designation where legislation is such that alternatives that do not lead to such effects should be followed. As a result, whilst close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the lines have to converge and diverge, and those increased effects on properties with overhead line to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.8.15	Suggest that the existing overhead lines in this section are reinforced / upgraded instead	The existing transmission network in the region is being upgraded to ensure the system is running at its most efficient performance. The existing networks are not able to be upgraded sufficiently to cope with the future demands expected on the network. As a result, new lines and substations will be required to accommodate the changing demands on the network.
3.8.16	Seek alternative routeing (no route specified)	National Grid considered alternative strategic proposals as well as alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published in support of the 2022 non-statutory consultation. We have updated our proposals in the light of the 2022 non-statutory consultation feedback, and we will

Ref no.	Summary of matters raised	National Grid's response
		continue to reflect on the detail of any feedback and back-check and update the Project as appropriate and necessary.
3.8.17	Suggestion that the Project follows the existing overhead line from Boreham to Tilbury	We note there is potential for the Project to run in close proximity to the existing overhead line (close paralleling) to reduce the level of effects that may arise from a new overhead line. However as described in the Corridor and Preliminary Routeing and Siting Study (CPRSS), there are some locations where the combination of existing physical and environmental features (roads, commercial and residential properties and other features) present very substantial challenges such that an additional overhead line is not considered to be able to be constructed. Even if this could be achieved there are constraints and features adjacent to the existing overhead line that mean that overall, in the context of the Project we consider close paralleling in this area to lead to greater effects and be less compliant with the Holford Rules (as set out in Chapter 1 of this report) or be less consistent with the policy to be economic and efficient. A number of residential properties are present in close proximity to the existing 400 kV overhead line meaning that close paralleling would result in the properties having overhead lines close to both sides. As a result, whilst close paralleling may appear beneficial in some sections, overall the increased environmental effects where the overhead lines have to converge and diverge, and those increased effects on properties with overhead lines to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Additional effects on Special Protection Area (SPA) designations can also be anticipated with the legislation set out in the Habitats Regulations such that alternatives (where they are available) that do not give rise to these effects should be adopted. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.8.18	Suggestion that the Project in this section should be located in valleys rather than along ridges / higher ground, to reduce visual impact	National Grid develops its proposals using the Holford Rules (as set out in Chapter 1 of this report) and must respond to the presence of existing constraints and environmental features. Whilst the use of lower lying ground and or valleys is favoured, there are some instances where higher ground cannot be avoided as a result of the constraints and features present or where routes that utilise lower ground and valleys require additional changes of direction and have additional effects of longer connections. For example, relatively shallow valleys to the west of Writtle have been considered and were less preferred as they have greater effects on woodland including unavoidable loss of Ancient Woodland and also increase residential amenity affects. Where higher ground cannot be avoided the alignment design will aim to reduce visibility as far as possible, utilising screening from existing woodland to filter views. The Environmental Impact Assessment (EIA) process will identify and report any additional mitigation where considered appropriate.
3.8.19	Suggestion that overhead lines should be at an equal distance between Ingatestone and Stock to minimise impact	National Grid has reviewed the preferred corridor in this area to respond to this feedback in conjunction with other feedback concerning the potential effects on listed buildings. We are proposing a more easterly positioning for the proposals to the east of the 2022 consultation corridor which, whilst marginally less direct and longer does substantially reduce effects on listed buildings. This change enables an alignment approximately midway between Ingatestone and Stock.
3.8.20	Suggest that the Project are routed as far away from	Deciding where and how to build new high voltage electricity lines is a complex issue and National Grid is mindful of the potential effects this infrastructure may have on local communities and the concerns these may bring. National

## Ref no. Summary of matters raised

### **National Grid's response**

populated / residential areas as possible

Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise and potential health impacts. It has sometimes been suggested that minimum distances between properties and overhead lines should be prescribed.

We do not consider this appropriate since each instance must be dealt with on its merits. However, we have always sought to route new overhead lines away from residential property on grounds of general amenity where possible.

We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate UK standards, and mitigated where necessary. We set strict technical standards for the equipment we install on our network. These will apply to the proposed new East Anglia Connection Node (EACN) substation located in the Tendring District, and proposed extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.

Noise from overhead lines is predominately determined by the conductor design, voltage and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types be used, consideration for this would be assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the Environmental Statement (ES).

In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an assessment on both landscape character and visual amenity.

The health and safety of the public, local communities and employees is central to everything that we do. The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. Our approach is to ensure that our network comply with those policies, which are set by Government on the advice of their independent advisors. The Project will be designed to ensure it is fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed

Policies for both noise and EMF are incorporated into the decision-making process for development consent as set out in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment complies fully with those policies and guidelines. The Development Consent Order (DCO) application will include assessments against these polices, including both construction and operational noise and EMF.

Ref no.	Summary of matters raised	National Grid's response
3.8.21	Consider laying underground cables under the river networks and existing sewer ducts	Existing underground infrastructure would not be suitable to accommodate 400 kV underground cables, the installation of National Grid underground cables occupies significantly more space due to the need for cable cooling considerations. Additionally, existing assets have not been designed to house 400 kV transmission assets and therefore would be ineffective at facilitating the Project. The typical working width for a 400 kV underground cable installation is approximately 120 m in width.
		The natural routes of watercourses also tend to meander which would lead to several issues:
		<ul> <li>following the path of such watercourses, rather than a direct route would create increased circuit lengths, which would mean more cable is required;</li> </ul>
		<ul> <li>greater disturbance to the environment and local community as we excavate along these rivers;</li> </ul>
		<ul> <li>greater capacitive losses due to the length increase which would require more High Voltage (HV) plant in the form of reactive compensation (shunt reactors) to be installed along the route;</li> </ul>
		<ul> <li>watercourses would not likely be wide enough to accommodate the construction and permanent underground cable corridors required, meaning land either side of the water courses would be excavated as well;</li> </ul>
		<ul> <li>water courses tend to be high priority ecological / environmental areas for wildlife, flora and fauna and as such makes this option even less desirable. Installation of underground cables following a watercourse would require major temporary works to open excavate i.e., damming, diversions, over pumping, cofferdams etc, all of which would cause huge disturbance and risk to the natural environment, not to mention the added time and cost over the route;</li> </ul>
		<ul> <li>directional drilling could potentially be utilised, but in order to accommodate the many changes in direction additional drill pits would be required along the route and as such any benefits lost; and</li> </ul>
		<ul> <li>there would be a need for cable jointing pits every 1 km at which point the river would need to be temporarily diverted to allow such works to be undertaken, again this is impracticable.</li> </ul>
		The increase in route length and the associated temporary works to achieve this would be significant in comparison to overhead lines routed directly as per the Holford Rules.
3.8.22	The Project should be located to the east of Bridleway 90 with suitable standoff distances to protect public amenity, and avoid land north of Rayleigh Road, Hutton (as Berkley hold an option agreement for this)	National Grid is aware of the option agreement over the land to the north of Rayleigh Road, to the west of Bridleway 90. The preferred corridor is to the east of Bridleway 90 and therefore it is currently not anticipated that the Project would impact on the proposed development.  While there are no minimum distances prescribed in UK law between overhead lines and homes, any implications on landscape and visual receptors, residential amenity or arising from concerns over electric and magnetic fields, will be robustly assessed and if any proposed application is granted, further dialogue will be undertaken with the property owner.

Ref no.	Summary of matters raised	National Grid's response
3.8.23	Provided with a suggested route by which the Project is aligned close to the A12	Whilst appreciating the potential benefits of infrastructure being concentrated geographically, i.e., by routeing the Project in close proximity to the A12, we do not consider these benefits would arise in this section. Whilst the A12 aligns (at least in part) with the general routeing of the Project, there are constraints and features that mean that we do not consider close paralleling would reduce environmental effects or improve compliance with the Holford Rules or be more consistent with the policy to be economic and efficient. A number of residential properties (isolated as well as hamlets, villages and towns) are present in close proximity to the existing transport infrastructure which, along with diversions to avoid other features (such as woodland) would necessitate multiple diversions of an overhead line. As a result, whilst close paralleling of the A12 may appear beneficial in some short sections, overall the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new corridor separated from existing transport infrastructure.
3.8.24		National Grid has carefully reviewed the proposals and considers that there remains an appropriate routeing opportunity at the eastern edge of the preferred corridor to avoid the Dunton Hills Garden Village proposals. Corridors further to the east were less preferred due to the potential for effects on European designated areas (Special Area of Conservation (SAC)/ Special Protection Area (SPA)) and their qualifying features. More localised eastern diversions are restricted because of other existing urban development.
3.8.25	Suggest that overhead lines are undergrounded when passing alongside Dunton	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. The National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV overhead line infrastructure. The area indicated is not subject to any landscape designation as identified in NPS EN-5. On this basis we do not consider that the higher cost of underground cables to bill-paying consumers, and the environmental implications of installing and maintaining them, are justifiable in the context of national policy or our statutory duties. Nevertheless, an Environmental Impact Assessment (EIA) will assess the impact of the Project and will identify any need for additional mitigation.
3.8.26	Suggestion that the Project is routed away from specific location	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation which has resulted in several changes to the current preferred corridor. Further details on these changes can be found in the Design Development Report, published as part of the 2023 non-statutory consultation. Further changes to the preferred corridor and the route alignment that has been developed within it will be considered as the Project develops.

Ref no.	Summary of matters raised	National Grid's response
3.8.27	Suggestion that the Project is routed away from Ingatestone	National Grid has reviewed the preferred corridor in this area to respond to this feedback in conjunction with feedback concerning the potential effects on listed buildings. We are proposing a more easterly positioning for the project which, whilst marginally less direct and longer, does move the Project further away from Ingatestone by adopting a corridor that facilitates a potential alignment approximately midway between Ingatestone and Stock.
3.8.28	Suggestion that the Project is routed away from Haverings Grove	National Grid has considered the respondents feedback highlighting a preference for an alternative corridor moved away from Haverings Grove. We have considered alternative corridors but remain of the view that the preferred corridor should be taken forward at this time. The vicinity of Haverings Grove cannot be avoided because of extensive urban areas to east and west with routeing also influenced by the presence of a Conservation area to the east and existing gas pipeline and existing 132 kV overhead line infrastructure. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules (particularly Rule 2 in respect of heritage assets and Supplementary Notes in respect of residential amenity) in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.8.29	Suggestion that the Project is routed away from Ingatestone Hall and Hylands House	National Grid has reviewed the preferred corridor in this area to respond to this feedback in conjunction with feedback concerning the potential effects on listed buildings. With the preferred corridor proposed in excess of 1 km from Hylands house and areas of intervening woodland to screen / filter views we do not consider further deviation of the corridor to be required. In the vicinity of Ingatestone Hall we are proposing a more easterly position to now be preferred which, whilst marginally less direct and longer, does substantially reduce effects on listed buildings at Ingatestone Hall by supporting an alignment approximately midway between Ingatestone and Stock at over 1 km from Ingatestone Hall.
3.8.30	Suggestion that the Project is routed away from Mountnessing	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Mountnessing, noting that the preferred corridor is at around 2 km from the eastern edge of Mountnessing. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.8.31	Suggestion that the Project is routed away from Billericay	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Billericay. We have reviewed alternative corridors but remain of the view that the preferred corridor should be taken forward at this time. The preferred corridor in this general area is between extensive urban areas and influenced by other factors including listed buildings. In the vicinity of Billericay we are proposing an alignment that has moved closer to Billericay to reduce effects on the Grade I Listed Ingatestone Hall. We considered the feedback and applied the guidance in the Holford Rules in developing the draft alignment. Whilst closer to Billericay we consider this alignment is not inconsistent with the Holford Rules. Guidelines on overhead line routeing are known as

Ref no.	Summary of matters raised	National Grid's response
		the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.8.32	Suggestion that the Project is routed away from Brentwood	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Brentwood. We have reviewed alternative corridors but remain of the view that the preferred corridor should be taken forward at this time. The preferred corridor in this general area is between extensive urban areas and influenced by other factors including listed buildings. In the vicinity of Brentwood we are proposing an alignment that has moved (in part) further from Brentwood to reduce effects on the Grade I Listed Ingatestone Hall. In the absence of a specific basis for the change or a proposed alternative corridor, National Grid has considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.8.33	Suggestion that the Project is routed away from Crown Hill / Dunton Hill	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Crown Hill and Dunton Hill. The presence of other environmental features, residential properties and proposed housing development in combination with existing urban areas restrict routeing options and alternatives were all considered less preferable. We nonetheless, have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
Economic	c / Employment impact	
3.8.34	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.
		Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include: traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
3.8.35	Impact on other local projects (i.e., solar farms such as Crouch Solar Farm)	National Grid continues to seek to reduce as far as practicable impacts on existing and consented projects as the designed alignment of the Project evolves.  This will be undertaken by engaging with developers of such infrastructure projects to understand their development plans and to identify complementary design principles and parameters if practicable.

Ref no.	Summary of matters raised	National Grid's response
		In addition, we will continue to apply a range of good practice design principles during the iterative design of the Project, such as, considerate siting of infrastructure and pylons, whilst considering other factors including but not limited to; engineering feasibility, environmental impacts and land take requirements.
3.8.36	Concern about cumulative effect on development in the area	National Grid will as part of the Environmental Statement (ES) for the Project undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This, in summary, is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments. Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will engage with stakeholders such as Local Planning Authorities to understand the other relevant proposed developments in the Project area that should be included in the long/short list for assessment, such as solar farms, housing developments and major roads. We will work closely with other developers where there may be a cumulative impact to ensure that we understand their proposals so that these can be considered in our own assessment.
3.8.37	Concerned about placement of pylon towers and potential overshadowing of the solar farm	The development of route alignment and pylon positions seeks to find an appropriate balance between different effects including impacts on residential amenity, setting of listed buildings and other commercial interests. Detailed route alignment will consider existing and solar developments within the planning system and seek to reduce the potential for effects. Where such avoidance of effects is not possible then mechanisms to establish appropriate compensation are available.
Environme	ental impact	
3.8.38	The Project will impact designated sites – e.g. Site of Special Scientific Interest (SSSI), Ancient Woodland and a Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Sites of Special Scientific Interest (SSSI) and Ancient Woodland.
		The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required mitigation requirements.
		We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.

Ref no.	Summary of matters raised	National Grid's response
3.8.39	The Project will result in a negative impact on the environment generally (no details given)	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.
3.8.40	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated.  National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.  The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the
3.8.41	The Project will cause a negative impact on landscape / amenity	Planning Statement will assess the impacts on Green Belt land designations.  National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
		Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
		We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.8.42	Flooding needs to be taken into account / mitigated against in this section (e.g. increased surface	National Grid has sought to and will continue to seek to reduce the impact on areas prone to flooding through the routeing and siting exercise, and we will continue to refine the potential interactions through careful siting of infrastructure and pylons outside of flood zones where practicable.
	water flooding due to climate change)	The Environmental Statement (ES) will include consideration for potential impacts of flood risk from rivers, surface water and groundwater sources, considering for the potential for both temporary and permanent impacts, taking account of the effects of climate change over the projects design life. A Flood Risk Assessment (FRA) will also be

Ref no.	Summary of matters raised	National Grid's response
		produced to support the ES and submitted with the Development Consent Order (DCO) application, with particular focus on management of surface water drainage.
3.8.43	Request that if the preferred corridor changes, Thorndon Park and Langdon Ridge Sites of Special Scientific Interest (SSSIs) are avoided	National Grid notes the respondent's feedback. We seek to avoid designated sites such as Sites of Special Scientific Interest (SSSI) when routeing and siting projects. Where sites of ecological significance cannot be avoided, we will seek to reduce potential impacts through mitigation. The Environmental Impact Assessment (EIA) will identify potential effects and mitigation, and we are working closely with the relevant statutory bodies, for example Natural England as the Project develops.
Financial	compensation	
3.8.44	The Project will devalue my property / Impact on property value in this section	National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.
		If there are any specific concerns about the devaluation of property, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>
3.8.45	Request for adequate financial compensation / Impacted individuals need to be compensated	All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.
		If there are any specific concerns, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>
		Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office,

Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.

### **Summary of matters** Ref no. **National Grid's response** raised The need to acquire a private property is unlikely, but where a need arises on a case-by-case basis, National Grid 3.8.46 Request for acquisition of their will offer to purchase the property at the market value. If there are any specific concerns, please contact the Project house at current market value team: Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314. Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ. Health and Safety 3.8.47 The Project may result in a National Grid recognises people may have concerns about the health effects of living close to an overhead line, and negative impact on mental health that the uncertainty whilst the proposals are developed may cause some stress and anxiety. / health and wellbeing of We have sought to reduce potential effects on communities and residents through routeing and design. We have residents also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project. The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to gueries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project: • Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am - 5:30pm) Email us: contact@n-t.nationalgrid.com Write to us: FREEPOST N TO T (No stamp or further address details are required) The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all of its equipment comply fully with those exposure limits. Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed overhead lines, underground cables and substation will be designed to ensure they are fully compliant with these policies and guidelines. This ensures that health concerns

relating to EMFs are properly and adequately addressed.

Ref no.	Summary of matters raised	National Grid's response
3.8.48	Consideration needs to be given to the Project between Braintree and Horndon and its proximity in relation to a 900 mm diameter High Pressure Gas Main and the associated Health and Safety Executive (HSE) planning zones	National Grid is aware of the presence of various utilities and will take appropriate account of them in developing the detailed alignment and infrastructure positions following consideration of feedback about the preferred corridor and graduated swathe. We will engage with such utility providers through the Project development process.
Heritage		
3.8.49	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. In the event that impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.
		Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).
		We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.8.50	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking an Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify any likely significant effects on archaeological sites. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
Maintenar	nce (ongoing)	
3.8.51	Power cuts are already frequent – require notice of power cuts in advance	The Project works will have no impact on your electricity supply. The work that we need to carry out is on part of the National Electricity Transmission System (NETS) and will have no direct effect on homes, businesses, schools and other premises in the local area.
Public Rig	hts of Ways (PRoW).	
3.8.52	Concern around disruption of Public Rights of Way (PRoW) /	Through routeing and siting, National Grid has sought to and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).
	Mitigation must be put in place for	The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. In the event that mitigation is

Ref no.	Summary of matters raised	National Grid's response
	pedestrians / equestrians directly or indirectly impacted	required, measures may include, the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.
		Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
Tourism		
3.8.53	Concerned about impact of the Project on leisure and tourism	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure. Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.
		Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include: traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
Visual imp	pact	
3.8.54	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable Sealing End (CSE) Compounds and Substations)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.
		In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify the need for any additional mitigation.
3.8.55	Cumulative effect of onshore National Grid projects within East Anglia / within this section	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.

Ref no.	Summary of matters raised	National Grid's response
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.  We will also engage with developers of infrastructure projects to understand their development plans and to identify
		complementary design principles and parameters where available and if practicable.
3.8.56	Cumulative effect of the Project alongside existing overhead lines	National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.
		For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.
Wildlife / E	Ecology impact	
3.8.57	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.
		We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques, to take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.

Ref no.	Summary of matters raised	National Grid's response
3.8.58	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology – including protected species	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.8.59	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.8.60	Concern about local badger populations and impacts on them	Based on the suitability of habitats and rural location of most of the Project, it is envisaged that badgers (Meles meles) are widespread throughout the areas required for construction and operation related activities. Given the

Ref no.	Summary of matters raised	National Grid's response
		length of programme and the fact that badger setts can appear (as well as be abandoned) at any time, it is proposed that a survey as part of the Environmental Impact Assessment (EIA) will focus on main badger setts as well as existing data from local record centres. Further badger survey work relating to all other badger setts would be undertaken as part of the pre-construction works post submission of the Development Consent Order (DCO) application to ensure adherence to legislation and animal welfare.
		Pre-construction surveys and sett classifications will be undertaken and, where appropriate, agreed working practices will be set out in the Code of Construction Practice (CoCP). These measures will be implemented to minimise potential impacts on badgers as far as practicable.

## Section 7: Thurrock feedback

Figure 3.22- Thurrock section map

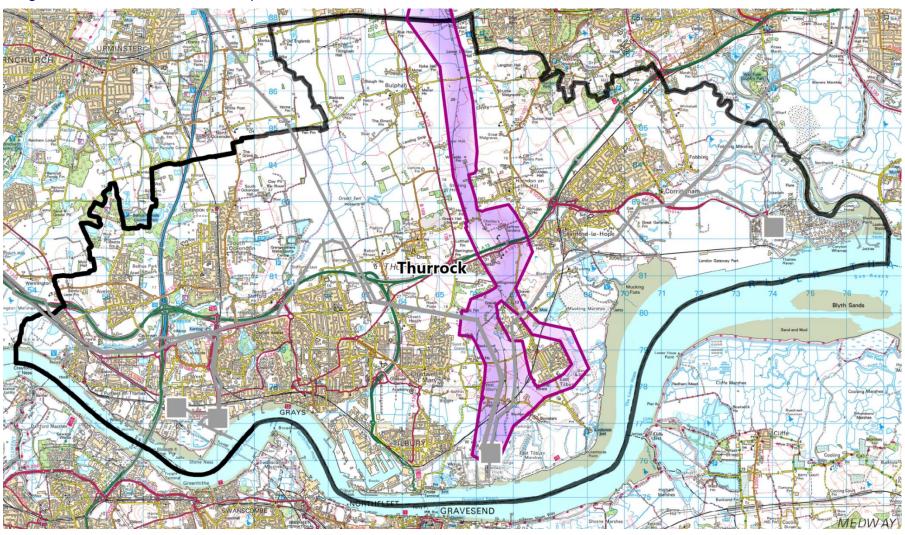


Table 3.9- Summary of consultee comments on Section 7: Thurrock and National Grid's response

Ref no.	Summary of matters raised	National Grid's response
Communi	ty / Social impact	
3.9.1	Cumulative effect of the Project with other projects that are not being led by National Grid within this section (mineral extraction, expanding free port, new power station, etc)	National Grid will as part of the Environmental Statement (ES) for the Project undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This, in summary, is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.  This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments. Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.  We will engage with stakeholders such as Local Planning Authorities to understand the other relevant proposed developments in the Project area that should be included in the long/short list for assessment, such as solar farms, housing developments and major roads. We will work closely with other developers where there may be a cumulative impact to ensure that we understand their proposals so that these can be considered in our own assessment.
Design Ch	nange	
3.9.2	Account for the emerging Thurrock Local Plan and proposed Lower Thames Crossing (LTC)	National Grid takes into account relevant information on development proposals such as new housing and infrastructure. In this area we consider that our proposals to install underground cable from the north of the Lower Thames Crossing (LTC) through to Tilbury Substation can be achieved without detriment to the LTC proposals and without preventing housing proposals. We will continue to back check the current proposals against new information including updates to local plans.
3.9.3	Suggestion that the Project is routed away from specific location	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non- statutory consultation which has resulted in several changes to the current preferred corridor. Further details on these changes can be found in the Design Development Report, published as part of the 2023 non-statutory consultation. Further changes to the preferred corridor and alignment will be considered as the Project develops.

# 3.7 National Grid's response to public and non-technical stakeholder comments received

- This section contains feedback received to this consultation from **members of the public and non-technical stakeholders** and National Grid's response to that feedback. These responses were written in the context of the information available at the 2022 non-statutory consultation. Information provided is subject to change as the Project develops.
- Table 3.10 contains a summary of comments on all general matters raised. Tables 3.11 to 3.17 relate directly to the Project sections as separated by local authority geographical areas as shown in Figure 1.2. For ease of reference, the table for each section follows the local authority colour code in Figure 1.2.

### Interest group responses

- A campaign led by the Essex Suffolk Norfolk Pylon (ESNP) interest group (also known as Pylons East Anglia Ltd) was hosted on their website and encouraged supporters to carry out activities such as: write to MPs, complete a survey developed by the ESNP which received 2500 inputs and sign a petition which received over 22,000 signatures.
- Issues raised in the ESNP formal response, survey and emails sent directly to National Grid were analysed as per the methodology in Section 3.3 of this report and are addressed in Tables 3.10 to 3.17.

### Non-section specific feedback

Table 3.10 Summary of general consultee comments and National Grid's response

Ref no.	Summary of matters raised	National Grid's response
Agricultura	al land	
3.10.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.
Area of O	utstanding Natural Beauty (AONB)	
3.10.2	Concern that the Project will impact on / be impacted by any potential future expansion of Area of Outstanding Natural Beauty (AONB)	National Grid considers known designations in the development of its proposals. It is unaware of any proposed expansion of the Area of Outstanding Natural Beauty (AONB) in the vicinity of the preferred corridor. The Stour Valley Project Area is the closest such location but at a distance where we do not consider the Project would impact the potential future expansion.
Communit	ty / Social impact	
3.10.3	Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.  We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.  The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:  • Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)  • Email us: contact@n-t.nationalgrid.com

Ref no.	Summary of matters raised	National Grid's response
		Write to us: FREEPOST N TO T (No stamp or further address details are required)
3.10.4	Local communities have the impacts, but don't benefit / The Projects only benefits those living elsewhere (e.g. London)	There is a need to reinforce the existing high voltage electricity network in the East Anglia region. It does not currently have the capability needed to reliably, and securely, transport the electricity that will be generated and connected to the electricity transmission network by 2030, while working to the required standards. The proposed Project would benefit the UK as a whole including local communities by contributing to our energy security in the future, ensuring that the national grid meets future power demands.
3.10.5	Request that benefits are contributed to communities that are impacted by the Project / National Grid provide a voluntary Community Benefit Contribution package / Local community fund	We know that our responsibility as a business goes beyond safely building new energy infrastructure to enable a cleaner, fairer, and affordable future. We want to leave a lasting positive impact where we build our projects, to help those areas and communities thrive and to support a sustainable future. Our Responsible Business Charter sets out our commitments and ensures that responsibility is woven through every we do. It focusses on five key areas where we believe we can really make a difference: the environment, our communities, our people, the economy, and our governance.
		We are working with stakeholders and communities to understand what is important to them and will endeavour to deliver initiatives in the region to support those priorities. There are four key areas where we believe we can bring benefit to those who are hosting the infrastructure that supports the green energy transition:
		<ul> <li>Natural Environment – we will build partnerships with environmental groups and NGOs where we can support initiatives that enhance the landscape, biodiversity, and availability of green space within the areas we are constructing our projects.</li> </ul>
		<ul> <li>Net Zero – we will help to support the region in achieving its own net zero priorities.</li> </ul>
		<ul> <li>Skills and employment – we are extending our Grid for Good programme, and building other partnerships, to deliver training and skills development in the region, to encourage the next generation of green energy workers</li> </ul>
		<ul> <li>Community Grant Programme – when projects are in construction, through our Community Grant Programme, charities and not- for- profit organisations can apply for a grant towards community-based initiatives that deliver social, economic, and environmental benefits.</li> </ul>
		In addition, the government recently ran a consultation seeking views on how community benefits should be delivered for communities that host onshore electricity transmission infrastructure. We continue to engage with government on this topic and will work with communities and stakeholders to implement the outcome of this consultation.
3.10.6	Potential for new overhead lines to disrupt telecommunications, broadcast signals, and electrical equipment (mobile reception, TV	Radiofrequency emissions can interfere with electrical equipment, telecommunication. WiFi and broadcast equipment. These emissions are limited from overhead lines by designing to National Grid's Technical Specifications, which include the requirements of standards. All the equipment used will meet the requirements in these standards, which are in place to prevent interference issues. These are the same good engineering practices

Ref no.	Summary of matters raised	National Grid's response
	and radio signals, car electronics and batteries)	that are applied to the existing transmission system assets, including existing 400 kV overhead lines, which cause no interference issues for electrical equipment, telecommunication, WiFi and broadcast equipment under normal operating conditions. Therefore, we also expect no interference issues as a result of the Project.
		Global Positioning System (GPS) is increasingly being used to provide accurate position information such as in precision farming. It uses a radio receiver to receive the transmitted radio signals from a number of satellites orbiting the earth. Additional accuracy is used in differential GPS (DGPS) which involves the use of signals transmitted from a local fixed transmitter (or another satellite). Close to a pylon, there might be some degradation in GPS performance, just as there can be some degradation close to buildings and trees. The individual wires of a power line are very thin so they do not cause a problem. Any radio interference emitted by the line is too small to have any effect. Other than that, there is no evidence of power lines interfering with GPS used in precision farming.
3.10.7	Use local labour / contractors	The construction of the Project will be highly technical and will require specialised contractors with the required expertise and experience, sourced via a competitive tender. However, National Grid promotes the use of local supply and small and medium enterprises (SMEs) through the main construction contractors they employ. National Grid works with schools and local authorities to encourage the next generation of engineers and help the unemployed to develop new skills.
3.10.8	Suggest that National Grid contribute to measures taken within the Essex County Council Climate Action Focus Area	The Essex Climate Action Commission recommended the creation of a focus area to demonstrate best practice in sustainable land use management. This area comprises the river catchments of the Blackwater and Colne, comprising approximately 30% of the county of Essex. Many of the objectives of the Focus Area are in line with that of the Government, achieving Net Zero carbon, new and enhanced green infrastructure and the recovery and improvement of biodiversity and natural ecosystems. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force), to ensure that they enhance biodiversity and create or enhance green spaces and green infrastructure for local communities to enjoy. National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		The Project will include consideration for land required for mitigation, compensation and enhancement for BNG, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas and we will consider all options that are available to us.
Construct	ion impacts	
3.10.9	Need to mitigate the impacts of construction and minimise disruption	National Grid, as part of our iterative design process, will undertake an assessment to gain an understanding of the existing local road network which the Project may need to utilise during both the construction and operation phases. As part of this assessment, we will work closely with the relevant highway authorities to understand and gain information on the local road network.
		This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements,

Ref no.	Summary of matters raised	National Grid's response
		highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
		Where temporary haul roads are required, for example to access the location of a substation, these will be carried out in consultation with the landowners and the local highway authority, to reduce impacts to local road users.
3.10.10	Concerned about noise and other disturbances resulting from construction (e.g. mud on roads, dust etc.) Use screening and	National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during project development, assessed according to the appropriate UK standards, and mitigated where necessary.
	mitigation measures for these where possible	We set strict technical standards for the equipment we install on our network. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.
		As part of the Development Consent Order (DCO) application, a Construction Traffic Management Plan (CTMP) will be submitted which will outline the best practice and standard control measures relating to the movement of construction related vehicle movements. These measures will include wheel washing of vehicles and the correct and tidy management of works areas to reduce as far as practicable dust and mud entering the local road network in the form of 'track-out'.
3.10.11	Ensure that any environmental damage as a result of construction is mitigated (e.g. replanting / rewilding / habitats replacement)	Mitigation will be proposed as part of the Environmental Impact Assessment (EIA), where appropriate. An assessment of soils and agriculture will be included in the EIA. This will include the requirement for soil management measures to be detailed in a Soil Resource Plan (SRP) which will form part of the Code of Construction Practice (CoCP). Measures would include how the topsoil and subsoil will be stripped and stockpiled and include suitable conditions for when soil handling will be undertaken, for example avoiding handling of waterlogged soil.
		Where land is being returned to agricultural use, the appropriate soil conditions (for example through the replacement of stripped layers and the removal of any compaction) will be recreated. Habitat will be reinstated considering a commitment of 10% Biodiversity Net Gain (BNG).
		The Environment Act 2021 introduces a mandatory requirement for 10% BNG for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all available options.
3.10.12	Concern about cumulative effect on development in East Anglia (housing developments, road works, etc)	National Grid will as part of the Environmental Statement (ES) for the Project undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This, in summary, is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved

Ref no.	Summary of matters raised	National Grid's response
		development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments. Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will engage with stakeholders such as Local Planning Authorities to understand the other relevant proposed developments in the Project area that should be included in the long/short list for assessment, such as solar farms, housing developments and major roads. We will work closely with other developers where there may be a cumulative impact to ensure that we understand their proposals so that these can be considered in our own assessment.
3.10.13	Local road infrastructure is not suitable for heavy construction vehicles and machinery	National Grid will as part of the iterative design process undertake an assessment to understand the existing local road network which the Project may need to utilise during both the construction and operation phases. As part of this assessment, we will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network.
		Where temporary haul roads are required to be constructed to access the location of a substation, these will be carried out in consultation with the landowners and the local highway authority, to reduce impacts to local road users.
		This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. Within the CTMP, it will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.10.14	Concerns about disruption in general (no details given)	National Grid notes the concern and will work hard to reduce disruption as far practicable by implementing standard measures/ processes such as a Construction Traffic Management Plan (CTMP) for construction related vehicle movements on the public highways, through to continual consultation with landowners to accommodate where possible existing and planned agricultural activities when temporary access is required to construct infrastructure within field networks. The measures to reduce and control possible disruption would be presented within the CTMP and the Code of Construction Practice (CoCP) for the Project.
3.10.15	Request to reduce the amount of groundworks associated with construction of the substation and connection points	The design and construction will be based on the technical needs of the system and will be kept to a minimum in order to avoid unnecessary disturbance and cost.  An outline Code of Construction Practice (CoCP) will be prepared and submitted as part of the Development Consent Order (DCO) application. This will outline environmental mitigation measures to be implemented during the
		construction phase of the Project. This outline CoCP will be further developed by the Main Works Contractor prior to construction and adhered to throughout the construction phase.

Ref no.	Summary of matters raised	National Grid's response
3.10.16	Concerns over the spread of the dangerous pathogen Phytophthora by making gravel roads using gravel from infected quarries	National Grid works with a range of approved and appropriately procured delivery partners to construct its Projects. As part of this procurement process, we expect delivery partners to use materials that have been sourced from traceable and reliable companies, in this case aggregates. It is expected that any aggregates used by the Project will have been appropriately tested and treated to reduce the likelihood of pathogen pathways. If there are still concerns regarding potential pathogen pathways (including that between livestock) then appropriate biosecurity mitigation would be provided in the Code of Construction Practice (CoCP).
3.10.17	Impact on high pressure national transmission gas pipelines / oil pipelines have not been considered as part of the Project	In developing our projects National Grid maps all known considerations that will inform the routeing and siting including utilities. National Grid will work closely with all utilities that the Project interacts with, including the gas transmission network, and we will continue to do so as the Project design progresses.  As we develop our proposals, we will consider utilities including water, gas and oil pipelines and lower voltage overhead lines. To ensure the integrity of existing utilities that the Project doesn't need to amend or alter, during the design and subsequent construction phase we will adhere to the applicable safety 'standoff' distances from the third party infrastructure in developing our proposals.
Consultat	Consultation	
3.10.18	Comment supportive of proposal / engagement that has taken place - feel listened to	National Grid note the respondent's feedback.
3.10.19	Criticism of consultation questionnaire / questions are misleading	The feedback form provided as part of the 2022 non-statutory consultation included a number of open and closed questions. Free text boxes enabled people to provide any other feedback they wanted. Respondents were free to answer any questions they felt most relevant. We have found in the past that people find a feedback form useful in structuring these responses and that the form has been helpful. However, feedback can be provided in any way that the consultee wishes, either by using the feedback form template, by letter, email or telephone. All feedback will be read by the Project team and the feedback considered as the Project develops. All feedback has been recorded and responded to in this report or in the Project documents supporting the 2023 non-statutory consultation.
		We note concerns about questions 1, 2 and 3 in the feedback form. The responses to these questions will be reported but support expressed for low carbon generation will not be taken as in any way being in support of this Project.
3.10.20	Need further information / Clearer information on the Project and its impacts are needed / Improved clear mapping	This 2022 non-statutory consultation was at the early stages of the Project development and information on the work done to date was included in the Project consultation documents including the Corridor and Preliminary Routeing and Siting Study (CPRSS). It was important to us to consult during the early stages of the Project to ensure that people were aware of the Project and had the opportunity to provide feedback in the early stages before further work was carried out. The level of detail of the information presented at the early stages of the project which included environmental baseline was proportionate to the Project's current status and stage through the iterative design process. This information was based upon desk based reviews and freely accessible sources. As the Project's design progresses, detailed environmental baseline will be collected to enable the undertaking of the Environmental

Ref no.	Summary of matters raised	National Grid's response
		Impact Assessment (EIA). This will include but not be limited to, a range of seasonal surveys on flora and fauna, intrusive and non-intrusive archaeological surveys and landscape and visual walkovers to define viewpoint locations and further appreciate the local topography and existing planting arrangements.
		The feedback received has been read and has been and will continue to be considered in how we develop our proposals further. There will be further consultation as the Project develops where we will share more detailed information on our proposals as they continue to develop, including how feedback has shaped the Project. We will also share further information relating to environmental baseline information collected and the potential environmental impacts of our proposals and how these are proposed to be mitigated.
		We note the concerns about the mapping. An interactive map was and continues to be available on the Project website so that people can look at our proposals in more detail. Large scale maps were available at all the events and copies were posted to members of the public who requested them during and following events. We will review how we can present materials at the next consultation, including maps, and balance this with the scale of the Project.
3.10.21	Criticism of consultation process / Being misled about the Project / Don't trust it will make a difference	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments (see Appendix A of this report) based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable. The Public Consultation Strategy is available in Appendix B and the consultation was undertaken in accordance with this. Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this has also been included.
		Before any further stage of consultation, we will update the Consultation Strategy and engage with Local Authorities.
3.10.22	Green' Project Name is misleading	The acronym GREEN stands for Green Energy Enablement to underline the significant importance of the UK's net zero aspirations. The Project is required to connect important new renewable generation on the east coast to the National Electricity Transmission System (NETS) so that it can be taken to the homes and businesses where it will be used. This new generation is an important part of the Government's targets to move to a low carbon future for the country and is required to achieve the goal of 50 GW offshore wind by 2030.
		National Grid has changed the name of the Project to Norwich to Tilbury to make it clear it's part of The Great Grid Upgrade.
		All projects that are part of the Great Grid Upgrade will include specific locations in their names to make it easy for people to understand what and where we are proposing to build new infrastructure.
		Although the name of the Project has changed the focus remains the same – to bring new sources of renewable energy to homes and businesses across East Anglia and the UK.
3.10.23	Criticism of consultation timing - not enough time to consider the proposals / no face-to-face meetings until late in the process	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected local authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report together with information on how we complied with the strategy. The Consultation Strategy is available as an

#### **Summary of matters** Ref no. **National Grid's response** raised appendix to this report. Before any future consultation we will update the Consultation Strategy and engage with local authorities for their views on how we should conduct the consultation. Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Section 3 of this report. A total of 12 face-toface events along the proposed route and 12 webinars were held during the consultation period of 8 weeks. Recordings of the webinars were available on the Project website for people to view at any time. The Project team were and continue to be available to answer questions through the Project contact details either by email or telephone. Residents who will be affected by 3.10.24 Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local the Project need to be communicated with Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report together with information on how we complied with the strategy. The Consultation Strategy is available as an appendix to this report. Before any future consultation we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation. Feedback has been reviewed and considered by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Section 3 of this report. A total of 12 face-to-face events along the proposed route and 12 webinars were held during the consultation period. Recordings of the webinars were available on the Project website for people to view at any time. The Project team were and continue to be available to answer questions both during and after the consultation through the Project details on the website, by phone, freepost or email. The consultation zone for the Project covered the preferred corridor and, as a minimum, an area of 1 km each side of the preferred corridor, and a letter introducing the Project was sent to all addresses in this area, approximately 50,000 addresses. Need for additional consultation 3.10.25 Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set events to be held (e.g. amount of out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local events, evening sessions, etc) Authorities who provided us with comments based on their knowledge and experience of consultation in the area. and wider publicity / Those within We amended the Strategy based on feedback where practicable and information on this is available in this report marginalised groups need to be together with information on how we complied with the strategy. The Consultation Strategy is available as an included too appendix to this report. Before any future consultation we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation. A total of 12 face-to-face events along the proposed route and 12 webinars were held during the consultation period. Recordings of the webinars were available on the Project website for people to view at any time. The face-to-face

The National Grid Project team contact information was published, including a freephone information line and an email address. Stakeholders were able to request a telephone call from a member of the Project team if they preferred to ask questions over the phone. This provided an alternative option for those who may have difficulty

answer questions either be telephone or email through the Project website.

events and webinars were at varying times through the day (including weekend and evening sessions) and events were held on four Saturdays over the consultation period. The Project team were and continue to be available to

Ref no.	Summary of matters raised	National Grid's response
		accessing other engagement channels or were less comfortable with online technology. The Project team are happy to discuss any special requirements for marginalised groups for consultation and implement these where practicable
3.10.26	Criticism of National Grid	All comments and feedback are welcomed and noted.
3.10.27	Make sure that you listen to feedback	In response to the 2022 non-statutory consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities, and technical stakeholders. All responses received have been read and considered by the Project team as we have developed our proposals. Information on how feedback has influenced the Project is available as part of our consultation within this report and other Project documents available on the Project website.
3.10.28	Criticism of CPRSS	National Grid notes the feedback and considers the Corridor and Preliminary Routeing and Siting Study (CPRSS) to have been an appropriate means for providing information on the work to date and basis for progressing the Project. We continue to review the approach to reporting to enhance the ease of information dissemination.
3.10.29	Criticism of Option Identification and Selection Process / Criticism of the 'Least Worst Regret' methodology used for Options Selection	We consider the process to have been an appropriate means for providing information on the work to date and basis for progressing the Project set within the duties and policy framework within which we must work. We will continue to review the Project, including back-checking. The strategic options that have been assessed are subject to review on an ongoing basis. In addition to the work already done, including assessment on Least Worst Regret basis which we believe to be a robust method (used by the ESO and accepted and adopted by Ofgem) we have conducted the back check and review in accordance with National Grid's document 'Our Approach to Consenting', which was published in April 2022. The Norwich to Tilbury Strategic Options Backcheck and Review (SOBR) appraises the ability of both onshore and offshore options to meet the system need while balancing cost, technical performance and environmental and socio-economic effects.
		The Norwich to Tilbury SOBR has been prepared by National Grid Electricity Transmission plc (NGET) as part of the ongoing strategic options assessment and decision-making process involved in promoting new transmission projects.
		The report explains that, without reinforcement, the transmission system in East Anglia will have insufficient capacity to accommodate contracted and predicted growth in generation connecting in the area.
		The Norwich to Tilbury SOBR concludes that we should continue take forward an onshore combination of options:
		1. EAN 4 – Overhead Line from Norwich Main to Bramford; and
		<ol> <li>EAS 2 – Overhead Line from Bramford via a new substation to Tilbury, with undergrounding through the Dedham Vale Area of Outstanding Natural Beauty (AONB).</li> </ol>
3.10.30	Request to generally hasten the process (e.g. including the consultation, construction, etc.)	National Grid has to follow a due process to achieve consent and that includes considering all the responses received from each stage of consultation.
		We take into consideration the feedback received, gather survey data to understand the environment along the proposed route and identify how we can reduce the impacts of our projects.

Ref no.	Summary of matters raised	National Grid's response
		This process is time consuming, but necessary. We believe we are working as efficiently as possible, whilst maintaining compliance with the overall Development Consent Order (DCO) application process. in order to help achieve the Government target of 50 GW of offshore wind by 2030.
3.10.31	Advertising is misleading due to there being no pylons in the pictures / Misleading images used on brochure	The 2022 non-statutory consultation materials, including the newsletter and Project Background Document, showed a mix of photographs including images of infrastructure such as pylons. At the public events a range of materials were available including photographs of infrastructure both in construction and operation. We note the comment and continue to bear this in mind as we develop materials for the next consultation.
3.10.32	Suggestion that the 'graduated swathe' terminology is exaggerates the impact that the Project will have / Suggest that the width of the 'graduated swathe' is reduced	We note this feedback and will reflect on whether there are better approaches to communicating clear information when there remains uncertainty on design detail.  National Grid has developed several new connection projects over the last 10 years. Following consultation, we have previously received comments from communities about route corridors and requests for greater clarity on where our proposals may be within the proposed route corridors. The graduated swathe approach is an attempt to show indicatively within the preferred corridor where our work to date indicates the connection may be made. The swathe is only indicative, and the proposals may change following feedback received, either within the indicative swathe or corridor or wider.
3.10.33	Criticism of the webinar (e.g. lack of preparation, poor level of knowledge, programme manager dismissive, lack of empathy, etc)	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any stage of consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.  All feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Section 3 of this report.
		The National Grid Project team has been and continues to be available to engage with both the public and stakeholders about the Project and all webinars were led by the Project team. The Project team members have developed the proposals and work on the Project every day and therefore are well placed to answer any questions that may arise. We do understand that people have strong opinions about our proposals, and it is of utmost importance to us that we build a strong relationship with the communities where we propose to develop new connections and understand their concerns/ thoughts on our proposals. We note the comment and will consider our approach.
3.10.34	Criticism of "piecemeal approach" i.e. splitting the Project into different areas	In presenting the proposals for the 2022 non-statutory consultation we felt it was important to not only have an overview of the proposals but also an approach that enabled people to look for information on the area where they lived in more detail. We presented information by Local Authority Area as we felt this would be something that people were most familiar with. Most people found this approach helpful. We note the comment and will continue to consider

### **Summary of matters** Ref no. **National Grid's response** raised the best approach for the next consultation to balance information about the Project overall but also to ensure people can understand the proposals in their local area. 3.10.35 No consideration given to the New connections for new offshore wind and nuclear power generation projects and for interconnectors into East Anglia are expected to continue in addition to the current contracted position. These are being constructed or alternative provision for Sizewell C or Bradwell - no plan to expected to be fed into existing substations at Necton, Norwich Main, Bramford, Friston and Sizewell. Although connection for nuclear generation does not currently form part of this Project, the Project will provide capacity for integrate or consider the future generation from various generators, including Sizewell C, to be transmitted across electrical boundaries within connection of Sizewell C or East Anglia and the wider transmission network. In relation to the Bradwell B project, this is in the feasibility stage. Bradwell There is an existing overhead line connection to the Bradwell B site. However, this has been operating at lower voltage (132 kV) and has not been used for a few years and is in generally poor condition. This would need to be rebuilt if connections were made at Bradwell and some sections may need to be re-routed. We would also still need to upgrade the existing network through Norfolk, Suffolk and Essex to transport the electricity due to come onto the network in the Norwich area. Several options were considered in developing the Project through Norfolk, Suffolk and Essex to transport the electricity due to come into the network in the Norwich and Tendring peninsula area, and information on these is available in the Corridor and Preliminary Routeing and Siting Study (CPRSS), Following the close of consultation and review of feedback we have backchecked our previous work and considered other potential routeing options in this area and felt they had different impacts and offered no benefit over the option we are taking forward. In particular, given that there is no certainty about the Bradwell B proposals we do not consider a connection via Bradwell to be preferred. There would need to be reinforcement from Norwich to Bramford and from there to Bradwell requiring connections to cross the Special Protection Area (SPA) designated Blackwater Estuary (3 km to 7 km tunnel likely to be required at much greater cost) as well as interact with other Special Area of Conservation (SAC) / SPA designations. The onward connection from Bradwell via Rayleigh to Tilbury is also constrained by urban development (including around South Woodham Ferrers) and further environmental designations. Taken together routeing of the Project via Bradwell requires a greater amount of new infrastructure and is therefore less economic and efficient and expected to be associated with greater environmental effects and on this basis is less preferred. Should Bradwell B progress at some point in the future then we will consider how to best meet the connection requirements and amend or add to the Project as appropriate. Criticism of the use of "Graduated National Grid has developed several new connection projects over the last 10 years. Following consultation, we have 3.10.36 Swathe" / Suggests it gives previously received comments from communities about route corridors and requests for greater clarity on where our National Grid the power to proposals may be within the proposed route corridors. The graduated swathe approach is an attempt to show relocate the Project as they see indicatively within the preferred corridor where our work to date indicates the connection may be made. The swathe is only indicative, and the proposals may change following feedback received, either within the indicative swathe or corridor or wider. We will show how feedback has influenced the design as the Project develops. We expect to submit our final designs to the Planning Inspectorate in 2025 who will then examine our proposals before making a recommendation to the Secretary of State (SoS) who will make the final decision on whether to give planning

consent for the proposals.

Ref no.	Summary of matters raised	National Grid's response
3.10.37	Consultation advertising was not adequate / More consultation advertising needed	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We incorporated these comments where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation. We note the comment and will keep this under review at the next stage of the Project.
3.10.38	Criticism of Consultation Team / Lack of knowledge	The National Grid Project team has been and continues to be available to engage with both the public and stakeholders about the Project. The Project team have developed the proposals and work on the Project every day and therefore are well placed to answer any questions that may arise.
3.10.39	Request for impact surveys (ground, ecological harm, aesthetics, health impacts, air, archaeology, heritage, economic, tourism, agricultural etc) / Criticism of process	There is staged approach to the process of collection of environmental data as any major project develops. National Grid is undertaking an Environmental Impact Assessment (EIA), which will consider the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. Further information on the potential environmental impacts and how we will mitigate these will be available within a Preliminary Environmental Information Report (PEIR) at statutory consultation stage The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022 and their Scoping Opinion received in December 2022. This provided technical statutory bodies the opportunity to comment on the scope of the proposed environmental survey work. Outputs of the environmental surveys will be detailed within the Environmental Statement (ES) and/ or standalone documents to support the application for Development Consent Order (DCO).
3.10.40	Consider Sea Link consultation - a new consultation must not take place before the Offshore Transmission Network Review (OTNR), the new (accompanying) Network Options Assessment (NOA) and the Sea Link consultation have taken place	The SeaLink consultation ran from the 24 October to 16 December 2022. Feedback from this consultation will be published in a feedback report. Information on this project is available on the project website <a href="https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink">https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink</a> The Government's Offshore Transmission Network Review (OTNR) looks into the way that the offshore transmission network is designed and delivered, consistent with the ambition to deliver net zero emissions by 2050. The Energy Minister announced the scope of a review into the existing offshore transmission regime to address the barriers it presents to further significant deployment of offshore wind, with a view to achieving net zero ambitions. The need for development of the Project pre-dates the commencement of the OTNR and therefore is not considered as part of this work, which focuses on Round 4 offshore wind.  The Network Options Assessment (NOA) 2021/2022 Refresh replaces the previously published NOA 2021/2022 and incorporates the recommended offshore network design set out in the Holistic Network Design (HND).  In order to meet the meet the Government's ambitious net zero targets and help to tackle energy security it is important that projects like this Project are progressed. National Grid will continue to backcheck and review its proposals for the Project in light of any new or updated information (such that might be contained in the HND and NOA publications for instance).

Ref no.	Summary of matters raised	National Grid's response
3.10.41	Consultation is not fit for purpose and should be rerun / A new consultation is required	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
		Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Section 3 of this report. Feedback on the way the consultation was run will also be considered for future consultations.
3.10.42	The Project is in breach of policy guidance (Electricity Act, EN-1 and EN-5)	National Grid considers that its proposals (subject to detailed siting of Cable Sealing End (CSE) compounds and other mitigation) are consistent with relevant policy framework within National Policy Statement (NPS) EN-1 and EN-5 and its duties under the Electricity Act 1989. Further details can be found in the Design Development Report, published as part of the 2023 non-statutory consultation.
3.10.43	Land surveys have been undertaken without the landowners knowledge	No land surveys will be undertaken without landowners' prior consent and/or knowledge. Before surveys are carried out from private land, National Grid will first try to obtain voluntary agreement from the relevant landowner. Where an agreement in relation to taking access to land for engineering, ecological and environmental surveys cannot be reached voluntarily, Section 172 of the Housing and Planning Act 2016 authorises National Grid as an acquiring authority, to take access to land for the purpose of surveys and/or valuation where there is a proposal to acquire an interest in or right over land. Where access is taken to land under the Act the relevant landowner and occupier will be given two weeks' notice.
3.10.44	Suggest that the consultation is extended to allow consultees to consider the Holistic Network Design (HND) document / Criticism that HND document has not been applied	In Summer 2022, National Grid ESO published the Holistic Network Design (HND) report.
		The HND provided a recommended offshore and onshore design for a 2030 electricity network to help facilitate Government's ambition for 50 GW of offshore wind by 2030.
		The HND enables investment and delivery of infrastructure, including locations in North and South Wales, the Scottish Islands and West Coast, and the East Coast of Scotland and Aberdeenshire, Lancashire, North-East England, and Yorkshire and the Humber, opening the door for more jobs and economic growth in these regions.
		The HND primarily includes Round 4 offshore wind projects. Further reinforcements in electricity transmission network infrastructure, beyond those set out in the HND, will be required to achieve net zero and therefore the timing of the consultation was deemed appropriate.
3.10.45	Gunning Principles have not been considered	This Project comprises a proposed overhead line connection over 2 km in length and therefore is currently classified as a Nationally Significant Infrastructure Project (NSIP). Therefore, the Project will require consent under the Planning Act 2008. The Planning Inspectorate publish guidance and advice on developing an NSIP project for developers to follow. We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:

Ref no.	Summary of matters raised	National Grid's response
		1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers  The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.  2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response  We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.
		3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
		4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account.  In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website.
3.10.46	Criticism of inconsistent mapping between online and printed versions (e.g. Great Horkesley; Aldham; swathe is located further south, closer to the A12 and further from the Area of Outstanding Natural Beauty (AONB) on the paper map compared to the interactive online map)	
3.10.47	I strongly oppose the consultation process as implemented by National Grid	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area.

# **Summary of matters** Ref no. **National Grid's response** raised We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. 3.10.48 Not a real consultation: no alternative options set out; lack of transparency as to costings and as to rejection of alternative routes; contravention of the Gunning Principles; breaches Green Claims Code consultation.

The consultation zone included the preferred corridor and an area of a minimum of 1 km each side of the preferred corridor (the PCZ). We sent the Project newsletter to approximately 50,000 addresses along the preferred corridor within an area of approximately 1 km either side. We also wrote briefing letters to Parish Councils both within the PCZ and in a wider area. We also published a series of newspaper advertisement setting out information on the

consultation. A total of 12 face-to-face events along the proposed route and 12 webinars were held during the consultation period. Recordings of the webinars were available on the Project website for people to view at any time. The Project team were and continue to be available to answer questions both during and after the consultation through the Project details on the website, by phone, freepost or email.

All feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report.

Before any future consultation, we will update our Consultation Strategy and engage with Local Authorities.

Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project and a draft of this was shared with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the

All feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report. This Project comprises a proposed overhead line connection over 2 km in length and therefore is currently classified as a Nationally Significant Infrastructure Project (NSIP). Therefore, the Project will require consent under the Planning Act 2008. The Planning Inspectorate publish guidance and advice on developing an NSIP project for developers to follow. We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:

- 1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers
- The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.
- 2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response

We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and

### **National Grid's response**

Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.

- 3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation

  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
- 4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account.

  In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website.

The acronym GREEN stands for Green Energy Enablement to underline the significant importance of the UK's net zero aspirations. National Grid has changed the name of the Project to Norwich to Tilbury to make it clear it's part of The Great Grid Upgrade.

All projects that are part of the Great Grid Upgrade will include specific locations in their names to make it easy for people to understand what and where we are proposing to build new infrastructure.

Although the name of the Project has changed the focus remains the same – to bring new sources of renewable energy to homes and businesses across East Anglia and the UK.

3.10.49 The National Grid Corridor and Preliminary Routeing and Siting Study (CPRSS) is premature given the imminent arrival of the Sea Link Consultation, a new National Policy Statement (NPS) and the Offshore Transmission Network Review (OTNR); there is no clear case for need made out, and overall the documents make

The SeaLink Project commenced consultation on the 24 October which ran until the 18 December 2022. Feedback from this consultation will be published in a feedback report. Information on this project is available from the project website <a href="https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink">https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink</a>

The Department for Business, Energy and Industrial Strategy (BEIS) confirmed that for any application accepted for examination by the Planning Inspectorate before any update to the existing National Policy Statements (NPSs), the extant 2011 suite of NPSs should have effect. The draft NPSs, which are themselves, subject to consultation feedback, will therefore have effect only on applications accepted for examination after their designation. The Government position set out in the 2011 EN-5 NPS (for Electricity Networks Infrastructure) is reinforced in the extant draft EN-5 that overhead lines should be the strong starting presumption for electricity networks development in general, this presumption is reversed only when proposed developments will cross part of a nationally designated landscape.

The Government's Offshore Transmission Network Review (OTNR) looks into the way that the offshore transmission network is designed and delivered, consistent with the ambition to deliver net zero emissions by 2050. The Energy

no sense

### **National Grid's response**

Minister announced the scope of a review into the existing offshore transmission regime to address the barriers it presents to further significant deployment of offshore wind, with a view to achieving net zero ambitions.

The need the Project was identified prior to the commencement of the OTNR. However, the need will be back checked as part of the evolution of the project. If there changes to the context of the project which eliminates the need for it, then the Project would not be promoted. The OTNR focuses on Round 4 offshore wind with this Project therefore being out of scope.

The Project is currently proposed to fulfil connection offers for two offshore windfarms, North Falls and Five Estuaries which will contribute to the Government's 50 GW offshore wind target and, more recently, from Tarchon Energy for an interconnector linking with Germany. The Project will also provide capacity for future generation from various generators to be transmitted across electrical boundaries within East Anglia and the wider transmission network. Details on the need case, strategic options, the currently preferred option and routeing and siting work are set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) and the Project Background Document published as part of the consultation exercise.

3.10.50 Limited publicity of consultation locally; many unaware; mailshot too narrow; misleading presentation (absence of pylons in photographs; claims to be green); insufficient time to consider and respond

Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any stage of consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.

The consultation materials, including the newsletter and Project Background Document, showed a mix of photographs including images of infrastructure such as pylons. At the public events a range of materials were available including photographs of infrastructure both in construction and operation.

We note the comment and continue to bear this mind as we develop materials for the next consultation.

The consultation zone included the preferred corridor and an area of a minimum of 1 km each side of the preferred corridor (the PCZ). We sent the project newsletter to approximately 50,000 addresses along the preferred corridor within an area of approximately 1 km either side. We also wrote briefing letters to Parish Councils both within the PCZ and in a wider area. We also published a series of newspaper advertisement setting out information on the consultation.

The consultation ran between 21 April 2022 until 16 June 2022. Although some feedback was received after the close of consultation, all responses received up to a month after the consultation closing (up to the 16 July 2022) have been considered in the reporting of feedback in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report. Comments received after the 16 July 2022 until the publication of this report have been summarised in Section 3.9 but were not considered as feedback to the non-statutory consultation. We will continue to take account of feedback as we develop our proposals during subsequent stages of consultation.

Ref no.	Summary of matters raised	National Grid's response
3.10.51	The Office of Gas and Electricity Markets (Ofgem)and independent review must be performed throughout the Project process.	National Grid is regulated by the Office of Gas and Electricity Markets (Ofgem). During the development of our proposals, we regularly report to Ofgem on the work we are doing, and they provide feedback.  Our proposals will be examined through the planning process. Our proposals are a National Significant Infrastructure Project and therefore require consent under the Planning Act 2008. We are proposing to submit our application for consent to the Planning Inspectorate in 2025 who will then examine our proposals before making a recommendation to the relevant Secretary of State (SoS), who will make the final decision as to whether the consent is granted.
3.10.52	Webinars should be held during the evenings, as it is difficult for people who work during the day to attend daytime webinars	During the 2022 non-statutory consultation period 12 face-to-face events and 12 webinars were held, several of which were undertaken in the early evening or were at the weekend. Recordings of the webinars were made available on the Project website for people to watch at any time. The Project communication channels including a telephone line and an email address remain available for people to ask questions about our proposals.
3.10.53	Designs need to be published prior to planning consent / Need for greater publicity of Project proposals / More channels of communication	National Grid held its first round of consultation from the 21 April 2022 to 16 June 2022. To support this consultation, we published a newsletter which was sent to approximately 50,000 addresses along the preferred corridor within an area of approximately 1 km either side, a Project Background Report which set out detail of our work and a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which set out details of the work to date. As well as information published on our website and social media, we also wrote briefing letters to Parish Councils both within the Primary Consultation Zone (PCZ) and in a wider area. We also published a series of newspaper advertisement setting out information on the consultation. At the Project wide consultation in 2023 we will publish further information including this report which sets out what feedback has been received and how we have been able to respond to it and the Design Development Report which sets out how we have developed the Project design following the first round of consultation. Prior to any future consultation, we will engage with Local Planning Authorities in advance and seek their comments on our approach to consultation and will take their comments into account in finalising our approach to consultation. An application for a Development Consent Order (DCO) will be required for this Project which will include designs and it is not anticipated that this would be submitted until 2025. During the planning examination there will be further opportunities for people to engage in the planning process and have their say on our proposals.
3.10.54	Request that representatives are more identifiable at meetings	Comment noted. All National Grid representatives at the public events wore name cards. We will consider how we can make this more visible in future public facing events.
3.10.55	Criticism that consultation was during Purdah for local elections	Prior to commencing the 2022 non-statutory consultation, we discussed our proposals with all Local Planning Authorities along the route and took their comments on board. The consultation commenced on the 21 April and ran for eight weeks, finishing on the 16 June which gave sufficient time for responses to be prepared and sent after the elections. We are happy to brief any new Councillors appointed in advance of the consultation close and we have published our Consultation Strategy on the Project website.
3.10.56	Request for more senior involvement / Request for more	The National Grid Project team has been and continues to be available to engage with both the public and stakeholders about the Project. The Project team members have developed the proposals and work on the Project every day and therefore are well placed to answer any questions that may arise.

Ref no.	Summary of matters raised	National Grid's response
	qualified personnel acting as public facing representatives	
3.10.57	Concern that the Project will contradict local council	In its present form, the Project is a Nationally Significant Infrastructure Project (NSIP) for which the primary policy basis for any decision are National Policy Statement (NPS) EN-1 and EN-5.
	development plans	The Development Consent Order (DCO) application will consider local planning policy through the Planning Statement and where relevant within the topic chapters in the Environmental Impact Assessment (EIA).
		Local Impact Reports submitted by each local authority will also consider local planning policy. Section 104 of the Planning Act 2008 sets out how the Secretary of State (SoS) must also have regard to any local impact reports submitted by a relevant local authority.
		Issues relating to local planning policy will be discussed with local planning authorities via ongoing engagement as the Project progresses and the Project will seek to minimise and mitigate any local impacts as far as practicable.
3.10.58	Concern about the Coronavirus Disease (COVID-19) safe environment in face-to-face consultations	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any stage of consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
		Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report.
		All National Grid representatives attending events tested for Coronavirus Disease (COVID-19) before each event and a sign explaining this was placed on the reception desk. If attendees expressed a preference to be seen outside the venue our team accommodated this where we could. We also ran a series of webinars where the Project team were and continue to be available to answer questions and people could contact the Project through the Project telephone number and email address, details of which were in the Project newsletter and on the Project website. We will continue to keep the Covid situation under review and ensure that we put in appropriate measures in line with Government guidance for any future consultation.
3.10.59	No reference to the national energy strategy, and how the strategy forms part of the Project	Government energy strategy drives the form of new generation taken forward by developers with the independent ESO confirming which connections are taken forward and where connections are to be made. Under its transmission licence, National Grid has a duty to respond to generation customers wanting to connect to the transmission network. Section 1.2 and 1.3 of the Corridor and Preliminary Routeing and Siting Study (CPRSS) set out these new connections and the need for reinforcement. We will continue to back check and review our proposals against the government energy strategy.

Ref no.	Summary of matters raised	National Grid's response
3.10.60	Make sure to use local venues for public consultation with appropriate facilities (e.g. disabled access, car parking)	We tried to find venues as close to the proposed graduated swathe as practicable to ensure that we reduced the distance people had to travel to the events. We note the comment and will bear this in mind as we look to identify venues for any future consultation. Larger venues with better facilities may involve a greater travelling distance.
3.10.61	Did not receive consultation letter.	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We incorporated these comments where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
		The consultation zone included the preferred corridor and an area of a minimum of 1 km each side of the preferred corridor (the PCZ). We sent the Project newsletter to approximately 50,000 to all addresses along the preferred corridor within an area of approximately 1 km either side. We also wrote briefing letters to Parish Councils both within the PCZ and across a wider area. We also published a series of newspaper advertisements setting out information.
3.10.62	Suggestion to make the consultation more accessible to those with no Information Technology (IT) access / limited literacy skills / accessible to all	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We incorporated these comments where practicable and information on this is available in this report. During the consultation we wrote to approximately 50,000 properties with details of our proposals and held 12 face-to-face events. We also made a freephone and freepost service available for people to contact us with any queries and to provide feedback.
		The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation. We note the comment and will keep this under review for the next stage of consultation.
		A total of 12 face-to-face events along the proposed route and 12 webinars were held during the consultation period. Recordings of the webinars were available on the Project website for people to view at any time. The face-to-face events and webinars were at varying times through the day (including weekend and evening sessions) and events were held on four Saturdays over the consultation period. The Project team were and continue to be available to answer questions either be telephone or email through the Project website.
		The National Grid Project team contact information was published, including a freephone information line and an email address. Stakeholders were able to request a telephone call from a member of the Project team if they preferred to ask questions over the phone. This provided an alternative option for those who may have difficulty accessing other engagement channels or were less comfortable with online technology. The Project team are happy to discuss any special requirements for marginalised groups for consultation and implement these where practicable
3.10.63	Consultation events were too informal / too busy	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area.

Ref no.	Summary of matters raised	National Grid's response
		We incorporated these comments where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future public consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
		Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report. 12 face-to-face events were held at regular distances along the route. From experience we find an informal approach best works for people who attend. It allows them to take their time in viewing the information available and when they are ready to spend some time talking to a member of the project team. We recognise that some of the events were very well attended, although our team worked to ensure that the capacity of venues was not exceeded at any time. We also held 12 webinars to provide information to those who felt more comfortable with online meetings. We note the comment and will bear this in mind in developing our next consultation and planning events.
3.10.64	Recordings of the webinars should be made available to the public	Recordings of the webinars were available during the 2022 non-statutory consultation period. In developing our proposals for future consultation we will consider how to record webinars and make these available on the Project website.
3.10.65	Suggest that consultants make in person site visits, instead of using computers / virtual tools	National Grid's appointed consultants have been and will be utilising a range of desk based and site visits to gather baseline information which will be used to inform the environmental assessment of the Project.
		The desk-based data collection relates to aerial photography and freely available mapping and environmental datasets held by statutory and non-statutory organisations such as Natural England, local authorities and local wildlife groups.
		The onsite surveys will include specific ecological species and habitat surveys, such as bats and woodland, through to engineering surveys that identify localised ground condition suitability.
		All sources of information used, and the surveys undertaken to inform the Environmental Impact Assessment (EIA) process will be detailed within the Environmental Statement (ES) for the Project.
3.10.66	National Grid profits should not come before the countryside /National Grid should present profitability of each option/ National Grid's profits should be used more to help pass on savings to the consumer	National Grid is funded by a price control mechanism which is agreed with and set by the Office of Gas and Electricity Markets (Ofgem). National Grid pays up front the costs to build a new power transmission line. The cost is then gradually passed to customers through their electricity bills over circa 40 years. The funding for these up-front costs comes from National Grid's shareholders and the institutions that lend us money. Across all our investments in our vital infrastructure, this amounts to many billions of pounds. They invest in us because they expect that we will make a sufficient profit to provide an appropriate return on their investment and eventually pay them back. This brings a major benefit to electricity bill payers as it allows the recovery of the cost of our investment to be spread out over many years, rather than having a spike in electricity bills when we build a large new transmission connection. National Grid is regulated under the Electricity Act and under Schedule 9 of the Act we are required to consider the environment and amenity and ensure that our proposals are economic and efficient. During our development of the Project and after construction Ofgem monitors how we have spent money to ensure that we provide best value for the bill payer.

Ref no.	Summary of matters raised	National Grid's response
3.10.67	Supports the issues of the Project that have been raised by Essex Suffolk Norfolk Pylons action group (Pylons East Anglia Ltd)	This report includes responses to the issues raised by Essex, Suffolk, Norfolk Pylons interest group (Pylons East Anglia Ltd).
3.10.68	Locations for Cable Sealing End (CSE) Compound site must been carefully chosen and subject to another consultation	National Grid acknowledges the requirement to carefully chose the location of Cable Sealing End (CSE) compounds to respond to constraints, environmental features and the potential for effects, and will consult on its proposals and consider any feedback provided as the Project Develops.
3.10.69	The terms of reference within the Electricity Act need updating to look at a long term proposal as they are outdated	National Grid owns, builds and maintains the high-voltage electricity transmission network in England and Wales. In England and Wales, the high voltage network operates primarily at 400,000 volts (400 kV) and 275,000 volts (275 kV).
		When developing transmission network proposals, we have a statutory duty, under the Electricity Act 1989, to act in an efficient, coordinated and economical way, and have regard to the desirability of preserving amenity. The terms of reference under the Electricity Act are developed and amended where required by the Government, National Grid has a duty to comply with the requirements of the Act.
		When considering options to deliver additional electrical network capability, we must balance the need to develop the network in a way that is efficient, coordinated and economical, and minimises impacts on people and places. In the UK, energy networks are regulated by the Office of Gas and Electricity Markets (Ofgem). Ofgem operate under the direction and governance of the Gas and Electricity Markets Authority (GEMA). It has established price control mechanisms to ensure that the investment required to maintain a reliable and secure network is delivered at a fair price for consumers.
		Our shares are listed on the London Stock Exchange and as such, we are also regulated by the Financial Services Authority in the UK.
		The National Policy Statement (NPS) for energy set out the Government's policy for the delivery of energy infrastructure and provide the legal framework for planning decisions. They were first published in 2011. They provide guidance for the development of energy projects and provides the basis for examining applications for projects by the Infrastructure Planning Commission. They also include any other policies or circumstances that ministers consider should be taken into account in decisions on infrastructure development. They provide the framework within which Examining Authorities make their recommendations to the Secretary of State (SoS).
		To find out more, please see the Planning Inspectorate's website here: <a href="https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/national-policy-statements/">https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/national-policy-statements/</a>
		The NPS which covers building electricity networks infrastructure (EN-5) states that the Government expects overhead lines will often be appropriate. It does, however, recognise that there will be cases where this is not so, for example, at particularly sensitive locations, where potential adverse landscape and visual impacts of an overhead line may make it inconsistent with our duties and relevant planning policy, taking account of the specific local environment and context. The NPS are in the process of being updated by Government and are subject to consultation.

#### **Summary of matters** Ref no. **National Grid's response** raised 3.10.70 Consultation breaches consumer Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set protection law and Competition out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local and Markets Authority should Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. investigate The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation. We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows: 1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive. 2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format. 3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders. 4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account. In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website. Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report. We have received

over 3,000 responses to the consultation, and these have been reviewed and have been used to inform development

of our proposals.

Ref no.	Summary of matters raised	National Grid's response
3.10.71	Consult with schools and universities – they will provide new ways of thinking on how the Project should be designed going forward	National Grid welcome the feedback, we will encourage pupils and students from local schools and universities to participate in future consultations.
3.10.72	A UK wide energy strategy fit for the future should be approved before the Project goes ahead which considers generation and	The National Policy Statement (NPS) on energy (EN-1 and EN-5) set out the Government's policy for the delivery of energy infrastructure and provide the legal framework for planning decisions. They were first published in 2011. They provide guidance for the development of energy projects and provides the basis for examining applications for projects by the Infrastructure Planning Commission.
	supply	They also include any other policies or circumstances that ministers consider should be taken into account in decisions on infrastructure development.
		They provide the framework within which Examining Authorities make their recommendations to the Secretary of State (SoS).
		To find out more, please see the Planning Inspectorate's website here: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/national-policy-statements/
		The NPS are in the process of being updated by Government and are subject to consultation.
3.10.73	Consultation document did not give the website address for the online consultation	The Project website address was available on all consultation materials. Including the Project newsletter which was sent to approximately 50,000 addresses along the preferred corridor within an area of approximately 1 km either side. In additional, information was given for the Project telephone line and email address to ensure that people could contact the Project team directly.
3.10.74	Need to ensure that Local Authorities and Parish Councils are consulted on the Project	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available in Appendix B. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
		Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report. We continue to meet regularly with Local Authority Officers to take their advice and feedback we develop our proposals. We will continue to inform and brief Parish Councils on our Project and welcome their feedback.
3.10.75	Does not taken into account or mention the previous consultation for Bramford to Twinstead - they should be linked as one consultation	Information on the East Anglia Green Energy Enablement Project was included in the Bramford to Twinstead reinforcement statutory consultation in 2022 and the East Anglia Green Project will consider cumulative impacts in its Environmental Statement (ES) which will support its application to the Planning Inspectorate for a Development Consent Order (DCO) in 2023.

Ref no.	Summary of matters raised	National Grid's response
		The Project considered the Bramford to Twinstead reinforcement as part of its work in developing proposals and will continue to do so as the Project develops.
3.10.76		National Grid will be developing its proposals taking into account the potential for effects on aviation interests and will consult with potentially affected airfield operators and relevant regulators as the Project develops.
3.10.77	National Grid investors strategies are supposed to be protective of human rights and the environment	National Grid develops its projects in accordance with its statutory duties under the Electricity Act 1989 to be economic, efficient and have regard to the environment and amenity and national planning policy. Consideration has been given in developing our proposals to potential for effects on the environment and amenity including people and communities. Information on how we have developed our proposals and what we have taken into account is available in the Project documents which are available on the Project website.
3.10.78	Suggestion that National Grid meet with local area experts to ascertain least invasive route	In addition to engagement carried out to date, to support the Project the National Grid team will carry out a series of workshops and meetings with representatives of stakeholders to learn from their knowledge of the local area and understand their views on their proposals. These stakeholders include the Local Authorities and technical stakeholders including Natural England, the Highways Agency, local Wildlife Trusts and Historic England. Where these bodies provide a response to the consultation, we will record this in this report and provide answers to any questions they have asked.
3.10.79	Supports the response to Government that had been compiled by Essex County, Suffolk County, Norfolk County and Colchester Borough Councils (in objecting to the Project)	National Grid note the respondent's feedback.
3.10.80	Criticism around lack of clarity on whether ET5 is a 'coastal' or'inland' route and criticism of these definitions	The Corridor and Preliminary Routeing and Siting Study (CPRSS) sets out the basis for selecting the most inland corridor. All other corridor combinations where one or other element passes nearer to the coast have greater levels of effect on qualifying features associated with European designated sites. How they are characterised (as inland or coastal) does not change the basis for them being less preferred and we will endeavour to provide greater clarity on these terms moving forwards.
3.10.81	Criticism that consultation does not allow for the additional Jubilee Holiday period	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. our next public consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation. The consultation ran between 21 April 2022 until 16 June 2022. Although some feedback was received after the close of consultation, all responses received up to a month after the consultation closing (up to the 16 July 2022)

Ref no.	Summary of matters raised	National Grid's response
		have been considered in the reporting of feedback in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report. Comments received after the 16 July 2022 until the publication of this report have been summarised in Section 3.9 but were not considered as feedback to the 2022 non-statutory consultation. We will continue to take account of feedback as we develop our proposals during subsequent stages of consultation.
3.10.82	Criticism of the Future Energy Scenarios (FES) applied	The Future Energy Scenarios (FES) document is produced by National Grid Electricity System Operator (ESO). FES represent a range of different, credible ways to decarbonise our energy system as we strive towards the 2050 target. FES has an important role to play in stimulating debate and helping to shape the energy system of the future as we move towards Net Zero and considers investment required to deliver these Government targets. Further information is available direct from National Grid ESO <a href="https://www.nationalgrideso.com/future-energy/future-energy-scenarios.">https://www.nationalgrideso.com/future-energy/future-energy-scenarios.</a>
		The strategic options that have been assessed are subject to review on an ongoing basis, as part of that review, in addition to the work already done, we have applied a different assessment approach. Both the original assessment and its review have arrived at the same conclusion. We will continue to back-check and review the strategic optioneering work as and when appropriate throughout the development of the Project.
3.10.83	Suggests that National Grid applies the process adopted by the Civil Aviation Authority to the project	National Grid follows a tried and tested options appraisal process that facilitates the development of projects in accordance with the requirements of our duties and the relevant policy framework and meets the requirements of the planning process through which Development Consent Orders (DCOs) are granted. We do not consider that the adoption of an alternative approach developed by the Civil Aviation Authority (CAA) for different types of development within a different context of duties and policy framework would be advantageous to the Project.
3.10.84	Absence of corridor section costings and effect of different constraints on costs	National Grid provided cost comparisons for complete corridors connecting different parts of the Project. For example from the East Anglia Connection Node (EACN) substation to Tilbury we identified five corridors in the Corridor and Preliminary Routeing and Siting Study (CPRSS) as ET1 to ET5. In some cases we developed the full corridors from partial corridor sections. These partial corridors are not complete corridors but provide alternative means of passing around a constraint or for connecting between partial corridor sections. The potential effects arising from corridor sections were used to inform the development of whole corridors for which costs were established to inform decision-making. As set out in the CPRSS in paragraph 4.5.1 the costs for these whole corridors that were presented use consistent assumptions based on a route produced from a desktop exercise that is representative of the likely constraints to routeing and the costs of including normal industry 'best practice' mitigation are inherent in the cost base.
3.10.85	Preference for planned offshore grid to route offshore generated electricity to where it is needed in the most efficient and green way, with an overall saving of £6bn according to National Grid and	Ultimately power is used across the whole of the country, and we expect demand nationwide will need to rise to accommodate decarbonisation of energy with Net Zero. With big demand centres across the M5 corridor, midlands and north-east only some conditions are satisfied by moving energy to specific locations. The National Electricity Transmission System (NETS) works by being highly interconnected ensuring that energy flows under a multitude of faults and situations to where it is consumed. Therefore, there is always a need to get energy generated offshore to demand nationwide and requires onshore solutions to do this.

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	considerable lack of human and environmental cost of 180 km of pylons across countryside, blighting the Area of Outstanding Natural Beauty (AONB), rural communities and people's homes	The £6bn overall saving figure comes from an Electricity System Operator (ESO) report from November 2020 examining high-level options to minimise new connections for offshore generation onto the GB network. That report does not identify specific projects, and specifically states it is based on hypothetical scenarios. This work ceased after it was overtaken by BEIS' Offshore Transmission Network Review.  We have since published costs for on and offshore options of the Project on our website in October 2022:  AC onshore option (Norwich/Bramford/Tilbury Substations) at 6.9 GW – £1,136.00 m; and  HVDC offshore (Norwich/Bramford/Tilbury Substations) at 6 GW – £5,099.83 m.
3.10.86	Should take into account long- term impact, future-planning and wider costs; should make sure that financial costings are appropriate and up to date (including using latest technology for undersea cabling) and take into account mitigation along onshore cable route	National Grid set out capital and lifetime cost summaries for Project options in their response to the Offshore Electricity Grid Task Force (OffSET) group (available on the Project website). The lifetime cost for the onshore option between Norwich Substation, Bramford Substation and Tilbury Substation were at the time identified as £1,136 m compared to the offshore High Voltage Direct Current (HVDC) option between Norwich Substation, Bramford Substation and Tilbury Substation of £5,099.83 m. This cost differential was considered by National Grid to be substantial. In response to a request by Essex County Council on behalf of all host local planning authorities, National Grid has agreed to fund an independent review of cost options. As part of the backcheck and review process, costs are reviewed and updated in accordance with the latest costing information. These may therefore, in some cases, supercede previously published costings.
		An offshore option would also still require development of onshore infrastructure between the coast and Norwich, Bramford and Tilbury. Offshore options also have the potential to impact the environment and would need to be constructed through internationally designated sites.
		The preferred option also provides reinforcement considered critical for future planned energy scenarios. National Grid will continue to develop the preferred option with stakeholders, using the principles of the Holford Rules, to find a solution that best balances environment, socio-economics and cost. We will be undertaking an Environmental Impact Assessment (EIA), which is a formal process that considers the likely significant effects on sensitive environmental receptors that may be impacted by the Project. Should significant likely effects be identified.
3.10.87	According to National Grid's Electricity Ten Year Statement (ETYS) the whole thing isn't required between Bramford and Tilbury in the first place	National Grid's Electricity System Operator (ESO) produces a suite of documents on the future of energy for Great Britain. The Future Energy Scenarios (FES) is the first step in assessing network requirements across the GB NETS and provides a range of credible pathways for the future of energy up to 2050. The second step is the Electricity Ten Year Statement (ETYS) which looks at future transmission requirements across the National Electricity Transmission System (NETS), providing NETS reinforcement options. The ETYS identified that reinforcement was required across the power boundaries with the East Anglia region. The third step is the Network Options Assessment (NOA) which identifies the recommended options to meet the reinforcement requirements. The section of new 400 kV double circuit overhead line in south East Anglia (ATNC) (including between Bramford and Tilbury substations) was identified in the NOA as a 'Critical' option to 'Proceed'.
3.10.88	Whole route contravenes Holford Rule 1 by traversing and then abutting the Dedham Vale Area	Holford Rule 1 does not preclude routeing through Areas of Outstanding Natural Beauty (AONBs) but states that such areas should be avoided if possible or be crossed by the use of underground cable. The Corridor and Preliminary Routeing and Siting Study (CPRSS) set out why alternatives to route around the AONB were considered

Ref no.	Summary of matters raised	National Grid's response
	of Outstanding Natural Beauty (AONB)	less preferred (noting for example that they are considerably longer leading to increased environmental effects at additional cost and are also noted to cross the Stour Valley Project Area where there may also be a case for the use of underground cable) National Grid therefore considers that its proposals (subject to detailed siting of Cable Sealing End (CSE) Compounds and other mitigation) are consistent with relevant policy framework including the guidance within the Holford Rules.
3.10.89	This consultation is so flawed that it is invalid and cannot be relied upon either to gauge public opinion or as the basis for any later Statutory Consultation.	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
		We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:
		1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers  The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.
		2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response  We have published a considerable amount of information to support the consultation, and this is all available on our
		website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.
		3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
		4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account.  In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our

#### **Summary of matters** Ref no. raised

### **National Grid's response**

proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website.

Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report. We have received over 3,000 responses to the consultation, and these have been reviewed and have been used to inform development of our proposals.

3.10.90

A new consultation is

accordance with the Gunning Principles, Treasury Green Book and National Policy Statement (NPS) EN-1. The new consultation MUST present proper options including that of an offshore ring-main, MUST allow sufficient time for reasoned consideration, MUST present me with the facts and costings necessary to consider this in a proper manner.

Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set ESSENTIAL, this MUST be run in out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.

> Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report. We have published the work done to date to support the consultation and this sets out details of the evaluation we have undertaken to identify options and chose our preferred route and site. This approach is compliant with our statutory duties to be economic and efficient and to have regard to amenity and aligns with national policy and guidance which we are required to consider as we develop our proposals. It would be disingenuous of us to consult an option, such as an offshore option, which we would not choose to take forward as it did not best meet the need case or best comply with our statutory obligations and policy.

This Project as currently proposed, would comprise an overhead line connection over 2 km in length and therefore would be classified as a Nationally Significant Infrastructure Project (NSIP). Therefore, the Project would require consent under the Planning Act 2008. The Planning Inspectorate publish guidance and advice on developing an NSIP project for developers to follow. We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:

1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers

The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.

2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response

We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.

### **National Grid's response**

- 3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation

  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
- 4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account.

In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website.

In response to a request by Essex County Council on behalf of all host local planning authorities, National Grid has agreed to fund an independent review of cost options.

3.10.91

Proper consultation is required in law. Gunning Principles have formed a strong legal foundation from which the legitimacy of a consultation is assessed, and they are frequently referred to as a legal basis for judicial review decisions on whether a consultation has been properly carried out. Gunning Principles have been extensively tested, including in the Supreme Court

Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We incorporated these comments where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.

Feedback has been reviewed by the Project team and responses have been published in this report. Where feedback has influenced the design of the Project information this information is summarised in Chapter 3 of this report.

This Project comprises a proposed overhead line connection over 2 km in length and therefore is currently classified as a Nationally Significant Infrastructure Project (NSIP). Therefore, the Project will require consent under the Planning Act 2008. The Planning Inspectorate publish guidance and advice on developing an NSIP project for developers to follow and the Department for Communities and Local Government (DCLG) also provide guidance on the pre-application process for NSIPs.

We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:

- 1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers
- The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.
- 2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees

### **National Grid's response**

to provide an informed response

We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.

- 3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation

  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
- 4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account.

  In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website.

3.10.92 The East Anglia GREEN
consultation fails against all four
Gunning Principles and therefore
the consultation is not proper.
National Grid's East Anglia
GREEN consultation also fails to
fulfil The Planning Act 2008
Guidance on Pre-application
Consultation, not being seen as
legitimate by the communities
and stakeholders involved

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Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report.

This Project comprises a proposed overhead line connection over 2 km in length and therefore is currently classified as a Nationally Significant Infrastructure Project (NSIP). Therefore, the Project will require consent under the Planning Act 2008. The Planning Inspectorate publish guidance and advice on developing an NSIP project for developers to follow.

We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:

1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers

The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.

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		2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response  We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.  3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.  4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account.  In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project website.
3.10.93	We refer you to the full consultation submission of the Essex Suffolk Norfolk Pylons action group (Pylons East Anglia Ltd) which I support in full and which sets out the issues with the East Anglia GREEN consultation in full.	This report includes responses to the issues raised by Essex, Suffolk, Norfolk Pylons actions group (Pylons East Anglia Ltd).
3.10.94	It is common ground that, whether or not consultation of interested parties and the public is a legal requirement, if it is embarked upon it must be carried out properly.	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update out Consultation Strategy and engage with Local Authorities.
	R v North and East Devon Health Authority ex parte Coughlan, Paragraph 108	We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:  1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers

### **National Grid's response**

The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.

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We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.

- 3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation

  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
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  In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website.

3.10.95 There is insufficient evidence to make an informed response. The consultation is also premature, given the offshore transmission review due out imminently, and the forthcoming consultation for Sea Link. We share concerns that the consultation makes misleading environmental claims.

The SeaLink commenced consultation on the 24 October which ran until the 18 December 2022. Feedback from this consultation will be published in a feedback report. Information on this project is available from the project website <a href="https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink">https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink</a> Government has stated:

'The Government's Offshore Transmission Network Review (OTNR) looks into the way that the offshore transmission network is designed and delivered, consistent with the ambition to deliver net zero emissions by 2050. The Energy Minister announced the scope of a review into the existing offshore transmission regime to address the barriers it presents to further significant deployment of offshore wind, with a view to achieving net zero ambitions.

The current approach to designing and building offshore transmission was developed when offshore wind was a nascent sector and industry expectations were as low as 10 GW by 2030. It was designed to de-risk the delivery of offshore wind by leaving the project developers in control of building the associated transmission assets to bring the energy onshore. This approach has contributed to the maturing of the sector, the significant reduction in costs of offshore wind energy and has helped position the UK at the forefront of global offshore wind deployment.

However, in the context of increasingly ambitious targets for offshore wind, constructing individual point to point connections for each offshore wind farm may not provide the most efficient approach and could become a major

Ref no.	Summary of matters raised	National Grid's response
		barrier to delivery given the considerable environmental and local impacts, particularly from the associated onshore infrastructure required to connect to the national transmission network. Offshore wind is expected to play an important role in delivering net-zero emissions by 2050, and it is right that the framework for delivering offshore transmission connections is reviewed in the context of our increased ambition'.
		An update was published in July 2022. The need for development of The East Anglia Green Energy Enablement project predates the commencement of the OTNR and therefore is not considered as part of this work which focuses on Round 4 offshore wind.
		Therefore, for the reasons stated above, the timing of the consultation was deemed appropriate.
		The Project is required to connect important new renewable generation on the East Coast to the national transmission network so that it can be taken to the homes and businesses where it will be used. This new generation is an important part of the Government's targets to move to a low carbon future for the country and is required to achieve the 50 GW offshore wind by 2030 goals. The acronym GREEN stands for Green Energy Enablement to underline the significant importance of the UK's net zero aspirations. National Grid has changed the name of the Project to Norwich to Tilbury to make it clear it's part of The Great Grid Upgrade.
		All projects that are part of the Great Grid Upgrade will include specific locations in their names to make it easy for people to understand what and where we are proposing to build new infrastructure.
		Although the name of the Project has changed the focus remains the same – to bring new sources of renewable energy to homes and businesses across East Anglia and the UK.
		We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.
		The consultation materials, including the newsletter and Project Background Document, showed a mix of photographs including images of infrastructure such as pylons. At the public events a range of materials were available including photographs of infrastructure both in construction and operation.
		We note the comment and continue to bear this mind as we develop materials for the next consultation.
3.10.96	Treasury Green Book guidelines must be applied	National Grid's Carbon Management processes consider our impacts at many stages and are aligned to best practices. We also apply carbon pricing at an early stage of development which draws on social costs of carbon values - aligned with that of the Treasury Green Book values.
3.10.97	The following options must be presented for consultation: - Strategic offshore grid - Options which follow existing power lines - Options which follow other existing infrastructure (rail/A12)	National Grid has presented its consideration of offshore proposals within the Corridor and Preliminary Routeing and Siting Study (CPRSS) and further explained this in its response to the Offshore Electricity Grid Task Force (OffSET) group of Members of Parliament (MPs). It remains of the view that an onshore solution is the appropriate approach. In developing our onshore proposals, we have considered the potential to parallel existing overhead lines and transport infrastructure and consider them to be less preferred. Numerous properties (residential and commercial), constraints and environmental features are present in close proximity and would be more adversely affected by close paralleling. Alternatively costs to avoid such effects would be much greater with additional limitations on the ability to

### **National Grid's response**

- Options which include undergrounding and use of T-pylons.

achieve the necessary outages (to undertake the works safely) within the time available. Mitigation through the use of reinforcement planting, alternative pylon designs or use of underground cable are considered where the effects of lattice pylons are not considered compatible with the relevant policy framework and effects arising. This consideration has seen the adoption of underground cable technology beyond the extent of the Area of Outstanding Natural Beauty (AONB).

For the purposes of this initial assessment, the preferred draft alignment reflects the use of standard lattice pylons and where we might locate pylons, underground cables, Cable Sealing End (CSE) compounds (where underground cables join with overhead lines) and the proposed East Anglia Connection Node (EACN) substation. The use of other pylon designs is still under consideration, if an overhead line route is progressed. We will be carrying out further assessments on pylon design. Our assessments will include visual impacts and mitigation, environmental and ecological considerations, construction, and lifetime maintenance effects.

Different designs in use in the UK include:

- standard lattice;
- lower height lattice; and
- T-pylons.

We will present the findings from our assessments at our statutory consultation.

### Design Change

3.10.98 Suggest that use of 'Superconducting cable' technology should be considered

National Grid is monitoring how this technology develops in the future, for the moment it is not a deployable technology that could be considered for any current projects. Superconductor technology remains in its infancy and has only been trialled in a limited number of circumstances globally. It is not at a level where it can provide the capacity, voltage level or distance required for this Project.

3.10.99 Suggestion that the Project should run adjacent to existing transport infrastructure

Whilst there could be potential benefits from infrastructure being concentrated geographically, i.e., by routeing the Project in close proximity to existing road and rail infrastructure, we do not consider these benefits arise for the whole route. Rail lines or roads potentially align (at least in part) with the general routeing of the Project. However, there are constraints and features that mean that we do not consider close paralleling will reduce environmental effects or improve compliance with the Holford Rules or be more consistent with the policy requirement to be economic and efficient.

A number of residential properties, as well as hamlets, villages and towns, are present in close proximity to the existing transport infrastructure necessitating multiple diversions of an overhead line. There are also some locations where the combination of existing physical and environmental features (railway and road infrastructure, commercial and residential property, woodlands and orchards) present very substantial challenges to routeing and siting. As a result, whilst close paralleling of transport infrastructure may appear beneficial in some short sections, overall, the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new route alignment.

Ref no.	Summary of matters raised	National Grid's response
3.10.100	Suggest energy storage solution	The capacity of the existing transmission infrastructure in East Anglia is not sufficient to accommodate the Government plans for an increase in energy generation from offshore wind from the current 8.5 GW to 50 GW by 2030. This is required to meet the expected large increase in future demand (potentially doubling by 2050 according to the Government's Energy White Paper (EWP). The use of energy storage solutions to manage variation in generation and demand will increase as Great Britain becomes more reliable on renewables in the future. Energy storage will replace the flexibility from fossil fuel generation, help maintain energy security and provide services to the grid to integrate and maximize the use of 50 GW of offshore wind generation. In their 'Smart Systems and Flexibility Plan 2021', the Department for Business, Energy and Industrial Strategy (BEIS) and Office of Gas and Electricity Markets (Ofgem) propose that by 2030 and beyond energy storage solutions will be deployed in 'optimal locations and at all scales'. Proposed energy storage solutions do not currently form part of these proposals.
3.10.101	Suggest underground cables should be used in rural areas	National Policy Statement (NPS) EN-5 makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.  National Grid does not consider that a rural nature of itself is sufficient to justify the higher cost of underground cables to bill-paying consumers, and the environmental implications of installing and maintaining them, in the context of national policy or our statutory duties.
3.10.102	The Project should run adjacent to A12	Whilst appreciating the potential benefits of infrastructure being concentrated geographically, i.e. by routeing the Project in close proximity to the A12, we do not consider these benefits arise in this section. Whilst the A12 aligns (at least in part) with the general routeing of the Project required, there are constraints and features that mean that we do not consider close paralleling will reduce environmental effects or improve compliance with the Holford Rules or be more consistent with the policy to be economic and efficient. A number of residential properties (isolated as well as hamlets, villages and towns are present in close proximity to the existing transport infrastructure which, along with diversions to avoid other features (such as woodland) would necessitate multiple diversions of an overhead line. As a result, whilst close paralleling of the A12 may appear beneficial in some short sections, overall the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new route alignment separated from existing transport infrastructure.
3.10.103	Substations should be built underground	Building substations underground would increase cost significantly whilst also hindering operation and maintenance flexibility of High Voltage (HV) transmission equipment which requires significant clearances to manage.
3.10.104	Suggest greater use of underground cables (no location given)	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need under The Electricity Act 1989 to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. The National Policy Statement (NPS) EN-5 makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it

Ref no.	Summary of matters raised	National Grid's response
		recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.
		Whilst we are not proposing to underground the whole route, our proposals include underground cable within the Area of Outstanding Natural Beauty (AONB) in accordance with NPS EN-5. We have also identified the need to extend the underground cable beyond the AONB boundary for a total of approximately 14 km because of potential effects as well as an approximately 5.3 km section near Great Horkesley. Additionally underground cable is also proposed at Fairstead for a 400 kV overhead line crossing and for approximately 4.6 km for the crossing of the Lower Thames Crossing (LTC) proposals and line entry to Tilbury Substation.
3.10.105	Suggest underground cables should be used on the entire proposed route / the whole of the Project should be undergrounded	National Grid is required under the Electricity Act 1989, to find a balance, developing proposals that are efficient, coordinated and economical, and which have regard to people and places. Each network upgrade must be considered on its individual merits, as required in planning law.
		The National Policy Statement (NPS) which covers building electricity networks infrastructure (EN-5) states that the Government expects overhead lines will often be appropriate. It does, however, recognise that there will be cases where this is not so, for example, at particularly sensitive locations, where potential adverse landscape and visual impacts of an overhead line may make it inconsistent with our duties and relevant planning policy, taking account of the specific local environment and context.
		National Grid's duties and obligations include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality.
		Whilst National Grid is not proposing to underground the whole route, our proposals include underground cable within the Dedham Vale Area of Outstanding Natural Beauty (AONB) in accordance with NPS EN-5. We are also proposing the use of underground cables extending beyond the AONB boundary and in a further location near Great Horkesley considered to meet he particularly sensitive threshold. We also propose the use of underground cable for crossing 400 kV overhead line infrastructure and for the line entry at Tilbury Substation.
3.10.106	Suggest routeing the cables offshore out at sea / Should consider routeing the power cables undersea	Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Study (CPRSS) examines several strategic options that were considered for the Project East Anglia GREEN that might achieve the required reinforcement including offshore and subsea options. These options were not taken forward as they did not fully address technical or physical/geographical constraints or enable the network to operate to the required standards.
		An offshore subsea connection would have a third of the capacity of the proposed overhead line connection and therefore to transfer the anticipated levels of power generation, three subsea connections would be required including associated infrastructure such as convertor stations. This would make the connection significantly costlier to energy bill payers.
		In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich. Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area.

Ref no.	Summary of matters raised	National Grid's response
3.10.107	Existing overhead lines in this section should be removed / undergrounded	The existing electricity transmission network provides power, via the local distribution network, into the local area where it is used in homes and businesses. The need case and funding for the Project is to deliver the new network reinforcement needed, rather than to remove existing overhead lines by undergrounding them. Unless required for mitigation, undergrounding existing overhead lines on the transmission network would not be in accordance with National Policy Statement (NPS) EN-5 and would result in substantial cost to bill payers. There may also be significant environmental impacts due to the removal works on sensitive ecological and archaeological receptors as well as constraints from either existing built form of unsuitable ground conditions.
3.10.108	The installation of underground cables should be carried out via Horizontal Directional Drilling (HDD) rather than open trenches (cut and cover) / Oppose cut and cover construction	Horizontal Directional Drilling (HDD) is used as an alternative to a trenched (cut and cover) approach to install underground cables where a trenched solution may not be assessed as being the most appropriate installation methodology, The benefits of using directional drilling need to be carefully considered to ensure ground conditions are suitable and that the balance of potential environmental effects is achieved. National Grid will assess ground conditions and any potential effects resulting from drilling or trenching, before deciding on where HDD should be used.
3.10.109	The Project should use T-pylon / modern pylon technology	For the purposes of this initial assessment, the preferred draft alignment reflects the use of standard lattice pylons and where we might locate pylons, underground cables, Cable Sealing End (CSE) compounds (where underground cables join with overhead lines) and the proposed East Anglia Connection Node (EACN) substation. The use of other pylon designs is still under consideration, if an overhead line route is progressed. We will be carrying out further assessments on pylon design. Our assessments will include visual impacts and mitigation, environmental and ecological considerations, construction, and lifetime maintenance effects.  Different designs in use in the UK include:  • standard lattice;
		lower height lattice; and
		T-pylons.
		We will present the findings from our assessments at our statutory consultation.
3.10.110	Suggest that the existing overhead lines are reinforced / upgraded instead	The existing transmission network in the region is currently being upgraded to ensure the system is running at its most efficient performance. The existing assets networks are not able to be upgraded sufficiently to cope with the new future demands expected on the network. As a result, new lines and substations will be required to accommodate the changing demands on the network.
3.10.111	Oppose the use of underground cables / Underground cables are too expensive and have issues relating to heat / damages food production	The proposed use of underground cables is limited given the significant increase in cost, and as such they are only intended for use where policy dictates, for example, where crossing the Area of Outstanding Natural Beauty (AONB) or where overhead lines are not suitable based on other legitimate local constraints.

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		With regards to concerns that residual heat from underground cables may affect crops, the underground cables installation shall be designed to limit any temperature increases to an absolute minimum which typically is no detriment to crops.
3.10.112	Suggest the use of local generation of power from renewable sources in communities and from individual properties / Suggest distributive generation solution	In its Energy White Paper (EWP), the Government states they are committed to phasing out coal in line with its commitments for Net Zero by 2050. At the same time the Government modelling suggests that the overall electricity demand could double by 2050 largely as a result of the electrification of cars and vans and the increased use of clean electricity replacing gas for heating. The EWP states that "as a result, electricity could provide more than half of the final energy demand in 2050, up from 17% in 2019 and would require a 4 fold increase in clean electricity generation". In order to meet demand on this scale, the Government is targeting to increase energy from offshore wind to 50 GW by 2030 and under its transmission licence, National Grid has a statutory duty to respond to generation customers wanting to connect to the transmission network. The Project is currently proposed to fulfil connection offers for two offshore wind farms, North Falls and Five Estuaries and, more recently, from Tarchon Energy for an interconnector linking with Germany.
3.10.113	The Project should run in closer to / parallel to the existing 400 kV overhead lines	National Grid note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, there are constraints and features than mean that overall we consider close paralleling in this area to lead to greater effects and therefore would be considered to be inconsistent with relevant policy.  A number of residential properties are present in close proximity to the existing 400 kV overhead line meaning that if the lines were close paralleled it would result in the properties having an overhead line close to both sides. There are also some locations where the combination of existing physical and environmental features (railway and road infrastructure, commercial and residential property, woodlands and orchards etc) present very substantial challenges to routeing and siting.
		As a result, whilst close paralleling may appear beneficial in some locations, overall the increased environmental effects where overhead lines have to converge and diverge, and the increased effects on properties with overhead lines to both sides are considered greater than those introduced by a new route alignment separated from existing 400 kV overhead lines.
		Whilst crossings to avoid positioning properties between overhead lines and the use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties under the Electricity Act 1989 and relevant policies such as National Policy Statement (NPS) EN5.
3.10.114	Concern around proposals causing communities to become encircled by overhead lines	The preferred corridor has been routed to achieve sufficient separation with the existing 400 kV overhead line, such that villages are not closely passed by overhead lines to both sides. Separation is inevitably reduced in certain locations due to the presence of residential properties, constraints to routeing and environmental features. A landscape and visual impact assessment will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation if required, this may include measures at particular locations to reduce a change in views of the Project or to better integrate infrastructure into the wider landscape.

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3.10.115	Seek alternative routeing (no route specified)	National Grid considered alternative strategic proposals as well as alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published in support of the 2022 non-statutory consultation. We have updated our proposals in the light of the 2022 non-statutory consultation feedback, and we will continue to reflect on the detail of any feedback and back-check and update the Project as appropriate and necessary.
3.10.116	Brownfield sites should take precedence for the Project	National Grid considers such sites in routeing and siting and takes a balanced view on their potential based on the various effects that may arise for a project from their use.
3.10.117	Suggest that the Project are routed as far away from populated / residential areas as possible	Deciding where and how to build new high voltage electricity lines is a complex issue and National Grid is mindful of the potential effects this infrastructure may have on local communities and the concerns these may bring. National Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise and potential health impacts. It has sometimes been suggested that minimum distances between properties and overhead lines should be prescribed.
		We do not consider this appropriate since each instance must be dealt with on its merits. However, we have always sought to route new lines away from residential property on grounds of general amenity where possible.
		We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate UK standards, and mitigated where necessary. We set strict technical standards for the equipment we install on our network. These will apply to the proposed new East Anglia Connection Node (EACN) substation located in the Tendring District, and extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.
		Noise from overhead lines is predominately determined by the conductor design, voltage and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types be used, consideration for this would be assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the Environmental Statement (ES).
		In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an assessment on both landscape character and visual amenity.
		The health and safety of the public, local communities and employees is central to everything that we do. The UK has a carefully thought-out set of policies for protecting us all against Electric and Megnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and

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		are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. Our approach is to ensure that our network comply with those policies, which are set by Government on the advice of their independent advisors. The Project will be designed to ensure it is fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed.
		Policies for both noise and EMF are incorporated into the decision-making process for development consent as set out in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment complies fully with those policies and guidelines. The Development Consent Order (DCO) application will include assessments against these polices, including both construction and operational noise and EMF.
3.10.118	Suggest that overhead lines are used in rural areas	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, and the duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. The National Policy Statement (NPS) EN-5 makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We therefore make location specific decisions in the context of policy, for example routes within the Area of Outstanding Natural Beauty (AONB) may be considered rural but are proposed for underground cable in line with policy.
3.10.119	Cumulative effect of the Project alongside existing overhead lines	National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.  For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.
3.10.120	Suggested minimum distance that overhead lines should be sited from residential areas / residences	National Grid does not use the application of standard minimum distances as a routeing consideration. Applying an arbitrary distance may be too big or too small for the specific circumstances. We utilise the Holford Rules informed by feedback and professional judgement to define appropriate corridors and alignments that are consistent with the relevant policy framework and duties. A landscape and visual impact assessment will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation if required, this may include measures at particular locations to reduce a change in views of the Project or to better integrate infrastructure into the wider landscape.

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3.10.121	Suggest underground cables in populated / residential areas	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, and the duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. The National Policy Statement (NPS) EN-5 makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. At this stage no locations have been proposed to be underground cable on the basis of residential effects alone although potential effects on residential property occupiers have formed part of the decision-making in some case. Underground cable is proposed through the Area of Outstanding Natural Beauty (AONB) and in some locations near the AONB as well as for a crossing of the 400 kV overhead line and for the line entry to Tilbury Substation. A landscape and visual impact assessment will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation if required, this may include measures at particular locations to reduce a change in views of the Project or to better integrate infrastructure into the wider landscape.
3.10.122	Alternative designs / plans should be presented	The option we have taken forward meets the technical and physical/geographical constraints and enables the network to operate to the required standards. More information on these options and the process of consideration can be found in our Corridor and Preliminary Routeing and Siting Study (CPRSS).
		Other options were not taken forward as they did not fully address technical or physical/geographical constraints or enable the network to operate to the required standards.
		We have published the work done to date to support the consultation and this sets out details of the evaluation we have undertaken to identify alternatives and chose our preferred route and site. This approach is compliant with our statutory duties to be economic and efficient and to have regard to amenity and aligns with national policy and guidance which we are required to consider as we develop our proposals. It would be disingenuous of us to consult an alternatives, which we would not choose to take forward as it did not best meet the need case or best comply with our statutory obligations and policy.  We will continue to backcheck and review our proposals including alternative designs in response to feedback and
		technical assessment as the Project develops.
3.10.123	Request that National Grid work with Department for Business, Energy and Industrial Strategy (BEIS) and Offshore Electricity Grid Task Force (OFFSET) to develop an alternative to the Project	We note the comment and engage with interested parties such as the Offshore Electricity Grid Task Force (OFFSET). We work hard to ensure that our stakeholders including the Department for Energy Security and Net Zero (formerly known as the Department for Business, Energy and Industrial Strategy (BEIS)) and Office of Gas and Electricity Markets (Ofgem) are aware of public comments on our proposals.

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3.10.124	Criticism of routeing the Project through Area of Outstanding Natural Beauty (AONB)	The Corridor and Preliminary Routeing and Siting Study (CPRSS) considered alternatives that avoid routeing through the Area of Outstanding Natural Beauty (AONB). On balance these were less preferred as they would be longer and therefore lead to effects over a much greater length to other receptors at greater cost than the route through the AONB. Undergrounding through the AONB is consistent with National Policy Statement (NPS) EN-5. The siting of Cable Sealing End (CSE) compounds (the transition sites between the overhead line and underground cable) will be located to minimise effects and consider the use of Horizontal Directional Drilling (HDD) – subject to ground conditions – to reduce certain construction effects.
3.10.125	A joined up approach needs to be taken by National Grid to power generation / facilities / transmission / infrastructure	National Grid does not have influence over power generation as such. Government energy strategy drives the form of new generation taken forward by developers with the independent Electricity Systems Operator (ESO) confirming which connections are taken forward and where connections are to be made. Under its transmission licence, National Grid has a duty to respond to generation customers wanting to connect to the transmission network. Section 1.2 and 1.3 of the Corridor and Preliminary Routeing and Siting Study (CPRSS) set out these new connections and the need for reinforcement. We will continue to back check and review our proposals in light of any changes to the energy strategy. We also note that a number of other studies have / are being progressed to ensure joined up thinking with different focus on projects at different stages of development (such as the Holistic Network Design (HND) and the Offshore Coordination Support Scheme (OCSS)). National Grid is actively involved where appropriate whilst at the same time ensuring it complies with its statutory and contractual duties.
3.10.126	Locations for Cable Sealing End (CSE) Compound sites to facilitate end point of underground section must be carefully chosen and subject to further consultation	National Grid agrees with the respondent and acknowledges the requirement to carefully chose the location of Cable Sealing End (CSE) compounds to respond to constraints, environmental features and the potential for effects and will consult on its proposals and consider any feedback provided as the Project develops.
3.10.127	A new consultation must not take place before the Offshore Transmission Network Review (OTNR), the new (accompanying) Network Options Assessment (NOA) and the SeaLink consultation have taken place.	The SeaLink project commenced consultation on the 24 October 2022 which ran until the 18 December 2022. Feedback from this consultation will be published in a feedback report. Information on this project is available from the project website <a href="https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink">https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink</a> SeaLink is part of the overall regional strategy to increase the network capacity in East Anglia but is in a separate geographical area with different programme drivers and detailed needs case.  The Government has said:  The Government's Offshore Transmission Network Review (OTNR) looks into the way that the offshore transmission network is designed and delivered, consistent with the ambition to deliver net zero emissions by 2050. The Energy Minister announced the scope of a review into the existing offshore transmission regime to address the barriers it presents to further significant deployment of offshore wind, with a view to achieving net zero ambitions.  The current approach to designing and building offshore transmission was developed when offshore wind was a
		The current approach to designing and building offshore transmission was developed when offshore wind was a nascent sector and industry expectations were as low as 10 GW by 2030. It was designed to de-risk the delivery offshore wind by leaving the project developers in control of building the associated transmission assets to bring the

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		energy onshore. This approach has contributed to the maturing of the sector, the significant reduction in costs of offshore wind energy and has helped position the UK at the forefront of global offshore wind deployment.
		However, in the context of increasingly ambitious targets for offshore wind, constructing individual point to point connections for each offshore wind farm may not provide the most efficient approach and could become a major barrier to delivery given the considerable environmental and local impacts, particularly from the associated onshore infrastructure required to connect to the national transmission network. Offshore wind is expected to play an important role in delivering net-zero emissions by 2050, and it is right that the framework for delivering offshore transmission connections is reviewed in the context of our increased ambition.
		An update was published in July 2022. The need for development of The East Anglia Green Energy Enablement project predates the commencement of the OTNR and therefore is not considered as part of this work which focuses on Round 4 offshore wind.
		In order to meet the meet the Government's ambitious net zero targets, help to tackle energy security it is important that projects like this Project are progressed. National Grid will continue to backcheck and review its proposals for the Project in light of any new or updated information (such that might be contained in the Holistic Network Design (HND) and Network Options Assessment (NOA) publications for instance).
3.10.128	National Grid must present options with full cost breakdown, setting out environmental, socioeconomic, heritage and health impact of each, plus impact to the Area of Outstanding Natural Beauty (AONB).  Cost must be presented in a transparent, accurate and unbiased manner. Cost of mitigation must be included within each option	National Grid set out capital and lifetime cost summaries for Project options in their response to the Offshore Electricity Grid Task Force (OffSET) group (available on the Project website). The lifetime cost for the onshore option between Norwich Substation, Bramford Substation and Tilbury Substation were at the time identified as £1,136 m compared to the offshore High Voltage Direct Current (HVDC) option between Norwich Substation, Bramford Substation and Tilbury Substation of £5,099.83 m. This cost differential was considered by National Grid to be substantial. In response to a request by Essex County Council on behalf of all host local planning authorities, National Grid has agreed to fund an independent review of cost options. As part of the backcheck and review process, costs are reviewed and updated in accordance with the latest costing information. These may therefore, in some cases, supercede previously published costings.
		An offshore option would also still require development of onshore infrastructure between the coast and Norwich, Bramford and Tilbury. Offshore options also have the potential to impact the environment and would need to be constructed through internationally designated sites. We will be undertaking an Environmental Impact Assessment (EIA), which is a formal process that considers the likely significant effects on sensitive environmental receptors that may be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered at that stage with associated costs.
		Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.
3.10.129	An offshore route would avoid any damage to the Area of	It is not disputed that an offshore option connecting only between Norwich to Tilbury would avoid the Area of Outstanding Natural Beauty (AONB) but the additional costs mean an offshore option is less preferred and not

consistent with National Grid's duties and the relevant policy framework. Offshore options are also noted to lead to

their own effects on different receptors both on the onshore routes to the coast as well as the sections within the

Outstanding Natural Beauty (AONB)

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		marine environment. Any offshore option connected into Bramford to aid system flexibility would itself require routes through the AONB potentially more extensively than those proposed for the Project.
3.10.130	Suggestion that efforts are made to encourage more modest energy consumption	Whilst we are all continually encouraged to use less energy, the modelling predictions stated in the Government's EWP suggests that the overall electricity demand could double by 2050 largely as a result of the electrification of cars and vans and the increased use of clean electricity replacing gas for heating. The EWP states that "as a result, electricity could provide more than half of the final energy demand in 2050, up from 17% in 2019 and would require a 4 fold increase in clean electricity generation". In order to meet this demand, the Government's EWP has outlined a plan to increase energy from offshore wind to 40 GW by 2030 (target increased to 50 GW in April 2022).
3.10.131	Suggestion that the capacity of the Project is increased even further	The Project will be constructed at the highest capacity currently available, this will be in line with the existing networks that are being uprated in East Anglia including the existing Norwich to Bramford circuit and the Bramford to Rayleigh circuit.
3.10.132	Suggestion that existing substations are upgraded instead of building a new substation	The new East Anglia Connection Node (EACN) substation is required to connect new customers generating electricity from offshore wind farms. None of the existing substations (and their 400 kV Transmission System connections) have the capacity to accommodate the connections without any extensions and new infrastructure leading to additional environmental effects or additional costs. For example, connecting both wind farms at Bramford would increase effects on the Area of Outstanding Natural Beauty (AONB) as either a wider corridor or two corridors for connections would be required through the AONB.
3.10.133	Government should implement other energy saving schemes	The Government's Energy White Paper (EWP) suggests that the overall electricity demand could double by 2050 largely as a result of the electrification of cars and vans and the increased use of clean electricity replacing gas for heating. The EWP states that "as a result, electricity could provide more than half of the final energy demand in 2050, up from 17% in 2019 and would require a 4 fold increase in clean electricity generation". In order to meet this demand, the Government's EWP has outlined a plan to increase energy from offshore wind to 40 GW by 2030 target increased to 50 GW in April 2022). Notwithstanding this predicted increase in electricity demand energy, the Government recognises that smart technologies will need to be implemented to reduce electricity consumption, for example in buildings, the use of smart meters and appliances and energy storage.
3.10.134	Underground cables should be used for at least 10 miles / 20 km outside of the Area of Outstanding Natural Beauty (AONB)	National Grid identifies the requirement for mitigation (whether by additional planting, type of pylon or choice of alternative technology such as underground cable) based on consideration of the potential effects that may arise on a case-by-case basis. This takes into account the specific details of the designation (including special qualities, key views etc) and local circumstances including landform and existing vegetation. This approach allows consideration of the predicted effects arising from underground cable or overhead line technology and the Cable Sealing End (CSE) compounds (the transition sites between overhead line and underground cable) rather than applying an arbitrary distance that may be too big or too small for the specific circumstances.
3.10.135	Suggestion for nuclear power at Sizewell to be increased	The Sizewell C Project was granted development consent in July 2022. Whilst new connections for new offshore wind and nuclear power generation projects and for interconnectors into East Anglia are expected to continue in addition to the current contracted position, these are expected to be fed into existing substations at Necton, Norwich

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		Main, Bramford, Friston and Sizewell. Although connection for nuclear generation does not currently form part of this Project, the Project will provide capacity for future generation from various generators, including Sizewell C, to be transmitted across electrical boundaries within East Anglia and the wider transmission network.
3.10.136	Underground cables should be used near to / within 4 miles of the substation	National Grid identifies the requirement for mitigation (for example by landscape planting, type of pylon or choice of alternative technology such as underground cable) based on consideration of the potential effects that may arise on a case-by-case basis. This approach allows consideration of the predicted effects arising from underground cable or overhead line technology and the Cable Sealing End (CSE) compounds (the transition sites between technologies) rather than applying an arbitrary distance that may be too big or too small for the specific circumstances. At this stage, informed by feedback and further study, we propose that the route through the Dedham Vale Area of Outstanding Natural Beauty (AONB) through to the East Anglia Connection Node (EACN) substation will be by underground cable. This is because of the level of effects which are likely to arise from a double overhead line in the vicinity of Ardleigh or from a CSE compound located between the AONB and EACN substation.
3.10.137	Route the Project underground following large watercourses	Existing watercourses do not follow the direct routes required between the Norwich – Bramford Substation and Bramford to Tilbury Substation. The natural routes of such watercourses also tend to meander which would lead to several issues.  • following the path of such watercourses, rather than a direct route would create increased circuit lengths,
		which would mean more cable is required;
		<ul> <li>greater disturbance to the environment and local community as we excavate along these rivers;</li> </ul>
		<ul> <li>greater capacitive losses due to the length increase which would require more High Voltage (HV) plant in the form of reactive compensation (shunt reactors) to be installed along the route;</li> </ul>
		<ul> <li>watercourses would not likely be wide enough to accommodate the construction and permanent underground cable corridors required, meaning land either side of the water courses would be excavated too;</li> </ul>
		<ul> <li>watercourses tend to be high priority ecological / environmental areas for wildlife, flora and fauna and as such makes this option even less desirable. Installation of underground cables following a watercourse would require major temporary works to open excavate i.e., damming, diversions, over pumping, cofferdams etc, all of which would cause huge disturbance and risk to the natural environment, not to mention the added time and cost over the route;</li> </ul>
		<ul> <li>directional drilling could potentially be utilised, but in order to accommodate the many changes in direction additional drill pits would be required along the route and as such any benefits lost; and</li> </ul>
		<ul> <li>there would be a need for cable jointing pits every 1 km at which point the river would need to be temporarily diverted to allow such works to be undertaken, again this is impracticable.</li> </ul>

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		The increase in route length and the associated temporary works to achieve this would be significant in comparison to overhead lines routed directly as per the Holford Rules.
3.10.138	Consider future supply resilience of the network – integration to reduce risks (learn from Nord Stream 2)	The electricity system is designed to meet the National Electricity Transmission System (NETS) Security and Quality of Supply Standard (SQSS). This has resilience and risk minimisation as part of the standard that provides a high level of security for the system. The proposal meets these standards.
3.10.139	Suggest new overhead lines should run as Direct Current (DC)	Direct Current (DC) technology is appropriate over very long distances (typically hundreds of kilometers) and is suitable for subsea cabling. To match capacity of the current proposal, a High Voltage Direct Current (HVDC) circuit would need to be of greater voltage than 500 kV DC and would need clearances very similar to the proposal giving little advantage visually over Alternating Current (AC) alternatives.  HVDC overhead lines would have very similar visual characteristics to the current proposals.
3.10.140	The Tendring Substation should not be built	A new East Anglia Connection Node (EACN) substation is required to facilitate incoming offshore connections to the National Electricity Transmission System (NETS) within East Anglia. The site on the Tendering Peninsula was selected as being most suitable in terms of access from the coast and connection onto the NETS after option appraisals of various feasible locations along the southern East Anglian coast. The main basis of this decision was the Tendering peninsula location contained less constraints overall compared to other locations along the coast, for example other options interfaced with the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) or required complex water crossings I.e. River Orwell etc.
3.10.141	Suggestion that the Project is routed west from Norfolk to join existing infrastructure	Strategic proposals that include this suggestion were considered in the Corridor and Preliminary Routeing and Siting Study (CPRSS) and considered less preferred as they would have required longer connections or additional cost. They were therefore less consistent with National Grid's Duties and relevant policy framework. We have back-checked the proposals and consider that the previous conclusions remain valid and will continue to back-check in light of feedback and further information as the Project progresses.
3.10.142	Suggestion to use alternative energy sources instead of nuclear or wind	To meet the predicted doubling in electricity demand by 2050 and the Government's 2050 Net Zero target, the Government Energy White Paper (EWP), whilst not planning for a specific technology solution predicts that "a low cost, Net Zero consistent system is likely to be composed predominantly by wind and solar" but also complementing intermittent renewables with technologies including nuclear and gas with carbon capture and storage. Under its transmission licence, National Grid has a statutory duty to respond to generation customers wanting to connect to the transmission network. The Project is currently proposed to fulfil connection offers for two offshore wind farms, North Falls and Five Estuaries which will contribute to the Government's 50 GW offshore wind target. The advantages of offshore wind farms compared to onshore are that they are considered more efficient (with higher wind speeds and consistency in direction) and are further away from local populations. The Project will also provide increased capacity for future generation from various generators.
3.10.143	Do not refine the Project, alternatively reconsider your	The Government has set a target that by 2050 the UK will have net zero carbon emissions. In order to achieve this, and hit the targets along the way, such as connecting 40 GW of offshore wind by 2030, new infrastructure will be

## **Summary of matters** Ref no. **National Grid's response** raised original proposals such a Sea needed to deliver the increased energy production. This will include new overhead lines, underground cables, Cable Sealing End (CSE) compounds (where underground cables meet overhead lines) and substations. Link 2 Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Study (CPRSS) examines several strategic options that were considered for the Project that might achieve the required reinforcement including offshore and subsea options. These options were not taken forward as they did not fully address technical or physical/geographical constraints or enable the network to operate to the required standards. A subsea connection would have a third of the capacity of the proposed overhead connection and therefore to transfer the anticipated levels of power generation, three subsea connections would be required including associated infrastructure such as convertor stations. This would make the connection significantly costlier to energy bill payers. In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich. Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area. The System Operator, National Grid Electricity System Operator (ESO), leads an annual process looking at how the electricity transmission network might need to adapt to likely changes to where the electricity we all use will come from. That starts with stakeholder discussions and analysis about potential Future Energy Scenarios (FES) which are published each summer. The System Operator takes those different scenarios and looks at what that might mean for the transmission network over the next ten years, publishing an Electricity Ten Year Statement (ETYS) each November. The transmission network owners, including National Grid, respond to the issues outlined in the ETYS with suggestions as to how those can be addressed. Then in January each year, National Grid ESO publishes a document known as the Network Options Assessment (NOA), which outlines their recommendations as to which reinforcement projects should be taken forward during the coming year to meet the future network requirements. A need was identified to resolve electrical boundary issues in East Anglia. There are three onshore power boundaries where additional system flexibility is required to ensure that power generated in the area from offshore wind farms and nuclear generation has more ways to flow into the wider transmission network during maintenance or faults on the system. In addition, two new offshore wind farms off the Suffolk/ Essex coast are currently proposed to be connected to the transmission network to transport the low carbon energy they will produce to the homes and businesses where it will be used. The NOA 2021 identified need for an upgrade to the existing line in East Anglia in all FES and this was confirmed in NOA 22. Suggest that the Project is routed National Grid uses the guidance in the Holford Rules (as directed by National Policy Statement (NPS) EN-5) as the 3.10.144 towards populated / urban areas basis for routeing new connections. The rules provide guidance regarding routeing away from various constraints and environmental features or

pylons rather than favouring rural versus urban areas.

favouring certain routeing to benefit from screening. We adopt these guidelines in our proposals for routeing of the

Ref no.	Summary of matters raised	National Grid's response
3.10.145	Reduce the number of onshore connections	The Electricity System Operator (ESO) Holistic Network Design (HND) and Network Options Assessment (NOA) has looked at such solutions and concluded that the proposed option represents the most economic, efficient and coordinated approach to the proposed connections.
3.10.146	Propose running the Project through gas main between London and Bacton (Norfolk)	Use of existing underground infrastructure would not be suitable for accommodating 400 kV underground cables. National Grid underground cables require sufficient space around the underground cables for cable cooling. The existing assets have not been designed to house 400 kV transmission assets and therefore would be ineffective at facilitating the specification requirements of the Project. The typical working corridor for a 400 kV underground cable would be approximately 120 m in width to be able to install the typically 18 underground cables that would make up the circuits on a project like East Anglia Green Energy Enablement Project.
3.10.147	Follow East 6 proposal	National Grid notes the respondent's preference. Having back-checked our proposals we remain of the view that the conclusions as published in the Corridor and Preliminary Routeing and Siting Study (CPRSS) remain valid.
3.10.148	Oppose overheadlines around Hempnalls—Hall - Grade II Historic Building in Cotton.	Amongst National Grid's duties is to have regard to the desirability of protecting (amongst other things) buildings of historic interest, and to do what it reasonably can to mitigate any effects. The Environmental Impact Assessment (EIA) will include an assessment of the effects of the Project on the historic environment, including listed buildings such as Hempnalls Hall. The assessment will identify the potential for significant effects on the setting of listed buildings and whether any additional mitigation is required to Offshore Electricity Grid Task Force (OffSET) likely significant effects.  We have engaged with Historic England (formerly English Heritage) and their views will be taken into account when developing the Project. We will continue to work with them regarding the heritage implications of the proposals, including regarding appropriate mitigation.
3.10.149	Suggest that the proposed expansion of Bradwell B is considered for the Project, and that the impact of overhead lines on the planned South Woodham Ferrers development area is considered	National Grid notes that there is an existing overhead line to the Bradwell B site which has been operating at lower voltage (132 kV) and has not been used for a few years and is in generally poor condition. To develop a 400 kV connection on this alignment would require the overhead line to be rebuilt with the design taking account of how the area has developed including the planned South Woodham Ferrers development area proposals.  Several options were considered in developing the Project through Norfolk, Suffolk and Essex to transport the electricity due to come into the network in the Norwich and Tendring peninsula area, and information on these is available in the Corridor and Preliminary Routeing and Siting Study (CPRSS). Following the close of consultation and review of feedback we have backchecked our previous work and considered other potential routeing options in this area and felt they had different impacts and offered no benefit over the option we are taking forward.  In particular, given that there is no certainty about the Bradwell B proposals we do not consider a connection via Bradwell to be preferred. There would need to be reinforcement from Norwich to Bramford and from there to Bradwell requiring connections to cross the Special Protection Area (SPA) designated Blackwater Estuary (3 km to 7 km tunnel likely to be required at much greater cost) as well as interact with other Special Area of Conservation (SAC) / SPA designations. The onward connection from Bradwell via Rayleigh to Tilbury is also constrained by urban development (including around South Woodham Ferrers) and further environmental designations. Taken together

Ref no.	Summary of matters raised	National Grid's response
		routeing of the Project via Bradwell requires a greater amount of new infrastructure and is therefore less economic and efficient and expected to be associated with greater environmental effects and on this basis is less preferred.
		Should Bradwell B progress at some point in the future then we will consider how to best meet the connection requirements and amend or add to the Project as appropriate.
3.10.150	Suggest the Project avoids wet grassland sites	Through the routeing and siting exercise National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity such as wet grassland sites. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Statement (ES) for the Project will present the effects on biodiversity and where required mitigation requirements.
3.10.151	Suggest Option ET5 (sections L and Q preferred)	We note the respondent's preference. The Corridor and Preliminary Routeing and Siting Study (CPRSS) sets out the difficulties associated with section L to the east of Chelmsford. Section Q only forms part of a solution with corridor L or with other corridors raising greater effects on the qualifying features associated with European designated sites and are therefore less preferred.
3.10.152	Suggest that the Project alignment is more direct with less deviations and changes in direction	The Corridor and Preliminary Routeing and Siting Study (CPRSS) sets out the reasons for corridor selection and is considered to be the most direct route that can be achieved in line with National Grid's duties and the relevant policy framework in light of the environmental features, residential property and other constraints that restrict routeing.
3.10.153	Given the significant faults the consultation run afresh including alternatives such as but not limited to a strategic offshore ring-main	Prior to commencement of the 2022 non-statutory consultation, National Grid prepared a Consultation Strategy, this document sets out the details of how we proposed to consult on the project. The Strategy was shared with Local Authorities for comment, and we took on board their comments to inform how the consultation was carried out where possible. The consultation was run in accordance with the published strategy.
		As we scope our projects, we consider numerous technology solutions. Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia and are part of our preliminary recommended solution. National Grid's appraisals, which were based on our knowledge of the network, understanding of the capacity and costs of developing subsea links as well as evaluation of the environmental and socio—economic implications, reached a preliminary conclusion that, on balance, the most appropriate solution was an offshore Direct Current (DC) link between the Sizewell area and Kent (SeaLink) in combination with onshore reinforcement between Norwich and Tilbury (East Anglia GREEN) and onshore reinforcement between Tilbury and Grain (progressed as a sperate scheme due to the general geographic separation of potential effects). We presented our evaluation and our preliminary preferred solution at the 2022 non-statutory consultation, which was an opportunity for members of the public to comment (which they did).
		It would have been disingenuous for us to present an offshore option to the public for consultation feedback, knowing this did not comply with the framework requirements.
		Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.

#### **Summary of matters** Ref no. **National Grid's response** raised National Grid identifies the requirement for mitigation (whether by additional planting, type of pylon or choice of 3.10.154 If cables must be routed as suggested in Chapter seven then alternative technology such as underground cable) based on consideration of the potential effects that may arise on to protect the AONB they must be a case-by-case basis. This takes into account the specific details of the designation (including special qualities, key buried wherever they fall within 3 views etc) and local circumstances including landform and existing vegetation. This approach allows consideration of miles / 5 km of the boundary of the predicted effects arising from underground cable or overhead line technology and the Cable Sealing End (CSE) the AONB compounds (the transition sites between technologies) rather than applying an arbitrary distance that may be too big or too small for the specific circumstances. We have published the work done to date to support the 2022 non-statutory consultation and this sets out details of 3.10.155 National Grid should fully set out the evaluation we have undertaken to identify options and chose our preferred route and site. This approach is all feasible alternative options (including costings and all human compliant with our statutory duties to be economic and efficient and to have regard to amenity and aligns with and environmental impacts). national policy and guidance which we are required to consider as we develop our proposals. It would be including offshore, upgrade to disingenuous of us to consult an option, such as an offshore option, which we would not choose to take forward as it existing lines, following existing did not best meet the need case or best comply with our statutory obligations and policy. In response to a request by infrastructure Essex County Council on behalf of all host local planning authorities, National Grid has agreed to fund an Avoidance of Area of Outstanding independent review of cost options. Natural Beauty (AONB) in its Further information on the potential environmental impacts and how we will mitigate these will be available within a entirety including visual blight of Preliminary Environmental Impact Report at statutory consultation stage and we will prepare an Environmental pylons abutting the AONB Statement (ES) to support our application for a Development Consent Order (DCO). This document will be examined by the Planning Inspectorate. Avoidance of listed buildings and archaeological sites The existing transmission network in the region is currently being upgraded to ensure the system is running as efficiently as possible, this includes replacing the existing conductors and fittings on existing overhead lines to enable them to carry more power safely and efficiently. Even with these upgrades the changes to the transmission network driven by the future scenarios anticipated and the move to net zero over the coming years means that the existing network is not able to be upgraded sufficiently to cope with the new demands expected. As a result, new connections and substations are required to accommodate the changing demands of the network. The Dedham Vale Area of Outstanding Natural Beauty (AONB) designation in is one such location where there is a presumption that underground cable technology will be adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the Natural Beauty of the AONB. Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the AONB, including a section at Great Horkesley. We will undertake sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening the infrastructure. A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation. Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. In the event that impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible. Where impacts on the historic environment are

identified these will be presented within a Historic Environment assessment which is undertaken as part of the EIA.

### **Summary of matters** Ref no. **National Grid's response** raised Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set 3.10.156 The entire consultation needs to be re-run. It is not fit for purpose. out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local A new consultation must present Authorities who provided us with comments based on their knowledge and experience of consultation in the area. offshore and brownfield We incorporated these comments where practicable and information on this is available in this report. The substation option. Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation. Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report. We have published the work done to date to support the consultation and this sets out details of the evaluation we have undertaken to identify options and chose our preferred route and site. This approach is compliant with our statutory duties to be economic and efficient and to have regard to amenity and aligns with national policy and guidance which we are required to consider as we develop our proposals. It would be disingenuous of us to consult an option, such as an offshore option, which we would not choose to take forward as it did not best meet the need case or best comply with our statutory obligations and policy. Further information on the potential environmental impacts and how we will mitigate these will be available within a Preliminary Environmental Impact Report at statutory consultation and we will prepare an Environmental Statement (ES) to support our application for a Development Consent Order (DCO). This document will be examined by the Planning Inspectorate. National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to National Grid infrastructure and customer connections across potential sites (including the potential for siting of infrastructure on industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS). National Grid has updated its proposals and also considered alternative locations for the EACN substation in the light of non-statutory consultation feedback. No additional areas of industrial / brownfield land have been identified. Although the Royal Air Force (RAF) Boxted site was identified in the feedback and the site has some potential, the connection corridor is too constrained for the multiple customer connections that need to be made to it requiring multiple corridors to be used (two of which would be through the AONB) and increasing the level of environmental effects. We consider the EACN substation location close to Lawford 132 kV Substation to be the preferred site to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary. 3.10.157 While I am supportive of Ultimately power is used across the whole of the country, and we expect demand nationwide will need to rise to accommodate decarbonisation of energy with Net Zero. With big demand centres across the M5 corridor, midlands renewable energy, East Anglia and north-east only some conditions are satisfied by moving energy to specific locations. The National Electricity GREEN is not a renewable Transmission System (NETS) works by being highly interconnected ensuring that energy flows under a multitude of energy project. It is a transmission project. Renewable faults and situations to where it is consumed. Therefore, there is always a need to get energy generated offshore to energy must be taken to where it demand nationwide and requires onshore solutions to do this. is needed in the least damaging We have looked at the possible ways in which the new energy connecting to the network could be transmitted to

where is needed. The various options where summarised in the Corridor and Preliminary Routing and Siting Study

way. That is via a strategic

offshore grid, coming onshore

### **Summary of matters** Ref no. **National Grid's response** raised and a review of that work is published in the Strategic Options Backcheck and Review report. This sets out how a close to where the power is required, at brownfield sites. potential offshore solution has been considered. 3.10.158 I endorse and support the As National Grid scopes its projects, we consider numerous technology solutions. Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia and are part of our preliminary position taken by the Essex Suffolk Norfolk Pylons action recommended solution. National Grid's appraisals, which were based on our knowledge of the network, understanding of the capacity and costs of developing subsea links as well as evaluation of the environmental and group that East Anglia Green's socio-economic implications, reached a preliminary conclusion that, on balance, the most appropriate solution was preferred option is the wrong one and that a strategic offshore grid an offshore Direct Current (DC) link between the Sizewell area and Kent (SeaLink) in combination with onshore reinforcement between Norwich and Tilbury (East Anglia GREEN) and onshore reinforcement between Tilbury and must be pursued instead. We agree that the East Anglia Grain (progressed as a sperate scheme due to the general geographic separation of potential effects). GREEN consultation is Offshore options have the potential to impact the environment and would need to be constructed through inadequate, that there are errors internationally designated sites. National Grid will continue to develop the preferred option with stakeholders, using and inconsistencies and that we the principles of the Holford Rules, to find a solution that least affects the environment. We will be undertaking an have been presented with a fait Environmental Impact Assessment (EIA), which is a formal process that considers the likely significant effects on accompli instead of options sensitive environmental receptors that may be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any stage of consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation. National Grid set out capital and lifetime cost summaries for Project options in their response to the Offshore Electricity Grid Task Force (OffSET) group (available on the Project website). The lifetime cost for the onshore option between Norwich Substation, Bramford Substation and Tilbury Substation were at the time identified as £1,136 m compared to the offshore High Voltage Direct Current (HVDC) option between Norwich Substation, Bramford Substation and Tilbury Substation of £5,099.83 m. This cost differential was considered by National Grid to be substantial. An offshore option would also still require development of onshore infrastructure between the coast and Norwich, Bramford and Tilbury. In response to a request by Essex County Council on behalf of all host local planning authorities, National Grid has agreed to fund an independent review of cost options. As part of the backcheck and review process, costs are reviewed and updated in accordance with the latest costing information. These may therefore, in some cases, supercede previously published costings.

Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has

influenced the design of the Project this information is summarised in Chapter 3 of this report.

# Ref no. Summary of matters raised

# **National Grid's response**

3.10.159

The East Anglia Green consultation must be abandoned. As demonstrated in the full submission of the Essex Suffolk Norfolk Pylons action group, it is not adequate or proper and fails three of the Gunning Principles. It cannot be used to inform future consultations, nor to support a Development Consent Order (DCO) application to the Planning Inspectorate.

Before the 20 out how we want with the Consultation of the Consultation. Feedback has influenced the a proposed of Significant In Planning Inspectorate.

Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.

Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report. This Project comprises a proposed overhead line connection over 2 km in length and therefore is currently classified as a Nationally Significant Infrastructure Project (NSIP). Therefore, the Project will require consent under the Planning Act 2008. The Planning Inspectorate publish guidance and advice on developing an NSIP project for developers to follow. We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:

- 1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers
- The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.
- 2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response

We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.

- 3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation

  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
- 4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account.

In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website. In preparing and

Ref no.	Summary of matters raised	National Grid's response
		delivering the consultation we have had due regard to and complied with all guidance and advice published by the Planning Inspectorate relating to developing a Development Consent Order (DCO) project.
3.10.160	Decision criteria must be objective and set out in advance	National Grid follows an options appraisal process that has been tested and proven appropriate over many years. We note the feedback and consider the process to have been an appropriate means for providing information on the work to date and basis for progressing the Project set within the duties and policy framework within which we must work. We will continue to review the Project, including back-checking.
		We consider the basis for decision-making to be clearly set out within the Corridor and Preliminary Routeing and Siting Study (CPRSS).
3.10.161	Results must be justified and testable	We consider the results of our decision-making to date on corridor selection, the proposed East Anglia Connection Node (EACN) substation siting and route design to be justified and they are tested through the process we must follow to secure the Development Consent Order (DCO) and necessary powers for the Project.
3.10.162	A new consultation must be re- run and must follow Gunning Principles	Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local Authorities who provided us with comments based on their knowledge and experience of consultation in the area. We incorporated these comments where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation.
		Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report. This Project comprises a proposed overhead line connection over 2 km in length and therefore is currently classified as a Nationally Significant Infrastructure Project (NSIP). Therefore, the Project will require consent under the Planning Act 2008. The Planning Inspectorate publish guidance and advice on developing an NSIP project for developers to follow. We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:
		1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers  The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.
		2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response  We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.

Ref no.	Summary of matters raised	National Grid's response
		3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
		4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account.  In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website.
3.10.163	National Grid must present options with full cost breakdown, setting out environmental, socioeconomic, heritage and health impact of each, plus impact to the Area of Outstanding Natural Beauty (AONB).	Appraisal of identified options is undertaken using National Grid's Approach to Consenting guidance. This provides a thorough, consistent and transparent framework to inform the appraisal of project options and decision-making. Its aim is to ensure that decisions regarding the Project's design (route, location or technology options) are based on a full understanding and balance of the technical, socio-economic, environmental and cost implications of each option. Once all identified options have been appraised, the option or options that best meet National Grid statutory duties and obligations are selected as the preferred option or options. After further consultation, detailed assessments of the preferred option to be taken forward for planning consent will be undertaken as part of the Environmental Impact Assessment (EIA) process and reported in the Environmental Statement (ES). This will include environmental, socioeconomic, heritage and health impact assessments, the approach and scope of which has been provided in the submitted EIA Scoping Report (November 2022). To minimise the potential impacts on the Area of Outstanding Natural Beauty (AONB), it is intended to underground the route section at this point.
3.10.164	National Grid profitability for each option must be presented for transparency.	National Grid is investing around £1.3 billion per year in our UK electricity transmission system. The funding for our investments comes from a number of sources including shareholders, reinvesting a significant proportion of our profits, and borrowings against a secure income stream. To recoup the initial costs associated with constructing transmission systems we charge both generators and supply companies for the connection to and use of them, which are ultimately passed onto the end consumer as a percentage of their electricity bills (approximately 3.3%). This charging methodology is approved by the Office of Gas and Electricity Markets (Ofgem), the energy regulator.
		As an organisation, the identification of new transmission lines is dictated by a range of factors such as; national Government policy, demands on the network (both current and projected), and the cyclical pattern of maintenance and upgrading (all of which fall within the remit of our Operating Licence). The 'profitability' of a transmission line is not one of the factors we consider in progressing projects. For these reasons, the profitability of each Option is not a material consideration in the decision-making process.
3.10.165	The Government must immediately review the current	National Grid operates under the electricity transmission licence granted to it by the Government up to a voltage of 400 kV. It is important that our equipment runs efficiently and safely.

Ref no.	Summary of matters raised	National Grid's response
	400 kV cap on energy transmission lines and seek to raise that limit	We operate the network in accordance with the Security and Quality of Supply Standard (SQSS) and all our structures have to be approved and verified as being able to withstand the loads imparted on them through their lifecycle. The materials (steel) we use for pylons are industry standard and best meets the requirements.
3.10.166	National Policy Statements (NPSs) s must include a presumption in favour of upgrading existing power lines before building new ones and a sequential test as follows: strategic offshore grid with brownfield onshore connections; upgrading of existing transmission network; full undergrounding. New overhead lines need to become the option of last resort.	The existing network in East Anglia currently carries around 3,200 megawatts (MW) of electricity generation. Over the next decade we expect more than 15,000 MW of new generation and 4,500 MW of new interconnection to connect in the region. Our existing power lines do not have sufficient capacity to accommodate this new generation. Where required, National Grid do upgrade their overhead line conductors across England and Wales to increase capacity and are already carrying out work to upgrade the existing transmission network in East Anglia, However, even with these upgrades the network will not have sufficient capacity and the Project is a key part of our wider investment programme to upgrade our electricity transmission network in East Anglia to ensure we meet this future energy transmission demand.  The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances. However, the Government is aware that overhead lines
		can cause detrimental landscape and visual impacts in particularly sensitive areas. Within the draft energy NPSs, consulted on at the end of 2021 and March 2023 and with responses still under review, in circumstances where there could be widespread landscape and visual impacts, undergrounding and the use of subsea cables can be considered where the benefits outweigh other considerations. National Grid's proposals include underground cable within the Dedham Vale Area of Outstanding Natural Beauty (AONB) in accordance with NPS EN-5.
3.10.167	An alternative route should be seriously considered. It is not clear why existing pylon routes broadly taking the same route cannot be upgraded, or that pylons could not follow existing infrastructure such as the A12	In developing its onshore proposals National Grid has considered the potential to parallel existing overhead lines and transport infrastructure and consider them to be less preferred alternatives. Numerous properties (residential and commercial), constraints and environmental features are present in close proximity to existing overhead line and infrastructure and would be more adversely affected by close paralleling. Alternatively, if such an alternative was pursued the costs to avoid such effects (multiple crossings) would be much greater with additional limitations on the ability to achieve the necessary outages (to undertake the works safely) within the time available.
3.10.168	The proposed Tendring Substation is in close proximity to the Dedham Vale AONB. Chapters 5 and 7 of the CPRSS recognise the potential for significant damage to the AONB as a result of cables in to and out from the substation which are scheduled to run along the southern length of the AONB	National Grid develops its proposals informed by the relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy.  National Grid has proposed to extend the use of underground cable technology beyond the Area of Outstanding Natural Beauty (AONB) boundary in response to the potential for the development to unacceptably affect the Natural Beauty of the AONB. The next consultation includes a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB. Specifically, the underground cable through the AONB is proposed to be extended to the East Anglia Connection Node (EACN) substation with a section of underground cable also proposed in the vicinity of Great Horkesley where the preferred corridor is in close proximity to the AONB.

#### **Summary of matters** Ref no. **National Grid's response** raised National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after 3.10.169 An alternative site to the Tendring Substation should be sought for careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and the sub-station and options away customer connections across potential sites (including industrial land) throughout the Tendring peninsula. The results from the AONB presented for full were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS). We have updated our consultation proposals and also considered alternative locations for the EACN substation (the former Royal Air Force (RAF) Boxted) in the light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it. We consider the EACN substation location close to Lawford 132 kV substation to be an appropriate basis to take forward the project. We will continue to reflect on the detail of any feedback and update the proposals as appropriate and necessary. National Grid's 2022 non-statutory consultation did include and future consultation shall include the National Grid 3.10.170 Consultation parameters should include not only the site of the substation and the incoming / outgoing National Grid circuits. Tendring Substation, but the The onshore option appraisal for siting of the East Anglia Connection Node (EACN) substation are covered in the implications of that site with Corridor and Preliminary Routeing and Siting Study (CPRSS). Siting considered the implications of the 400 kV respect to the impact of cables in connection infrastructure to connect the substation to the National Electricity Transmission System (NETS) and also and out from the site. considered whether viable pathways for customer connections were available through which it could be expected that the customer connections could be made. These options must include We have published the work done to date to support the consultation and this sets out details of the evaluation we offshore alternatives as part of a have undertaken to identify options and chose our preferred route and site. This approach is compliant with our strategic grid as well as statutory duties to be economic and efficient and to have regard to amenity and aligns with national policy and brownfield sites onshore. In guidance which we are required to consider as we develop the Project. It would be disingenuous of us to consult an particular, offshore substations option, such as an offshore option (which could be developed in various forms including with offshore substations), must be considered and which we would not choose to take forward as it did not best meet the need case or best comply with our statutory presented for consultation. obligations and policy. Further information on the potential environmental impacts and how we will mitigate these will be available within a Preliminary Environmental Impact Report at statutory consultation and we will prepare an Environmental Statement (ES) to support our application for a Development Consent Order (DCO). This document will be examined by the Planning Inspectorate. The consultation was inadequate Before the 2022 non-statutory consultation commenced, we prepared a Consultation Strategy. This document set 3.10.171 out how we were planning to consult on the Project. We shared this in draft with the potentially affected Local and only one alternative for the Authorities who provided us with comments based on their knowledge and experience of consultation in the area. proposed Tendring Substation is provided as the de-facto choice We amended the Strategy based on feedback where practicable and information on this is available in this report. The Consultation Strategy is available as an appendix to this report. Before any future consultation, we will update the Consultation Strategy and engage with Local Authorities for their views on how we should conduct the consultation. Feedback has been reviewed by the Project team and responses are published in this report. Where feedback has influenced the design of the Project this information is summarised in Chapter 3 of this report.

### **Summary of matters** Ref no. **National Grid's response** raised National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to the NG infrastructure and customer connections across potential sites (including industrial land) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS) at the 2022 non-statutory consultation. National Grid has updated its proposals and also considered alternative locations for the EACN substation (including the former Royal Air Force (RAF) Boxted) in the light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it. We consider the EACN location close to Lawford 132 kV substation to be an appropriate basis to take forward the project. We will continue to reflect on the detail of any feedback and update the proposals as appropriate and necessary. 3.10.172 The underground section is far National Grid develops its proposals informed by the relevant National Policy Statement (NPS) is EN-5 which makes from sufficient to mitigate blight of it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although the Area of Outstanding Natural it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual Beauty (AONB). At the very least, impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. Section F which abuts the AONB National Grid has proposed to extend the use of underground cable technology beyond the Area of Outstanding should also be undergrounded as Natural Beauty (AONB) boundary in response to the potential for the development to unacceptably affect the Natural will have a significant adverse Beauty of the AONB. The current proposals include a total of approximately 19.3 km of underground cable through impact on the AONB, as and in the vicinity of the Dedham Vale AONB. Specifically, the underground cable through the AONB is extended to recognised in Chapters 5 and 7 the East Anglia Connection Node (EACN) substation with a section of underground cable also proposed in the Corridor and Preliminary vicinity of Great Horkesley where the preferred corridor is in close proximity to the AONB. Routeing and Siting Study (CPRSS) 3.10.173 A detailed study will be required National Grid develops its proposals informed by the relevant National Policy Statement (NPS) is EN-5 which makes in all underground areas and it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although detailed route options presented it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual for consideration impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. National Grid has proposed to extend the use of underground cable technology beyond the Area of Outstanding Natural Beauty (AONB) boundary in response to the potential for the development to unacceptably affect the Natural Beauty of the AONB. The current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB. Specifically, the underground cable through the AONB is extended to the East Anglia Connection Node (EACN) substation with a section of underground cable also proposed in the

vicinity of Great Horkesley where the preferred corridor is in close proximity to the AONB. We will continue to reflect

on the detail of any feedback and update the proposals as appropriate and necessary.

Ref no.	Summary of matters raised	National Grid's response
Design qu	uestion	
3.10.174	Query and / or concern raised around the source of the materials for pylon construction	National Grid works with a range of contractors to procure construction related materials such as steel for the construction of pylons for major infrastructure projects.
		The sourcing of these materials typically occurs when the principal construction contractor is appointed by National Grid. The appointed construction contractor will source materials that ultimately meet required technical specification, are at the current market rate and can be delivered as per the construction programme.
3.10.175	Has a notional cost been applied to all impacts (landscape,	The methodology for assessing the environmental impacts of a development does not generate a notional cost that can be used as part of a wider cost weighting exercise.
	environment, quality of life, tourism, wellbeing etc) and	The Environmental Impact Assessment (EIA) process focuses on identifying whether or not the impacts of the Project would result in significant or not significant environmental effects.
	formally weighted against financial cost?	In the event that significant effects are generated, mitigation measures such as planting or the creation of biodiversity habitat may be required. These measures will have an intrinsic financial cost associated with them (such as purchasing and/ or construction) but these are not a material consideration within the remit of the EIA process.
3.10.176	Are the existing overhead lines being recycled?	The existing 400 kV network is still required and will remain in use upon operation of the Project. National Grid recycles materials as much as possible.
3.10.177	Will the Project be connected to the proposed battery storage unit to the west of Hutton Country Park?	At the time of our non-statutory consultation in 2022 the Project had two confirmed customers wishing to connect into the National Grid, these are to be connected into the proposed new East Anglia Connection Node (EACN) substation node on the Tendering Peninsula. Neither of the two contracted customers are associated with the battery storage at Hutton.
3.10.178	Is there any way to harness the heat that will be produced by the overhead lines / underground cables?	Underground cable installation shall be designed to limit any temperature increases. It is unlikely that we would look to harness heat as our design for the underground cabling is based on quick and efficient heat dispersion. Holding heat in the ground could potentially affect the performance of our circuits.
3.10.179	How many cables per phase are intended for the new proposed route?	We intend installing three underground cables per phase which totals 18 underground cables.
Economic	Economic / Employment impact	
3.10.180	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.

Ref no.	Summary of matters raised	National Grid's response
		Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include: traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
3.10.181	The Project will negatively impact proposed development / The Project will restrict future development	National Grid has obtained information on development proposals within the planning system for the area potentially impacted by the Project and considered whether its proposals need to be amended. The nature of response varies as in some cases proposals in the early stage of design can be amended to be designed around the National Grid infrastructure but in other cases the National Grid proposals have been amended in response. We consider this can be done through detailed alignment design rather than change to the preferred corridor. We do not consider the proposals unreasonably restrict known housing plans.
3.10.182	National Grid should provide local job / employment opportunities as part of the Project / National Grid should produce a 'Skills and Employment Strategy' to accompany the Project	National Grid are at the heart of the UK's transition to a clean, green electricity network. During construction, we will work with our suppliers to develop opportunities for local employment and to bring benefit to the local economy through our projects. There are also huge opportunities in the renewable energy sector that our proposals support. As the Government explain in the Energy White Paper (EWP), fighting climate change offers huge opportunity for growth and job creation. The global markets for low-carbon technologies, electric vehicles and clean energy are fast growing. The Government estimate zero emission vehicles could support 40,000 jobs by 2030 and 40 GW of offshore wind in the same period will support up to 60,000 jobs.
		Altogether the UK Government's Net Zero Strategy sets out a vision that will support up to 440,000 jobs by 2030 and see every home in the country powered by offshore wind. Our own analysis in our Job That Can't Wait report, shows that the country needs to fill 400,000 jobs in the energy sector in the next three decades to deliver Net Zero by 2050.
		At National Grid, we are investing around £1.3 billion every year, wiring up our communities to the next generation clean electricity network, so that every household can be powered by renewable energy by 2030. Where we are delivering those network investments, aside from opportunities for local suppliers, we work with schools and local authorities to encourage the next generation of engineers and help the long term unemployed develop new skills.
		When operating in an area, we have a Community Grant Programme which offers grants to local community groups and charities. This allows local charities and not-for-profit groups to apply for support for community based initiatives that deliver social, economic, or environmental benefits.
		We know that our responsibility as a business goes beyond safely building new energy infrastructure to enable a cleaner, fairer, and affordable future. We want to leave a lasting positive impact where we build our projects, to help those areas and communities thrive and to support a sustainable future. Our Responsible Business Charter sets out our commitments and ensures that responsibility is woven through every we do. It focusses on five key areas where we believe we can really make a difference: the environment, our communities, our people, the economy, and our governance.
		We are working with stakeholders and communities to understand what is important to them and will endeavour to deliver initiatives in the region to support those priorities. There are four key areas where we believe we can bring benefit to those who are hosting the infrastructure that supports the green energy transition:

# Ref no. Summary of matters raised

## **National Grid's response**

- Natural Environment we will build partnerships with environmental groups and NGOs where we can support initiatives that enhance the landscape, biodiversity, and availability of green space within the areas we are constructing our projects.
- Net Zero we will help to support the region in achieving its own net zero priorities.
- Skills and employment we are extending our Grid for Good programme, and building other
  partnerships, to deliver training and skills development in the region, to encourage the next generation of
  green energy workers
- Community Grant Programme when projects are in construction, through our Community Grant Programme, charities and not- for- profit organisations can apply for a grant towards community-based initiatives that deliver social, economic, and environmental benefits.

In addition, the government recently ran a consultation seeking views on how community benefits should be delivered for communities that host onshore electricity transmission infrastructure. We continue to engage with government on this topic and will work with communities and stakeholders to implement the outcome of this consultation.

## **Environmental impact**

# 3.10.183 The Project will cause a negative impact on landscape / amenity

National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.

Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.

We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.

The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.

As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.

Ref no.	Summary of matters raised	National Grid's response
3.10.184	Other areas should be protected too, not just the Area of Outstanding Natural Beauty (AONB)	National Grid recognises that even after careful routeing and siting and consideration of other measures, there will be a need for additional use of undergrounding to achieve compliance with its duties and the relevant policy framework within which it operates.
		Following further assessment further undergrounding is proposed extending around 1 km from the north of the Area of Outstanding Natural Beauty (AONB) for approximately 14 km through to the East Anglia Connection Node (EACN) substation, as well as an additional section of around 5.3 km close to the AONB near Great Horkesley. Underground cabling is also proposed for a short section for a 400 kV overhead line crossing near Fairstead and approximately 4.6 km from just north of the Lower Thames Crossing (LTC) through to Tilbury Substation.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation if required, this may include measures at particular locations to reduce a change in views of the Project or to better integrate infrastructure into the wider landscape.
3.10.185	Consideration needs to be given to the carbon footprint of the Project during construction (e.g. construction methods, materials, transport, etc)	National Grid has set challenging targets to reduce the carbon emissions of our organisation, including a specific commitment to deliver carbon neutral construction by 2025/26. Key to the delivery of this commitment is to measure the carbon footprint of our projects through concept, detailed design and into delivery and construction using a range of best practice carbon tools and data sets.
		Prior to construction, and as part our procurement process, carbon management and carbon reduction forms a key award criteria for all projects. At tender stage National Grid require all contractors to calculate a detailed carbon footprint of the project using our Carbon Interface Tool (CIT), this provides a Capital Carbon baseline in Tonnes of CO2e* from which the contactors are then incentivised (via Key Performance indicators) and quarterly reviews to reduce the Carbon Footprint of the project during construction. Contractors are contractually required to provide carbon data on a quarterly basis to demonstrate performance against carbon reduction commitments agreed at contract award.
		We also have a range of Net Zero working groups within Electricity Transmission that explore low carbon innovations and approaches, these groups bring together our contactors and our supply chain to help to reduce the carbon footprint of the materials and resources required to deliver National Grid Projects. These groups are: Low-carbon concrete, Low-carbon steel and aluminium, Net Zero construction and Low Carbon cables. These working groups all report progress to an overarching Net Zero forum.
		The carbon calculations derived from the CIT are used to inform progress against National Grid's overall strategic commitments to reducing carbon emissions across its portfolio of projects and meeting its Net Zero targets for construction projects'.
		*CO2e/ Carbon Dioxide equivalent: is the number of metric tons of CO2 emissions with the same global warming potential as one metric ton of another greenhouse gas.
3.10.186	The Project will result in a negative impact on the environment generally (no details given)	National Grid will be undertaking an Environmental Impact Assessment (EIA), this will consider the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.

Ref no.	Summary of matters raised	National Grid's response
3.10.187	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated.  National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.
		The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.
3.10.188	Opposition to the use of nuclear generation (waste, storage, etc)	National Grid is not a nuclear generator but has a duty to respond to generation customers wanting to connect to the transmission network. The Project is currently proposed to fulfil connection offers for two offshore wind farms, North Falls and Five Estuaries and an interconnector linking with Germany. However, other new connections for new offshore wind and nuclear power generation projects and for interconnectors into East Anglia are expected to continue in addition to the current contracted position and although connection for nuclear generation does not currently form part of this Project, the Project will provide capacity for future generation from various generators, including Sizewell C, to be transmitted across electrical boundaries within East Anglia and the wider transmission network.
3.10.189	Suggestion that National Grid shift towards more renewable, storage and distributive generation, and away from centralised generation	The Government's energy policy is to move away from large coal fired power generating stations to more numerous onshore and offshore generation sites and, as such, the electricity transmission network is now becoming more decentralised. The Government recognises the complexities with balancing supply and demand from renewables generation and securing this flexibility will increasingly come from energy storage systems and interconnected capacities with other electricity markets and consumer/ smart technologies. National Grid's licence is for the transmission of electricity in England and Wales. In East Anglia, the existing transmission system, built in the 1960's, was to supply regional demand centered around Norwich and Ipswich. The existing transmission network in this area does not have sufficient capacity to accommodate the new decentralised generation, hence the requirement for the new infrastructure.
3.10.190	Concerned about future sustainability of energy (general concern, not limited to the Project)	With the move away from large coal fired power generating stations to more numerous onshore and offshore generation sites, the electricity network is now becoming more decentralised. The Government recognises the complexities with balancing supply and demand from renewables generation and securing this flexibility will increasingly come from energy storage systems and interconnected capacities with other electricity markets and consumer/ smart technologies. The Government Energy White Paper (EWP) states that "renewables now account for over one third of electricity generation, up from 7% in 2010". To meet the predicted doubling in electricity demand by 2050 and the Government's 2050 Net Zero target, the EWP, whilst not planning for a specific technology solution predicts that "a low cost, Net Zero consistent system is likely to be composed predominantly by wind and solar" but also complementing intermittent renewables with technologies including nuclear and gas with carbon capture and storage.
3.10.191	Oppose the disturbance of existing mature woodlands	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity, which includes areas of existing mature woodland. Route design progression takes

Ref no.	Summary of matters raised	National Grid's response
		account of existing biodiversity features, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation, as informed by Environmental Impact Assessment (EIA).
3.10.192	The Project is unsustainable and doesn't address the 17 United Nations (UN) sustainable development goals	Goal 7 of the United Nations (UN) Sustainable Development Goals is for 'Affordable and Clean Energy' with an emphasis on progress in energy efficiency and an increase in renewable energy generation over fossil fuels. Goal 13 relates to Climate Change. One of the top five key messages from the 2012 Report 'Making Peace with Nature' emphasises It "the coming decade is crucial. Society needs to reduce carbon dioxide emissions by 45% by 2030 compared to 2010 levels and reach Net Zero emissions by 2050" The Project is required to provide sufficient capacity to accommodate the growth in new energy generation from offshore wind, nuclear power and interconnection with other countries. This is in accordance with the UK Government's ambition to achieve Net Zero emissions by 2050 and considered in line with that of the UN goal.
3.10.193	Long term environmental benefits of other options (underground cables / undersea) would outweigh the initial higher cost	may have landscape benefits, this is not always the case with other environmental factors.
		National Grid set out capital and lifetime cost summaries for Project options in their response to the Offshore Electricity Grid Task Force (OffSET) group (available on the Project website). The lifetime cost for the onshore option between Norwich Substation, Bramford Substation and Tilbury Substation were at the time identified as £1,136 m compared to the offshore High Voltage Direct Current (HVDC) option between Norwich Substation, Bramford Substation and Tilbury Substation of £5,099.83 m. This cost differential was considered by National Grid to be substantial. An offshore option would also still require development of onshore infrastructure between the coast and Norwich, Bramford and Tilbury substations.
		In response to a request by Essex County Council on behalf of all host local planning authorities, National Grid has agreed to fund an independent review of cost options. As part of the backcheck and review process, costs are reviewed and updated in accordance with the latest costing information. These may therefore, in some cases, supercede previously published costings.
		Offshore options also have the potential to impact the environment and would need to be constructed within internationally designated sites. National Grid will continue to develop the preferred option with stakeholders, using the principles of the Holford Rules and careful routeing and siting, to find a solution that least affects the environment. We will be undertaking an Environmental Impact Assessment (EIA), which is a formal exercise that considers the likely significant effects on sensitive environmental receptors that may be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered.
		Onshore undergrounding also has potential effects on the environment, particularly ecology and archaeology. The effects on different environmental aspects need to be balanced, along with socio-economic and cost factors. The National Policy Statement (NPS) EN-5 states that "The Government does not believe that development of overhead lines is generally incompatible in principle with developers' statutory duty under section 9 of the Electricity Act to have regard to amenity and to mitigate impacts. In practice new above ground electricity lines, whether supported by lattice steel towers/pylons or wooden poles, can give rise to adverse landscape and visual impacts, dependent upon their scale, siting, degree of screening and the nature of the landscape and local environment through which they are routed. For the most part these impacts can be mitigated, however at particularly sensitive locations the potential

Ref no.	Summary of matters raised	National Grid's response
		adverse landscape and visual impacts of an overhead line proposal may make it unacceptable in planning terms, taking account of the specific local environment and context". Dedham Vale Area of Outstanding Natural Beauty (AONB) is considered a sensitive location in landscape and visual terms and, hence, the balance of competing factors at this location has resulted in an underground section.
3.10.194	Concern about the geological impacts the Project will have on water drainage / general geological impacts	A hydrology and land drainage assessment will be undertaken as part of the Environmental Impact Assessment (EIA). This will consider the ground conditions, which will be a consideration in the drainage design, and the suitability of Sustainable Drainage Systems (SuDs) where required. The EIA will also include an assessment on geology and hydrogeology, identifying any potential impacts and introducing mitigation, where required.
3.10.195	The Project will impact designated sites – e.g. Site of Special Scientific Interest (SSSI),	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Site of Special Scientific Interest (SSSI) and Ancient Woodland.
	Ancient Woodland and a Royal Society for the Protection of Birds (RSPB) reserve	The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required mitigation requirements. We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.10.196	Flood risk / drainage needs to be taken into account with respect to both temporary and permanent construction works	A Flood Risk Assessment (FRA) for temporary and permanent works will be undertaken as part of the Environmental Impact Assessment (EIA) for the Project, the findings of which will be presented within the Environmental Statement (ES). In the event mitigation in the form of flood compensation land is required, this will be presented in the Project submission.
3.10.197	Within the Area of Outstanding Natural Beauty (AONB) undergrounding still causes significant damage and blight, with swathes up to 100 metres wide dug up	The installation of underground cabling would broadly adopt the following process: initially the removal of topsoil and storage of a width sufficient to allow for construction machinery to work and the digging of the trenching required for cabling would be engineered. The cabling would then be laid in the trench, soils would be backfilled and hedgerows and shrubs reinstated where practicable. At this point a typical grass seed mixture would be scattered to encourage regrowth.
		It is anticipated that within 6-12 months upon completion of the construction of the underground cabling, there would be minimal visibility of the works at ground level and the landscape would return to pre-construction views and settings.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project, including the undergrounding, and will identify any need for additional mitigation if required, this may include screening at particular locations to reduce a change in views of the Project or to better integrate infrastructure into the wider landscape. In the event mitigation is required, these will be presented within the Code of Construction Practice (CoCP) for the Project.

Ref no.	Summary of matters raised	National Grid's response
3.10.198	Importing renewable energy technologies and materials from other countries (e.g. China) is shifting dependence on fossil fuels from other countries (e.g. Russia and the Middle East) to China.	The sourcing of renewable energy technologies and materials is outside of the remit of National Grid. However, once a generator of renewable energy has applied to National Grid for a connection, National Grid has a statutory duty under its licence to respond.
3.10.199	Have the flood risks due to climate change been considered at the substation?	National Grid will as part of the iterative design process for the Project, reduce the land take deemed necessary to construct and/ or operate the works associated with the East Anglia Connection Node (EACN) substation as far as practicable.
		This process will reduce the impact on the identified flood zone where the proposed EACN substation would be located. Notwithstanding this, a Flood Risk Assessment (FRA) for the Project will be undertaken as part of the Environmental Impact Assessment (EIA) for the Project. The FRA will include consideration for potential impacts of flood risk from rivers, surface water and groundwater sources, considering for the potential for both temporary and permanent impacts, taking account of the effects of climate change over the projects design life. The findings of which will be presented within the Environmental Statement (ES).  In the event mitigation in the form of flood compensation is required this land will be presented in the Project submission.
3.10.200	Concern about the impact on and damage to soils	National Grid will reinstate all land temporarily required for construction to a standard no worse than prior to construction in areas where disturbance has occurred. This includes the creation of additional planting for the purpose of screening views where new infrastructure would be located.
		In addition to the above and specific to soil, where land would be temporarily impacted during the construction phase, the control measures and processes to reinstate land will be defined within a Soil Resource Plan (SRP) which will be submitted as part of the Development Consent Order (DCO) application.
		Measure to control soil storage and how we would reinstate disturbed land would include; how and where the topsoil and subsoil would be stripped and stockpiled (such as dimensions to maintain soil nutrients and quality), if any stockpiles would be treated to reduce weed growth and where soil is to be reinstated, and the mechanisms how this would be achieved without being to the detriment of soil quality (such as over-compaction).
3.10.201	Request that the Project should avoid passing over, or under, any woodland	The process of route design takes into account the avoidance of woodland wherever possible. Where woodland may be either directly or indirectly affected an Arboricultural Impact Assessment (AIA) will be produced setting out mitigation measures to reduce the impact on retained arboricultural features. Mitigation measures, such as root protection measures would feed into the outline Construction Code of Practice (submitted with the Development Consent Order (DCO) application).
3.10.202	Concern regarding impact on land under agri-environmental	Whilst the avoidance of land under agri-environment schemes is taken into account when developing the final Project alignment, it is inevitable, with land under various schemes being widespread, that this cannot be avoided completely. National Grid will continue to work with all affected landowners including farmers who maintain land

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	schemes (e.g. Countryside Stewardship)	subject to various agri-environment schemes to understand the impacts on their scheme and to work with them as the Project is developed. Any potential effects on this land will be assessed and this, along with any proposed mitigation, reported in the Environmental Statement (ES). Particular agricultural matters can also be written into voluntary land agreements.
3.10.203	Suggest that the Department for Environment, Food and Rural Affairs (Defra) 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites' is applied in design and construction of the Project	<ul> <li>Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (the Department for Environment, Food and Rural Affairs (Defra), 2009);</li> <li>Department for Environment, Food and Rural Affairs (Defra, 2009) Safeguarding our Soils: A Strategy for England;</li> <li>Technical Information Note 049. Agricultural Land Classification (ALC) Protecting the Best and Most Versatile (BMV) Agricultural Land (Natural England, 2012);</li> </ul>
		<ul> <li>Guide to assessing development proposals on agricultural land (Natural England, 2021);</li> <li>Guidance Note: Working with Soil Guidance Note on Benefitting from Soil Management in Development and Construction (The British Society of Soil Science, 2022);</li> <li>British Standard Specification for Topsoil and Requirements for Use (BS3882:2015);</li> <li>Good Practice Guide for Handling Soils. Cambridge: The Farming and Rural Conservation Agency (Ministry of Agriculture, Fisheries and Food (MAFF), 2000);</li> <li>ALC of England and Wales. Revised Guidelines and Criteria for Grading the Quality of Agricultural Land (MAFF, 1988); and</li> <li>A new perspective on land and soil in Environmental Impact Assessment (Institute of Environmental Management and Assessment (IEMA), 2022).</li> </ul>
3.10.204	National Grid recognise that significant damage to the Area of Outstanding Natural Beauty (AONB) would result from use of overhead lines even near to the AONB (Corridor and Preliminary Routeing and Siting Study (CPRSS) 5.1.4; 5.5.5;	National Grid develops its proposals informed by the relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy.  National Grid has proposed to extend the use of underground cable technology beyond the Area of Outstanding Natural Beauty (AONB) boundary in response to the potential for the development to unacceptably affect the Natural

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	5.5.24;7.5.15; 7.5.16; Appendix B30)	Beauty of the AONB. The current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley.
Financial	compensation	
3.10.205	No detailed assessment of private financial loss to affected landowners resulting from the Project	At the early stages of routeing and siting of the Project and before we have had individual discussions with affected landowners, we are unable to fully assess private financial loss. As the Project design progresses to the route alignment stage, the possible impacts on private financial loss may become clearer to assess.  Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review) If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.
		If there are any specific concerns about the devaluation of property, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>
3.10.206	The Project will devalue my property / Impact on property value (no location given).	National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.
		If there are any specific concerns about the devaluation of property, please contact the Project team:
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		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>
3.10.207	Request for adequate financial compensation / Impacted individuals need to be compensated	All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review)

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		If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.
		If there are any specific concerns about the devaluation of property, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>
3.10.208	Financial compensation to landowners should be fair regardless of location / property type	National Grid uses the same land rights and acquisition strategy across all its projects regardless of location.
Health an	d Safety	
3.10.209	Concerns around the use of carbon fibre fishing rods and poles in the vicinity of high voltage electricity (e.g. risk of arcing electricity from cables onto rods)	Fishing close to overhead lines without mitigation measures in place can cause fatalities if rods and poles get too close to the conductors.
		This is something that National Grid is aware of and will manage through the design process and through liaison with local landowners to remove these risks potentially through local restrictions.
3.10.210	Concerned about health risks associated with overhead lines (e.g. Electric and Magnetic Fields (EMFs), Cancer)	The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. All of the equipment which forms part of this Project, will be fully compliant with these polices, set to protect everyone. This will be fully and publicly documented in the Development Consent Order (DCO) submission.
3.10.211	The Project may result in a negative impact on mental health / health and wellbeing of residents	National Grid recognises people may have concerns about the health effects of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.
		We have sought to reduce potential effects on communities and residents through routeing and design. We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.
		The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns.

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		We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:
		• Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)
		Email us: contact@n-t.nationalgrid.com
		<ul> <li>Write to us: FREEPOST N TO T (No stamp or further address details are required)</li> </ul>
		The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all of its equipment comply fully with those exposure limits. Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed overhead lines, underground cables and substation will be designed to ensure they are fully compliant with these policies and guidelines. This ensures that health concerns
		relating to EMFs are properly and adequately addressed.
3.10.212	Concerns about the safety of overhead lines	400 kV overhead lines are designed to remain robust and operational in the worst weather conditions in the UK. Although overhead lines are more susceptible to disruption from lightning and high winds, they are also comparatively easy and cost-effective to repair and maintain compared to underground cables. It should also be noted that the majority of the existing National Grid network is made up of overhead lines, which have been proven to be a reliable form of electricity transmission in the UK climate.
3.10.213	Overhead lines and related infrastructure can be dangerous to construct and maintain / Overhead lines are unsafe for the workers / operatives of whom build and maintain them	Any form of construction has built in risk associated with different activities. All our contractors undertake risk assessments and follow safe systems of work as per the specific Method Statement, regardless of technology type being constructed, which in turn will be independently reviewed by National Grid. This Risk Assessment and Method Statement (RAMS) will follow industry standard practice.
3.10.214	Consideration needs to be given to the operation of light aircraft that could be impacted by the Project	Our review of airfields within 4 km of the preferred corridor identified 10 General Aviation (GA) sites, one military site (Wattisham Flying Station) and the Mid and South Essex National Health Service (NHS) Broomfield Hospital which receives helicopters from a helipad on the roof of the main hospital building.  The airfield operators will be consulted as the design of the Project evolves and we will endeavour to design a solution that safely accommodates airfield operations as far as practicable.
3.10.215	Suggest installing night-time lighting on pylons and other highvis markings on pylons and	Details of National Grid's equipment including pylons is available to pilots on aerial mapping. In respect of lighting the relevant regulations only require lighting on pylons in specific circumstances. National Grid conforms to these requirements.

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	overhead lines for safety of aircraft	
Heritage		
3.10.216	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. In the event that impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.
		Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).
		We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.10.217	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking a Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify likely significant effects on archaeological sites arise. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
Mitigation		
3.10.218	A visual impact mitigation plan that considers National Grid's Horlock Rules needs to be provided.	The iterative design development of the Project will consider the Horlock Rules as guiding design principles for substations. These principles will form part of the 'embedded mitigation measures' presented within the Environmental Statement (ES) which have been implemented during the design of the Project to reduce its impact(s) on the surrounding environment and receptors.  All embedded mitigation measures will be detailed in the ES for the Project and will be presented as part of the application for a Development Consent Order (DCO).
3.10.219	Investment should be made to the natural amenities along the whole of the Project	In the event the Project significantly impacts natural amenities, mitigation as appropriate will be proposed to reduce the effect. Mitigation for such impacts would likely be in the form of sympathetic siting of infrastructure and planting for the purpose of integration and screening. These will be implemented as tangible mitigation that address the specific impacts identified.
3.10.220	Suggest that planting and screening is used to mitigate the visual impacts of the Substations	Through the routeing and siting exercise, National Grid has sought to and will continue to seek to maximise the existing landform and vegetation to screen the Project as far as practicable as it passes through the wider landscape.

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		Where the Environmental Impact Assessment (EIA) concludes that additional mitigation would be of benefit, screening in the form of planting would be implemented to further integrate the East Anglia Connection Node (EACN) substation into the wider landscape.
3.10.221	Suggest additional planting and screening / The visual impacts of the overhead lines and related infrastructure need to be mitigated (e.g. made unobtrusive)	Through the routeing and siting exercise, National Grid has sought to and will continue to seek to maximise the use of existing landform and vegetation to screen the Project as far as practicable as it passes through the wider landscape.
		Where new infrastructure is required as part of the Project and the Environmental Impact Assessment (EIA) concludes that additional mitigation would be appropriate, measures to reduce effects can include the use of underground cables in the areas of highest amenity value (e.g. Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
3.10.222	Consider the use of Defra schemes to replant hedgerows	The process of route design takes account of biodiversity and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. An Environmental Impact Assessment (EIA) is being undertaken which will identify effects and mitigation, and National Grid is working closely with the relevant statutory bodies, for example Natural England.
		A suite of ecological surveys will be undertaken on the Project, which will inform the design and approach to mitigation. Currently we are not proposing to utilise the Department for Environment, Food and Rural Affairs' (Defra's) planting scheme to facilitate environmental mitigation required as part of the Project.
		We are however working closely with the relevant statutory bodies, including Natural England regarding the Projects Biodiversity Net Gain (BNG) target.
		The Environment Act 2021 introduces a mandatory requirement for 10% BNG for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all available options.
3.10.223	Not convinced by mitigation plans to offset the environmental impact of the Project / Need for further discussion of mitigation plans	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.
	with relevant stakeholders	We will continue to engage with Statutory Environmental Bodies (SEBs) and the applicable local planning authorities on aspects relating to the Project, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.

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3.10.224	Need more information on the mitigation (e.g. planting and screening) of the impacts of Substations	The EIA which will be submitted with the Development Consent Order (DCO) application will include an assessment of the effects of the Project on the environment. The assessment will identify the potential for significant effects and highlight where mitigation is required to offset likely significant effects. National Grid is working closely with the relevant statutory bodies, for example Natural England. The design would allow for landscape planting around Cable Sealing End (CSE) compound and the East Anglia Connection Node (EACN) substation, which would reduce effects on views and landscape setting.
3.10.225	Request that mitigation is put in place prior to construction	An Environmental Impact Assessment (EIA) will be undertaken for the Project. As part of the assessment process mitigation will be identified to reduce environmental effects where they arise.
		Mitigation will be included within the design and form part of the construction works for the Project. The majority of mitigation will be implemented during the construction period, these typically include planting, reinstating hedgerows and landform. Some mitigation can be implemented pre-construction but these are typically relate to ecology and cultural heritage, where for example, protected species are translocated to areas where construction activities are not occurring, to the completion of trial trenching and the recording of archaeological assets found.
		The mitigation requirements and control measures identified for the Project will be documented within the Environmental Statement (ES) for the Project, which will form part of the Development Consent Order (DCO) application.
3.10.226	National Grid recognise that that mitigation in the form of alternate routes (Corridor and Preliminary Routeing and Siting Study (CPRSS) 5.1.4; 5.5.5) alternative pylon design (CPRSS 5.5.18; Appendix B30) or more likely significant sections underground would be required in respect of section F close to the AONB (CPRSS 1.3.40; 3.1.9; 5.5.8; 5.5.9; Appendix B30).	National Grid develops its proposals informed by the relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. National Grid has proposed to extend the use of underground cable technology beyond the Area of Outstanding Natural Beauty (AONB) boundary in response to the potential for the development to unacceptably affect the Natural Beauty of the AONB. The current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley.
Needs ca	se	
3.10.227	Criticism of needs case / The Project is not needed or wanted	National Grid has a statutory duty to facilitate new connections and maintain a safe National Electricity Transmission System (NETS). The Project would facilitate the connection agreements that are in place with two offshore wind farm projects and an interconnector project on the basis of their connection into a new East Anglia Connection Node (EACN) substation. The Project will also reinforce the local transmission network which currently does not have the capacity needed to reliably and securely transport all the energy that is likely to be connected in the future – driven by the Government's plan to increase offshore wind from the current 8.5 GW to 50 GW by 2030 to meet the increased demand.

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		The needs case is reviewed at each critical stage of the project and without a robust demonstrable need the project would be revised or fall away. Currently the contracted generation supported by Future Energy Scenarios (FES) show a clear need for the Project.
3.10.228	General comments to scrap / rethink / change the Project	National Grid has a statutory duty to facilitate new connections and maintain a safe National Electricity Transmission System (NETS). The Project would facilitate the connection agreements that are in place with two offshore wind farm projects and an interconnector project on the basis of their connection into a new East Anglia Connection Node (EACN) substation. The Project will also reinforce the local transmission network which currently does not have the capacity needed to reliably and securely transport all the energy that is likely to be connected in the future – driven by the Government's plan to increase offshore wind from the current 8.5 GW to 50 GW by 2030 to meet the increased demand, potentially doubling by 2050 according to the Government Energy White Paper (EWP).  National Grid has presented its strategic options and its approach to routeing and siting of the Project in the published 'Project Background Document' and Corridor and Preliminary Routeing and Siting Study (CPRSS), both dated April 2022. The process of options appraisal of all the identified options is undertaken using guidance (National Grid's Approach to Consenting) which provides a thorough, consistent and transparent framework to inform the appraisal of project options and decision-making. Its aim is to ensure that decisions regarding the Project design (route, location or technology option) are based on a full understanding and balance of the technical, socioeconomic, environmental and cost implications of each option. Once all identified options have been appraised, the option or options that best meet National Grid statutory duties and obligations are selected as the preferred option or options. National Grid has taken into consideration comments made to date in the development of the Project (as provided in this document) and will continue to engage with the relevant stakeholders and members of the public prior to the submission.
3.10.229	Criticism of Government green agenda / policy	The Government, in its Energy White Paper (EWP), states its ambition to achieve Net Zero emissions by 2050 whilst meeting a large increase in future demand (potentially doubling by 2050). To achieve this the EWP has outlined a plan to increase energy from offshore wind to 40 GW by 2030 (target increased to 50 GW in April 2022) although it is recognised that whilst a low cost, Net Zero consistent system is likely to be composed predominantly by wind and solar it also likely to require complementing intermittent renewables with technologies including nuclear and gas with carbon capture and storage. Under its transmission licence, National Grid has a statutory duty to respond to generation customers wanting to connect to the transmission network, whether this be for wind, solar, nuclear, tidal or from other forms of generation.
3.10.230	National Grid must first demonstrate the need for this project	The need for the Project is set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) in sections 1.2 and 1.3 and is responding to the need to connect and transmit the power from new low carbon energy sources to consumers. The existing network being of insufficient capacity for the scale of new connections proposed.
Project Fi	nance / Costs	
3.10.231	Consideration that tax payers will be funding the Project	National Grid is funded by a price control mechanism which is agreed with and set by the Office of Gas and Electricity Markets (Ofgem). National Grid pays up front the many millions of pounds it costs to build a new power transmission line. The cost is then gradually passed to customers through their electricity bills over the next 40 years

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	(construction and operations / maintenance)	or so. The funding for these up-front costs comes from National Grid's shareholders and the institutions that lend us money. Across all our investments in our vital infrastructure, this amounts to many billions of pounds. They invest in us because they expect that we will make a sufficient profit to provide an appropriate return on their investment and eventually pay them back. This brings a major benefit to electricity bill payers as it allows the recovery of the cost of our investment to be spread out over many years, rather than having a spike in electricity bills when we build a large new transmission connection.
3.10.232	Criticism that focus should be on bringing down the cost of energy to an affordable level for everyone, not on projects that will increase the price of energy for the consumer	When developing transmission network proposals, National Grid has a statutory duty, under the Electricity Act 1989, to act in an efficient, coordinated and economical way, and have regard to the desirability of preserving amenity. National Grid are also regulated by the Office of Gas and Electricity Markets (Ofgem). Ofgem's role is to protect consumers through delivering a greener, fairer, energy system. Ofgem works with Government, industry and consumer groups to help deliver a Net Zero economy at the lowest cost possible to consumers through established price control mechanisms. Cost is a factor that has been, and will continue to be, taken into consideration throughout the development of the Project as these will eventually be passed on to the consumer. The option National Grid has taken forward provides a very low economic cost per Megawatt (MW) compared to the multiple offshore High Voltage Direct Current (HVDC) links that would be required to match the capacity of this option. However, there are many external factors influencing the energy markets that also affect the affordability of energy for the consumer.
3.10.233	Decision for the Project should not be influenced by current political concerns / the current cost of living crisis	The Project is needed to support the Government's target of connecting 50 GW of offshore wind by 2030 and have Net Zero carbon emissions by 2050. A need has also been identified to resolve electrical power boundary issues in East Anglia. There are three onshore power boundaries where additional system flexibility is required to ensure that power generated in the area from offshore wind farms and nuclear generation has more ways to flow into the wider electricity transmission network during maintenance or faults on the system. The Project therefore forms part of the Government's long term objectives for the provision of more sustainable and flexible energy in the UK.
3.10.234	Any increased costs should be met by customers, Government and National Grid	National Grid is funded by a price control mechanism which is agreed with and set by the regulator, the Office of Gas and Electricity Markets (Ofgem). National Grid pays up front the many millions of pounds it costs to build a new power transmission line. The cost is then gradually passed to consumers through their electricity bills over the next 40 years or so. The funding for these up-front costs comes from National Grid's shareholders and the institutions that lend us money. Across all our investments in our vital infrastructure, this amounts to many billions of pounds. They invest in us because they expect that we will make a sufficient profit to provide an appropriate return on their investment and eventually pay them back. This brings a major benefit to electricity bill payers as it allows the recovery of the cost of our investment to be spread out over many years, rather than having a spike in electricity bills when we build a large new transmission connection.
		Cost is a factor that has been, and will continue to be, taken into consideration throughout the development of the Project as these will eventually be passed on to the consumer through the agreed Ofgem mechanisms. The option we have taken forward provides a very low economic cost per Megawatt (MW) compared to the multiple offshore High Voltage Direct Current (HVDC) links that would be required to match the capacity of this option. This is particularly important in the current climate of high energy prices and potential energy shortages in supply.

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3.10.235	Cost is the main factor driving the proposed Project design / economic priority in Project design	Cost is one of the factors that needs to be considered in making decisions on the Project.  The relevant National Statement Policy (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances. However, the Government is aware that overhead lines may not be appropriate in particularly sensitive areas. The process of appraising different identified options is undertaken using guidance (National Grid's Approach to Consenting). Its aim is to ensure that decisions regarding the scheme design (route, location or technology option) are based on a full understanding and balance of the technical, socio-economic, environmental and cost implications of each option. Once all identified options have been appraised, the option or options that best meet National Grid statutory duties and obligations are selected as the preferred option or options. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers to whom the costs are eventually passed, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality.  The consideration of cost within the decision-making process is therefore one of National Grid's statutory duties and is not something that National Grid could make representation to the Office of Gas and Electricity Markets (Ofgem) to waive.
3.10.236	Acknowledge that there is a need to find a balance between the Project design (i.e. undergrounding, new overhead lines, upgrading existing lines, etc) and cost	The process of options appraisal of all the identified options is undertaken using guidance (National Grid's Approach to Consenting) which provides a thorough, consistent and transparent framework to inform the appraisal of project options and decision-making. Its aim is to ensure that decisions regarding the project's design (route, location or technology options) are based on a full understanding and balance of the technical, socio-economic, environmental and cost implications of each option. Once all identified options have been appraised, the option or options that best meet National Grid statutory duties and obligations are selected as the preferred option or options. The existing overhead lines cannot be further adapted safely and securely to enable them to carry more power or additional conductors (wires) added to take the amount of power being proposed in East Anglia.
3.10.237	An (independent) review of the financial costs of the options for the Project should be undertaken, taking into account all costs through the whole of the Project lifecycle.	In response to a request by Essex County Council on behalf of all host local planning authorities, National Grid has agreed to fund an independent review of cost options.
3.10.238	Request that National Grid presents evidence of the cost of transmission within electricity bills and willingness of consumers to absorb costs of undergrounding, preference for different types of pylons, and preferences for	The Electricity Transmission part of a bill, which is subject to approval by the energy regulator, the Office of Gas and Electricity Markets (Ofgem), covers the cost of building and maintaining the network. Our transmission network cost in 2020/ 2021 was £20 of the average annual household bill of £612 – that's around 3.3% of a total annual bill. National Grid publishes information on this on their website: <a href="https://www.nationalgrid.com/electricity-transmission/about-us/breaking-down-your-bill">https://www.nationalgrid.com/electricity-transmission/about-us/breaking-down-your-bill</a> As part of its regulatory requirements set by Ofgem National Grid has previously carried out research considering consumers' willingness to pay for mitigating the visual impact of existing transmission infrastructure in nationally designated landscapes in Great Britain, i.e. National Parks, Areas of Outstanding Natural Beauty (AONBs) in

Ref no.	Summary of matters raised	National Grid's response
	reinforcement vs new infrastructure	England and Wales, and National Scenic Areas in Scotland. The outputs of this survey are available to view on National Grid's website at: <a href="https://www.nationalgrid.com/sites/default/files/documents/NationalGridWTPreport.pdf">https://www.nationalgrid.com/sites/default/files/documents/NationalGridWTPreport.pdf</a>
Project His	story	
3.10.239	Energy transmission should have been considered before generating the energy offshore / Consider generation and transmission as separate developments	With the move away from large coal fired power generating stations to more numerous onshore and offshore generation sites, the electricity transmission network is now becoming more decentralised. National Grid's licence is for the transmission of electricity in England and Wales. In East Anglia, the existing transmission system, built in the 1960's, was to supply regional demand centered around Norwich and Ipswich. The existing transmission network in this area does not have sufficient capacity to accommodate the new decentralised generation, such as offshore wind farms, The Government has made a commitment to connecting 50 GW of offshore wind by 2030 and have Net Zero carbon emissions by 2050. This Project is needed to enable this commitment given the existing electricity transmission capacity restrictions. National Grid also has a statutory duty to respond to customers wanting to connect to the electricity transmission system, in this case North Falls and Five Estuaries offshore Wind Farms. There is also a requirement to resolve electrical boundary issues in East Anglia. There are three onshore power boundaries where additional system flexibility is required to ensure that power generated in the area from offshore wind farms and nuclear generation has more ways to flow into the wider transmission network during maintenance or faults on the system. The Project therefore forms part of the Government's long term objectives for the provision of more sustainable and flexible energy in the UK.
3.10.240		The Project is one of a number of essential network reinforcements needed to deliver on the UK's Net Zero target — without it, cleaner, greener energy generated offshore would not be able to be transported to homes and businesses across the country. To meet the predicted doubling in electricity demand by 2050 and the Government's 2050 Net Zero target, the Government's Energy White Paper (EWP), whilst not planning for a specific technology solution, predicts that "a low cost, Net Zero consistent system is likely to be composed predominantly by wind and solar" but also complementing intermittent renewables with technologies including nuclear. This mix of energy production is considered to provide a more sustainable approach in line with the United Nations (UN) Sustainable Development Goals and would be facilitated by this Project.
Public Rig	ghts of Ways (PRoW)	
3.10.241	Concern around disruption of Public Rights of Way (PRoW) / Mitigation must be put in place for pedestrians / equestrians directly or indirectly impacted	Through routeing and siting, National Grid has sought and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).
		The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. In the event that mitigation is required, measures may include, the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.  Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.

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Substatio	on location	
3.10.242	Substations should be located along the coastline	The Corridor and Preliminary Routeing and Siting Study (CPRSS) reported on the substation siting work. This included consideration of sites closer to the coast which were less preferred due to the greater costs and environmental effects associated with much longer overhead line connections (two parallel overhead lines) to make the necessary connections on to the existing National Electricity Transmission System (NETS).
3.10.243	Suggestion to expand the Bulls Lodge substation (next to the A130 bypass)	This refers to the Bulls Lodge Substation on the existing National Transmission System (NTS). National Grid has considered this feedback and whether the capability of the existing network could be sufficiently increased by expanding this connection. We found that this would not be suitable as it would require a new connection onwards to Tilbury Substation and there is insufficient space for a new connection to the east of Chelmsford due to other constraints and environmental features.
3.10.244	Suggest that substation is built with capacity to allow for future connections to renewable energy projects (i.e., sufficient headroom capacity)	National Grid will work with its customers to ensure, where practicable, that the substations are designed to enable future connections to the site if required. However, the requirement and extent of any future proofing is a balance of site specifics and the level of certainty of potential future connections. The proposed 400 kV substation in the Tendring district is required to connect two offshore wind farms, (North Falls and Five Estuaries) and an interconnector with Germany (Tarchon Energy). Additionally, approximately 60% of current offshore wind projects are looking to connect their energy onshore along the east coast.
3.10.245	Suggest the substation should be located at Bradwell rather than Tendring	Several options were considered in developing the Project and information on these is available in the Corridor and Preliminary Routeing and Siting Study (CPRSS). Following the close of the 2022 non-statutory consultation and review of feedback we have backchecked our previous work and considered other potential substation siting options in this area and felt they had different impacts and offered no benefit over the option we are taking forward.  In respect of connecting at the old Bradwell power station, there is an existing overhead line connection to the Bradwell B site. This has been operating at lower voltage (132 kV) and has not been used for a few years and is in generally poor condition. This overhead line would need to be rebuilt however this onward connection via Rayleigh to Tilbury is also constrained by urban development and further designations and some sections may need to be rerouted if connections were made at Bradwell. Additionally, any connection point also requires two points of connection to the National Electricity Transmission System (NETS) (to meet compliance standards) requiring either a double overhead line through the Bradwell peninsula and onwards to separate locations or a connection back to Bramford (in addition to one towards Tilbury). A connection to Bramford would require connections to cross the Special Protection Area (SPA) designated Blackwater Estuary (3 km to 7 km tunnel likely to be required at much greater cost) as well as interact with other Special Area of Conservation (SAC) and SPA designations.  The existing network through Norfolk, Suffolk and Essex would also still need to be upgraded to transport the electricity due to come onto the network in the Norwich area and provide the necessary two points of connection to the NETS. Taken together a Bradwell point of connection requires a greater amount of new infrastructure and is therefore less economic and efficient and expected to be associated with greater environmental effects.

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3.10.246	The Tendring Substation should be placed adjacent to Lawford	Our proposals that were consulted upon in our 2022 non-statutory consultation indicated location of the East Anglia Connection Node (EACN) substation in the general location of Lawford substation. In response to feedback and further study and initial design work the proposed EACN substation is proposed to be located in close proximity to the Lawford substation (across the road) with the proposed location selected to benefit from existing screening vegetation and to facilitate the 400 kV connections that need to be made to it.
Technolog	gy / Operations	
3.10.247	Comment supportive of use of overhead lines (no location given)	National Grid develops its proposals in light of its duties, relevant policies and guidance. National Policy Statement (NPS) EN-5 identifies the use of overhead lines to be appropriate in most locations but with the use of underground cables in some circumstances. The NPS provides the framework within which we develop our proposals. The majority of the proposals involve overhead line (approximately 160 km) with underground cable used where appropriate, e.g., to reduce the impact on the Area of Outstanding Natural Beauty (AONB) and for crossings of existing 400 kV overhead lines (approximately 30 km).
3.10.248	Opposed to the use of wind power / Opposed to providing infrastructure that caters for / facilitates the use of wind power	The use of energy storage solutions to manage variation/ unpredictability in generation and demand will increase as Great Britain becomes more reliable on renewables in the future, replacing the flexibility provided by fossil fuel generation. In their 'Smart Systems and Flexibility Plan 2021', Department for Business, Energy and Industrial Strategy (BEIS) (now known as the Department for Energy Security and Net Zero) and the Office of Gas and Electricity Markets (Ofgem) propose that by 2030 and beyond energy storage solutions will be deployed in 'optimal locations and at all scales'. The Plan states that storage will provide significant flexibility (approximately 13 GW) and address challenges associated with low carbon system, including maintaining energy security and integrating and maximizing the use of the Government's plan for 40 GW (target increased to 50 GW in April 2022) of offshore wind by 2030 and other low carbon generation.
		The Government Energy White Paper (EWP) states that "renewables now account for over one third of electricity generation, up from 7% in 2010". To meet the predicted doubling in electricity demand by 2050 and the Government's 2050 Net Zero target, the EWP, whilst not planning for a specific technology solution predicts that "a low cost, Net Zero consistent system is likely to be composed predominantly by wind and solar" but also complementing intermittent renewables with technologies including nuclear.
		Under its transmission licence, National Grid has a statutory duty to respond to generation customers wanting to connect to the transmission network. The Project is currently proposed to fulfil connection offers for two offshore wind farms, North Falls and Five Estuaries which will contribute to the Government's 50 GW target. The advantages of offshore wind farms compared to onshore are that they are considered more efficient (with higher wind speeds and consistency in direction) and are further away from local populations. Assessment and mitigation of impacts relating to offshore wind farms on the seabed would be addressed as part of any Environmental Impact Assessment (EIA) carried out by the developer.
3.10.249	Concern about the requirement for aerial monitoring of overhead lines via helicopters (noise /	Maintenance inspections of overhead line routes are typically undertaken using a helicopter or small aircraft to monitor their condition on an annual basis. As helicopters and small aircraft can cover extensive distances over a short period of time, this method of inspection is considered less disruptive than other methods.

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	disruption, and carbon footprint due to use of fossil fuels during maintenance)	Additionally, thermal images are taken every six to eight years, which capture high definition imagery of each pylon and allows for a detailed assessment of the condition of the pylon.
		To supplement the aerial photography and inspections, routine ground level walking inspections are also undertaken.
		Inspection regimes for overhead lines are very similar to underground cables, however any repair is a lot less intrusive for overhead lines than underground cables, where ground excavation would be required, typically using more fossil fuels and finite materials.
3.10.250	Concern relating to reported short fall in the capacity of the electrical distribution system west of Eye / south of Diss (e.g., impact on businesses)	National Grid is responsible for the High Voltage Transmission Lines that transport electricity around the country. The Local Distribution Network which supplies residential and industrial properties with their electricity is not owned and operated by National Grid. In this area the distribution network is owned and operated by UK Power Networks (UKPN). National Grid is in discussions with UKPN in relation to the interactions between the Project and the UKPN network.
3.10.251	Concerned about potential future increase in the number of lines	Any future new overhead line would need to follow the planning process in place at the time and would be assessed for taking account of the existing infrastructure at that time.
		Known future developments are taken into account in the cumulative assessment undertaken as part of the Environmental Impact Assessment (EIA) and presented in the Environmental Statement (ES). The current Project cannot account for unknown future developments.
3.10.252	Suggestion to use a different (more sustainable) material for the pylons	It is important that our equipment runs efficiently and safely. We operate the network in accordance with the Security and Quality of Supply Standard (SQSS) and all our structures have to be approved and verified as being able to withstand the loads imparted on them through their lifecycle. The materials (steel) we use for pylons are industry standard and best meets the requirements.
3.10.253	Coastal erosion and construction of sea defences as mitigation should be considered as part of an offshore scheme	National Grid believes the onshore option we have taken forward, rather than an offshore scheme, best meets the technical and physical/geographical constraints and enables the network to operate to the required standards. More information on these options and the process of consideration can be found in our Corridor and Preliminary Routeing and Siting Study (CPRSS).
3.10.254	Oppose use of overhead lines as they are an outdated and inefficient technology	National Grid is constantly looking into new innovations and investigating alternative technology types. These are explored and assessed for suitability. Currently, overhead line solutions offer the most economic and efficient solution to transmit our electricity over long distances.
3.10.255	Overhead lines / substations are noisy and disruptive	Noise from overhead lines is predominately determined by the conductor design, voltage and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions.
		Pylon fittings, such as insulators, dampers, spacers and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development

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		consent to support scoping out noise associated with overhead lines from the Environmental Impact Assessment (EIA).
3.10.256	Overhead lines are susceptible to weather events and vulnerable to terrorism / warfare / sabotage	The majority of the existing National Grid transmission network is constructed from overhead lines, these are a proven and reliable form of electricity transmission in the UK. They are designed to meet current design and safety standards and also to operate in a range of typical and abnormal weather conditions found in the UK. Standards are regularly reviewed and any adjustments to these standards (for example with regards to climate change) would need to be applied to the entire network. At this stage no known changes are required for a new overhead line project.
		Unforeseen events of sufficient severity to cause damage to infrastructure are very rare in the UK but do occur. Overhead lines could be subject to adverse weather conditions such as high wind speeds and lightning strikes, and also due to disruption from an external factor such as sabotage. To reduce sabotage from the ground as far as practicable we install anti-climb measures such as barb-wiring. However, the possibility of interference still remains as pylons are typically situated in isolated locations where constant surveillance is impractical.
		In the unlikely event an overhead line was to be damaged, a network wide monitoring system would detect the fault almost immediately and the circuit would be tripped, and the live current stopped. At the point of repairing any damage, overhead lines are comparatively easier and more cost-effective to repair and maintain than alternative transmission technology.
		National Grid also undertakes regular inspections of the overhead line using thermal imaging to assess damage to the overhead line from weather or other causes. This means low level damage caused would be identified and repaired prior to failure of the line.
3.10.257	The Project should ensure that there is sufficient capacity to meet future needs / future proofing the capacity	The Project is one of a number of network reinforcements needed to deliver 50 GW of offshore wind by 2030. There are further onshore reinforcements identified in the region in National Grid's Network Options Assessment (NOA) that are needed in addition to the Project.
		The current proposal would ensure the maximum capability is provided, when compared with alternatives and other technologies at the most efficient, economic and co-ordinated way.
		Together these network reinforcements will provide capacity for future generation from various generators to be transmitted across electrical boundaries within East Anglia and the wider transmission network.
3.10.258	Concerns about disruption caused by (and cost of) ongoing maintenance of equipment	National Grid has thousands of kilometers of overhead lines, underground cables and supporting infrastructure such as Cable Sealing End (CSE) compounds. We have well established and standardised practices to undertake maintenance works as outlined above. By the implementation and adherence to such practices, cost and time efficiencies across the network have been identified and maximised where possible.
		The typical lifespan of an overhead line and the underground cable elements of a project would be approximately 40 years, depending on use and location.
		Maintenance inspections of overhead line routes are typically undertaken using a helicopter or small aircraft to monitor their condition on an annual basis.

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		Additionally, thermal images are taken every six to eight years, which capture high definition imagery of each pylon and allows for a detailed assessment of the condition of the pylon.
		To supplement the aerial photography and inspections, routine ground level walking inspections are also undertaken. The CSE compounds would contain equipment that can be accessed remotely to monitor the condition of the cabling.
Tourism		
3.10.259	Concerned about impact of the Project on leisure and tourism	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure. Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.
		Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include: traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
Visual imp	pact	
3.10.260	Overhead lines should be located within valleys to minimise visual impact	National Grid recognises the potential reduction in visual effects from routeing using valleys as set out in the Holford Rules. The Rules also note the consideration of other potential effects such as on heritage assets and ecological features which should also be taken into account when reaching a balanced decision on any proposed route alignment and pylon siting. We will take this consideration into account when developing the alignment and balance it against the other Holford Rules in reaching a decision as to siting and alignment of the pylons.
3.10.261	There should be a visual and noise swathe, plus amenity impact hotspot assessment	National Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise. These concerns are taken seriously including when planning new infrastructure such as that proposed for the Project.
		We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate UK standards and mitigated where necessary. We set strict technical standards for the equipment we install on our network including the proposed new East Anglia Connection Node (EACN) substation, and extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.

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		Noise from overhead lines is predominately determined by the conductor design, voltage and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types be used, consideration for this would be assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings, including insulators. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the EIA.  Deciding where and how to build new high voltage electricity lines is a complex issue and We are mindful of the potential effects this infrastructure may have on local communities and the concerns these may bring. In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an
		assessment on both landscape character and visual amenity.
3.10.262	Support for undergrounding the Project when passing through sensitive areas	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient (including adhering to the Electricity Act 1989), National Grid's Licence Conditions and Planning Policy), which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. The National Policy Statement (NPS) EN-5 makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. Our proposals include underground cable within the Dedham Vale Area of Outstanding Natural Beauty (AONB) in accordance with NPS EN-5.  The Environmental Impact Assessment (EIA) will assess the impacts on sensitive areas and inform mitigation
0.40.000		measures to be adopted by the Project which will be presented in the Environmental Statement (ES).
3.10.263	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable Sealing End (CSE) Compounds and Substations)	The relevant National Statement Policy (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.
		In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.
		A landscape and visual impact assessment will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.

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3.10.264	Cumulative effect of onshore National Grid Projects within East Anglia	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.
3.10.265	Using of application of the 'Holford Rules' to lessen visual impact is an outdated methodology / The Project does not meet the Holford Rules	National Grid disagrees that the Holford Rules are outdated as these are referenced within the policy framework which is relevant to the Project. We would note that application of the Holford Rules typically involves balancing alternative solutions which can present conflicting Holford compliance. We use the Environmental Impact Assessment (EIA) process to inform the balance and define our proposals that we take forward, and which are also informed by feedback. Further details on the proposed routeing and siting of the Project can be found in the Design Development Report, published as part of the 2023 non-statutory consultation.
3.10.266	Consider potential alternative colour schemes for the pylons / Consider alternative aesthetic of pylons to complement the landscape	National Grid uses a standard industrial grey paint colour across the majority of its assets.  It is a colour we have used for several years as it provides a sympathetic balance between pylons blending into landscapes and skylines when seen from differing views and natural lighting.
		The new T-pylon differs in colour from the lattice pylons given its bulkier appearance. If there are areas where there are specific requirements to mitigate visual impacts and it is considered that a different paint colour may reduce the visual impact further, these will be looked at and reviewed on a case-by-case basis with the findings presented within the Environmental Statement (ES) for the Project.
3.10.267	Substation does critical damage	National Grid has considered other locations for the East Anglia Connection Node (EACN) substation to the west but cannot progress those as there is insufficient space to accommodate the multiple connections that are required. In response to feedback and following detailed consideration the underground cable through the Area of Outstanding Natural Beauty (AONB) is proposed to be extended from the AONB all the way to the EACN substation. The remaining overhead line is also proposed to be routed to increase the separation to Ardleigh within the constraints that exist to reduce potential effects. We consider this to be consistent with the relevant policy framework.

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Wildlife / E	Ecology impact	
3.10.268	The Project will have a negative impact on bees / Bees will be unable to navigate under high voltage overhead lines	Bees can be affected if the hive is under (or close to) a power line and the hive becomes charged. This can be eliminated by screening or earthing the hive.  Other than that effect, there does not seem to be evidence of Electric and Magnetic Fields (EMFs) or overhead lines adversely affecting bees. In the United States of America, the strip of land along power lines, have been shown to be particularly attractive to bees.  Additionally, National Grid has worked with the British Beekeeping Association to establish hives around our sites,
		including high voltage substations, which have thrived. Embedded design measures will avoid any potential effects.
3.10.269	Concern about local badger populations and impacts on them	Based on the suitability of habitats and rural location of most of the Project, it is envisaged that badgers ( <i>Meles meles</i> ) are widespread throughout the areas required for construction and operation related activities. Given the length of programme and the fact that badger setts can appear (as well as be abandoned) at any time, it is proposed that a survey as part of the Environmental Impact Assessment (EIA) will focus on main badger setts as well as existing data from local record centres. Further badger survey work relating to all other badger setts would be undertaken as part of the pre-construction works post submission of the Development Consent Order (DCO) application to ensure adherence to legislation and animal welfare.
		Pre-construction surveys and sett classifications will be undertaken and, where appropriate, agreed working practices will be set out in the Code of Construction Practice (CoCP). These measures will be implemented to minimise impacts potential on badgers as far as practicable.
3.10.270	Concerns regarding effect on birds of prey from overhead line frequencies / disturbance	The European Commission's (EC's) Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) reviewed the environmental impacts of Electric and Magnetic Fields (EMF) in its 2009 review. Its conclusions on the EMF research on wild birds was "the changes observed are neither all in the same direction nor consistent". There have been no established effects of overhead line EMFs on any animal.  National Policy Statement (NPS) EN-5 also provides a summary of the research in terms of ecosystems stating, "There is little evidence that exposure of crops, farm animals or natural ecosystems to transmission line EMFs has any agriculturally significant consequences." This is reiterated in the current draft NPS EN-5 (2021).
3.10.271	Request that timing of construction avoids sensitive seasons (e.g. breeding season, wintering period) to mitigate disturbance on birds	An outline Code of Construction Practice (CoCP) will be prepared, which will include measures agreed with environmental stakeholders, and submitted as part of the Development Consent Order (DCO) application. This will outline environmental mitigation measures to be implemented during the construction phase of the Project. The outline CoCP will include precautionary working methods for protected species (i.e. avoiding the breeding bird season when removing vegetation or undertaking bird checks prior to removal). This outline CoCP will be further developed by the Main Works Contractor prior to construction and adhered to throughout the construction phase.
3.10.272	Request that 'Priority Habitats' / 'Irreplaceable Habitats' are avoided by both the routeing of	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity, including priority and irreplaceable habitats. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological

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	overhead lines and siting of substations as part of the more	sensitivity, through avoidance or mitigation. The Environmental Statement (ES) for the Project will present the effects on biodiversity and where required mitigation requirements.
	detailed routeing development process	We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
3.10.273	Consider that, where sensitive areas cannot feasibly be avoided, overhead lines are "bridged" over sensitive areas with pylons positioned outside of the sensitive areas, rather than positioned on the sensitive area, so that direct habitat losses can be avoided	There are many engineering factors that influence and limit the final positioning of an individual pylon and National Grid will always seek to position pylons balancing the engineering factors with that of the environment, as is fundamental to the routeing process. The span between individual pylons is governed by the minimal clearance distance of the conductors (wires) above the ground. Generally speaking, to minimise direct impact on a sensitive area by 'bridging,' taller pylons would be needed in order for them to be placed farther apart but still maintain the minimal ground clearance.
3.10.274	Suggest that National Grid contribute to Biodiversity Net Gain (BNG) Credit Pilot Schemes (e.g. at Spains Hall and Abbotts Hall)	The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.  As well as seeking to avoid and minimise our impact to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas and we will consider all options that are available to us, including pilot schemes, such as Spains Hall, which are important and will assist in shaping BNG policy.
3.10.275	Negative impact of the Project on available land for grazing animals and horses	National Grid recognises that there is the potential for impacts. We are and will continue to work with all landowners including farmers and equestrian facilities who may be affected by the proposals to understand the impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements. There will also be mitigation put in place where wild animal grazing maybe affected.
		As well as possible effects on humans, possible effects of Electric and Magnetic Fields (EMFs) on various animals have been studied a number of times. No detectable effects of EMFs have been found on, for example, health, milk production, fertility, and behaviour. This is confirmed in National Policy Statement (NPS) EN-5 which states: "There is little evidence that exposure of crops, farm animals or natural ecosystems to transmission line EMFs has any agriculturally significant consequences."
		As well as the potential direct biological or health effects addressed above, indirect effects such as microshocks can occur as a result of electric fields. Microshocks are small spark discharges which are similar to a static shock after walking across a nylon carpet for example. The Project will be designed in accordance with the principles of the

Ref no.	Summary of matters raised	National Grid's response
		Government's Code of Practice 'Power Lines: Control of Microshocks and other indirect effects of public exposure to electric fields' to ensure these are mitigated.
3.10.276	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology – including protected species	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.10.277	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.

Ref no.	Summary of matters raised	National Grid's response
3.10.278	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.  The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.  We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment,
		including appropriate mitigation measures and techniques, to take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.10.279	Minimise potential impact on flying birds from the overhead lines	Overwintering birds will be assessed in the biodiversity assessment as part of the Environmental Impact Assessment (EIA). Survey work for wintering /passage birds commenced in September 2022 and the scope of survey has been agreed with Natural England. The potential for collision with new overhead lines and risk of mortality through electrocution will also be assessed in the EIA. Should adverse impact be identified, they will be minimised as far as possible, where practicable.
3.10.280	Suggested target for Biodiversity Net Gain (BNG) / Requested ecological enhancements	The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.10.281	Request that consideration is given to minimising the impact that the Project has on Local Wildlife Site (LWS) / County Wildlife Site (CWS)	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity, including designated sites of ecological value. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Statement (ES) for the Project will present the effects on biodiversity and where required mitigation requirements.
		As part of the Environmental Impact Assessment (EIA) process for the Project, a suite of ecological surveys have been and will continue to be undertaken, the findings of which will inform the design and approach to mitigation.

Ref no.	Summary of matters raised	National Grid's response
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
		We will continue to engage with the relevant stakeholders and local planning authorities on aspects relating to Local Wildlife Sites (LWS) and County Wildlife Sites (CWS), including appropriate mitigation measures and techniques (should they be required) and to take their views into account as the Project continues to develop.

## Section 1: South Norfolk feedback

Figure 3.23- South Norfolk section map

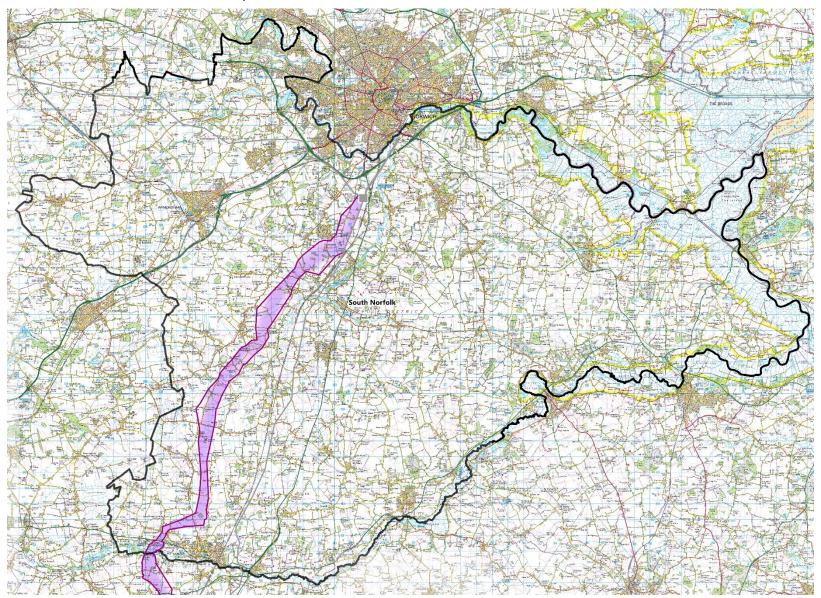


Table 3.11- Summary of consultee comments on Section 1: South Norfolk and National Grid's response

Ref no.	Summary of matters raised	National Grid's response
Agricultura	al land	
3.11.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.
Communit	ty / Social impact	
3.11.2	Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.  We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.  The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:  • Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)  • Email us: contact@n-t.nationalgrid.com  • Write to us: FREEPOST N TO T (No stamp or further address details are required)
Construction impacts		
3.11.3	•	National Grid will work closely with the relevant authorities and their highways teams to understand and gain
3.11.3	local area caused by construction works (e.g. construction traffic	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control

Ref no.	Summary of matters raised	National Grid's response
	travelling along local roads, road closures, etc)	working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.11.4	The construction traffic relating to the Norwich Main Substation needs to be managed	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform the drafting of the Construction Traffic Management Plan (CTMP) for the Project. Within the CTMP, it will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
Consultati	on	
3.11.5	Comment supportive of proposal / engagement that has-taken place - feel listened to	National Grid note the respondent's feedback.
Design Ch	nange	
3.11.6	Underground cables should be used in this section	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV infrastructure.
		No such designations or crossing locations have been identified in this section which is therefore proposed as an overhead line. We will undertake an Environmental Impact Assessment (EIA) to assess the potential impact of the Project and this will identify any need for additional mitigation.
3.11.7	Existing overhead lines in this section should be removed / undergrounded	The existing electricity transmission network provides power, via the local distribution network, into the local area where it is used in homes and businesses. The need case and funding for the Project is to deliver the new network reinforcement needed, rather than to remove existing overhead lines by undergrounding them. Unless required for mitigation, undergrounding existing overhead lines on the transmission network would not be in accordance with National Policy Statement (NPS) EN-5 and would result in substantial cost to bill payers. There may also be significant environmental impacts due to the removal works on sensitive ecological and archaeological receptors as well as constraints from either existing built form of unsuitable ground conditions.

Ref no.	Summary of matters raised	National Grid's response
3.11.8	Cumulative effect of the Project alongside existing overhead lines	National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.  For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of
		the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.
3.11.9	Concern around the Project causing communities to become encircled by overhead lines	The current preferred corridor has been routed to achieve some separation from the existing 400 kV overhead line, such that villages are not encircled by overhead lines to both sides. Separation is inevitably reduced in certain locations due to the presence of constraints to routeing and environmental features. Detailed assessment reported in the Environmental Impact Assessment (EIA) will identify any measures considered to be necessary to reduce potential effects which will also consider the potential for effects potentially arising from close paralleling existing 132 kV overhead line and new 400 kV overhead line infrastructure.
3.11.10	Suggest routeing the Project offshore out at sea / Should consider routeing the Project undersea	Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Study (CPRSS) examines several strategic options that were considered for the Project that might achieve the required reinforcement including offshore options. These options were not taken forward as they did not fully address technical or physical/ geographical constraints or enable the network to operate to the required standards.
		An offshore connection (each is limited to around 2 GW at present) would have a third of the capacity of the proposed overhead line connection and therefore to transfer the anticipated levels of power generation, three offshore connections would be required including associated infrastructure such as convertor stations. This would make the connection significantly costlier to energy bill payers.
		In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich. Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area.
3.11.11	The Project should run in closer to / parallel to the existing 400 kV overhead lines	We note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, in this section there are constraints and features that mean, overall, we consider close paralleling would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. A number of residential properties are present in close proximity to the existing 400 kV overhead line meaning that if the lines were close paralleled it would result in the properties having an overhead line close to both sides. There are also some locations where the combination of existing physical and environmental features (road infrastructure, commercial and residential properties etc) present very substantial challenges to routeing and siting. As a result, whilst close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the overhead lines have to converge and diverge, and those increased

Ref no.	Summary of matters raised	National Grid's response
		effects on properties with an overhead line to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.11.12	Suggest that the existing overhead lines in this section are reinforced / upgraded instead	The existing transmission network in the region is being upgraded to ensure the system is running at its most efficient performance. The existing networks are not able to be upgraded sufficiently to cope with the future demands expected on the network. As a result, new lines and substations will be required to accommodate the changing demands on the network.
3.11.13	Concerned about the route being in too close proximity to recently built housing developments / land being considered for potential future development	National Grid notes the presence of applications for planning permission. It should be noted that there are no minimum distances prescribed in UK law between overhead lines and homes. Any implications on landscape and visual receptors, on residential amenity, or arising from concerns over electric and magnetic fields (EMFs), are robustly assessed and balanced as part of the decision-making process. If any proposed application is granted, further dialogue would be undertaken with the property owner in the future – subject to any planning application being made.
3.11.14	Suggestion that the Project is routed away from specific location	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation which has resulted in several changes to the current preferred corridor. Further details on these changes can be found in the Design Development Report, published as part of the 2023 non-statutory consultation. Further changes to the preferred corridor and route alignment will be considered as the Project develops.
3.11.15	Support alternative corridor NB2 as it is less disruptive (e.g. it aligns more closely with existing infrastructure)	National Grid note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line and consider the specific of close parallel mean that there are greater effects from the use of corridor NB2. In this section there are constraints and features that mean that overall we consider, that in the context of the Project, close paralleling in this area to lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. A number of residential properties are present in close proximity to the existing 400 kV overhead line meaning that close paralleling would result in the properties having overhead lines on both sides. There are also some locations (such as Flordon) where the combination of existing physical and environmental features (railway and road infrastructure, commercial and residential properties, woodlands and orchards) present very substantial challenges to routeing and siting. As a result, whilst close paralleling may appear beneficial in some sections, overall the increased environmental effects where overhead lines have to converge and diverge, and those increased effects on properties with overhead lines to both sides are considered greater than those introduced by a new route alignment separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.

Ref no.	Summary of matters raised	National Grid's response
3.11.16	Suggestion that the Project is routed away from the Waveney Valley	National Grid has considered the feedback, however note that a crossing of the Waveney Valley cannot be avoided in developing a connection between Norwich and Bramford without an undue diversion to the west with a longer, less direct route. We have applied the guidelines on overhead line routeing known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report. A longer and less direct route would be expected to transfer effects to a greater number of other receptors and be less consistent with the Rules and would therefore be considered less preferable. Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.
3.11.17	Seek alternative routeing (no route specified)	National Grid considered alternative strategic proposals as well as alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published in support of the 2022 non-statutory consultation. We have updated our proposals in the light of the 2022 non-statutory consultation feedback, and we will continue to reflect on the detail of any feedback and back-check and update the Project as appropriate and necessary.
3.11.18	Suggest that the Project are routed as far away from populated / residential areas as possible	Deciding where and how to build new high voltage electricity lines is a complex issue and National Grid is mindful of the potential effects this infrastructure may have on local communities and the concerns these may bring. National Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise and potential health impacts. It has sometimes been suggested that minimum distances between properties and overhead lines should be prescribed.
		We do not consider this appropriate since each instance must be dealt with on its merits. However, we have always sought to route new lines away from residential property on grounds of general amenity where possible.
		We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate UK standards, and mitigated where necessary. We set strict technical standards for the equipment we install on our network. These will apply to the proposed new East Anglia Connection Node (EACN) substation located in the Tendring District, and extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.
		Noise from overhead lines is predominately determined by the conductor design, voltage and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types be used, consideration for this would be assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the

Ref no.	Summary of matters raised	National Grid's response
		application for development consent to support scoping out noise associated with overhead lines from the Environmental Statement (ES).
		In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an assessment on both landscape character and visual amenity.
		The health and safety of the public, local communities and employees is central to everything that we do. The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. Our approach is to ensure that our network comply with those policies, which are set by Government on the advice of their independent advisors. The Project will be designed to ensure it is fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed.
		Policies for both noise and EMF are incorporated into the decision-making process for development consent as set out in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment complies fully with those policies and guidelines. The Development Consent Order (DCO) application will include assessments against these polices, including both construction and operational noise and EMF.
3.11.19	Suggestion that the Project should run adjacent to existing transport infrastructure	Whilst there could be potential benefits from infrastructure being concentrated geographically, i.e., by routeing the Project in close proximity to existing road and rail infrastructure, we do not consider these benefits arise for the whole route. Rail lines or roads potentially align (at least in part) with the general routeing of the Project. However, there are constraints and features that mean that we do not consider close paralleling will reduce environmental effects or improve compliance with the Holford Rules or be more consistent with the policy requirement to be economic and efficient.
		A number of residential properties, as well as hamlets, villages and towns, are present in close proximity to the existing transport infrastructure necessitating multiple diversions of an overhead line. There are also some locations where the combination of existing physical and environmental features (railway and road infrastructure, commercial and residential properties, woodlands and orchards) present very substantial challenges to routeing and siting. As a result, whilst close paralleling of transport infrastructure may appear beneficial in some short sections, overall, the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new route alignment.
3.11.20	Suggest that the Project is coordinated with works at the Norwich Main Substation, including suggestion that a link road directly on and off the A47 could be installed to accommodate traffic associated with both sites	National Grid will as part of the iterative design process undertake an assessment to understand the existing local road network which the Project may need to utilise during both the construction and operation phases. As part of this assessment, we will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network.
		Where temporary haul roads are required to be constructed to access the location of a substation such as that at Norwich, these will be carried out in consultation with the landowners and the local highway authority, to reduce impacts to local road users.

Ref no.	Summary of matters raised	National Grid's response
		The information collected as outlined above, will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. Within the CTMP, it will define the local road network that could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.11.21	Civil Aviation Authority document Civil Aviation Publication (CAP) 793 states: "The runway should, wherever possible, be designed such that trees, power lines, high ground or other obstacles do not obstruct its approach and take-off paths. It is recommended that there are no obstacles greater than 150 ft above the average runway elevation within 2,000 m of the runway mid-point." The Project is likely to mean that these recommendations cannot be satisfied and could result in airfield closures	Our review of airfields within 4 km of the preferred corridor identifies that the protection of the Obstacle Clearance Surface (OLS) is a specific requirement of Civil Aviation Authority (CAA) licensed airfields and would normally also be applied to military airfields (including Wattisham Flying Station where operations might potentially be impacted by the new power line). None of the airfields examined are licensed by the CAA. Whilst there are no statutory requirements, unlicensed airports and airfields are expected to follow guidance issued by the CAA under Civil Aviation Publication (CAP) 793 'Safe Operating Practices at Unlicensed Aerodromes'. In assessing any current or future potential obstacles or other obstructions close to an airport and airfield, the pilot needs to consider the clearance height over the obstacle based on the performance data available for the type of aircraft to be used. This includes the climb and approach gradient taking account of possible variations in the meteorological conditions and allowing for an appropriate safety margin.  We identified 10 General Aviation (GA) airfields, a single Royal Air Force (RAF) station and a Hospital Helipad near to the emerging preferred corridor. More detailed discussions with the individual airfield operators will be undertaken as the preferred alignment emerges.
3.11.22	Suggestion to keep overhead lines close to field boundaries and to angle the pylons such to make it less disruptive to growing crops	Further assessment will inform route alignment as the Project develops.  National Grid is and will continue to work with all landowners including farmers who may be affected to understand the impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable.
3.11.23	Wind farms should be built onshore instead and should be used to provide local power generation for Suffolk and Essex	National Grid has a statutory duty to respond to generation customers wanting to connect to the transmission network. The Project is currently proposed to fulfil connection offers for two offshore wind farms, North Falls and Five Estuaries and, more recently, from Tarchon Energy for an interconnector linking with Germany.
3.11.24	Suggestion that the Project should run alongside the A140	Whilst appreciating the potential benefits of infrastructure being concentrated geographically, i.e., by routeing the Project in close proximity to the A140, we do not consider these benefits arise in this section. Whilst the A140 aligns (at least in part) with the general routeing of the Project, there are constraints and features that mean that we do not consider close paralleling in the context of the Project will reduce environmental effects or improve compliance with the Holford Rules or be more consistent with the policy to be economic and efficient. It is notable also that the existing 400 kV overhead line (constructed when fewer constraints were present) does not run alongside the A140. A number of residential properties (isolated as well as hamlets, villages and towns) are present in close proximity to the

Ref no.	Summary of matters raised	National Grid's response
		existing transport infrastructure which, along with diversions to avoid other features (such as woodland) would necessitate multiple diversions of an overhead line. As a result, whilst close paralleling of the A140 may appear beneficial in some short sections, overall the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new corridor separated from existing transport infrastructure.
3.11.25	Suggestion to integrate the current proposals for a nearby solar farm and battery storage facility with Norwich Main Substation	National Grid has and will continue to consider how its proposals can best be integrated with other 3 <sup>rd</sup> party development proposals throughout the development process of the Project, responding to the different forms of development and their stage of development. We are aware of various proposals in the vicinity of Norwich Main substation and will consider these in developing our design proposals.
3.11.26	Suggestion that the Project is aligned as closely to the B1113 as possible	The B1113 lies to the west of the preferred corridor in the area between Bunwell Hill and Mulbarton. We have considered whether close alignment to this road throughout this section would be beneficial. We consider that it would reduce compliance with the Holford Rules by placing the Project closer to a larger number of residential properties (individual properties, hamlets and villages) and potentially through (mostly undesignated) woodland or alternatively require many additional changes of direction. In contrast the current preferred corridor allows for a straighter alignment with reduced effects on residential amenities and areas of woodland and is considered more compliant with the Holford Rules. Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.
3.11.27	Enter East Anglia further down the coast	National Grid has considered the feedback and concludes that a more southerly connection point for the wind farm underground cables would lead to greater interactions with environmental designations (most notably Special Protection Areas (SPA) and Special Area of Conservation (SAC)) either for the wind farm underground cables or 400 kV overhead line infrastructure. Legislation is such that other alternatives that do not interact with these designations (or interact less) should be taken forward. The Tendring peninsula wind farm landing point and East Anglia Connection Node (EACN) substation avoid such interactions and are therefore preferred at this stage
3.11.28	Suggest the Project is routed to east of Diss to avoid Roydon and Bressingham (i.e., passing through commercial, not residential, areas) / Concern relating to change in direction between Roydon and Bressingham	Further assessment and technical appraisal has been undertaken on several corridor options around Diss following feedback received from the 2022 non-statutory consultation.  While an option to the east of Diss would move the preferred corridor further away from Roydon and Bressingham, this option would introduce impacts on a greater number of residential receptors, a Grade I Listed church as well as several engineering complexities including two crossings of the railway and a crossing of the existing 400 kV overhead line. This assessment therefore concluded that an alternative corridor option to the east of Diss would be less favourable than the preferred corridor which passes to the west of Diss. Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.

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3.11.29	Concerned about over development of area (e.g. cumulative impact of solar farms, new residential and business development)	With regards to multiple developments impacting specific areas and/ or receptors through overdevelopment. Planning applications for each development would be considered on their own merit by the determining authorities. Any such application would be considered in accordance with planning policy and material considerations, such as scale, suitability and need.
		Where there is certainty of a development, such as a new residential development, being constructed, and there is adequate information in the public domain to understand the impacts of that development on the receiving environment, these will be considered within the cumulative impact assessment of the Project.
		National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.
3.11.30	Suggests underground cables are used where the Project crosses the Waveney Valley and runs close to Bressingham Village and the nearby Steam Museum and Gardens	Further assessment and technical appraisal has been undertaken on several alternative corridor and technology options around Diss following feedback received from the 2022 non-statutory consultation.
		We have considered the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.
		With regards to this area, the higher cost of underground cables to bill-paying consumers, and the environmental implications of installing and maintaining them, are not considered to be justifiable in the context of national policy or our statutory duties. We will continue to update our proposals following feedback as the Project develops and as further surveys are undertaken.
3.11.31	Request that pylons are spaced to avoid the corridor identified for the Nature Recovery Network	Through careful routeing and siting within the current preferred corridor we have tried to minimise the number of pylons in the Waveney Valley. This is in order to reduce potential impacts but also from a technical perspective to reduce the number of pylons in the flood zone and peaty soils. However, due to the length of crossing these

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	(along the Waveney and Little Ouse to the west of Diss)	constraints we are unable to avoid this area completely, thus two pylons are proposed to be within these constraints, relatively close to the River Waveney at this stage.
		Through routeing and siting we have sought to, and will continue to, reduce as far as practicable impacts on biodiversity which includes areas considered part of the Nature Recovery Network. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
3.11.32	Suggestion that the Project is routed away from Mulbarton	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Mulbarton. We have considered alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) and having reviewed these continue to consider that the preferred corridor should be taken forward at this time. We also considered alternatives raised in feedback to route to the north and west of Mulbarton but considered these less preferred as they would be longer and less direct (reducing Holford Rule 3 consistency) transferring effects to other receptors without material benefit. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report. As a result, we have routed as far east in the preferred corridor as other constraints, environmental features and residential properties allow to reduce effects at Mulbarton.
3.11.33	Suggestion that the Project is routed away from Diss	We have reviewed alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that would avoid Diss but consider the reasons for them being considered less preferred to remain valid. We have also considered a number of alternatives to the currently preferred corridor in the vicinity of Diss. An alternative corridor further to the west near Redgrave and Lopham Fen, a localised diversion of the preferred corridor to pass to the east of Wortham Ling and two alternatives passing to the east of Diss. The most western alternative was less preferred for reasons including greater effects on nature conservation interests and east of Diss alternatives less preferred mainly due to the positioning of several properties unavoidably between overhead lines. Of the remaining alternatives, passing to the east of Wortham Ling is currently preferred because of reduced effects to heritage assets and woodland. We will aim to reduce effects by use of the Holford Rules to develop the draft alignment. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.34	Suggestion that the Project is routed away from Bressingham	We have considered a number of alternative corridors to the currently preferred corridor in the vicinity of Diss. An alternative corridor further to the west near Redgrave and Lopham Fen, a localised diversion of the preferred corridor to pass to the east of Wortham Ling and two alternatives passing to the east of Diss. Overall the alternatives that avoid Bressingham were considered less preferred. The most western alternative was less preferred for reasons including greater effects on nature conservation interests and east of Diss alternatives less preferred mainly due to the positioning of several properties unavoidably between overhead lines. Of the remaining alternatives, passing to the east of Wortham Ling is preferred at this stage because of reduced effects to heritage assets and woodland. We will aim to reduce effects by use of the Holford Rules to develop the draft alignment. Guidelines on overhead line

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		routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.35	Suggestion that the Project is routed away from Tibenham	National Grid has considered the feedback from a number of respondents in this area by considering western and eastern alternative corridors. A western alternative deviated westwards to the north of Bunwell Hill passing north and west of Hargate, passing the east side of New Buckenham and re connecting with the preferred corridor to the north of Winfarthing. This would transfer effects to other similar receptors and could increase them such as on the Church of St Michael on Church Road as a result of being a longer and less direct route. As such it is considered less preferred by reducing consistency with Holford Rule 3 and Holford Rule 2. A wider eastern alternative corridor close paralleling the existing 400 kV overhead line was also considered but was also less preferred. The main reasons were that the alternative was less direct and approximately 2.5 km longer than the preferred corridor, would require two crossings of the existing 400 kV overhead line with the additional costs and technical risks this creates. It would require oversail and require tree removal within Aslacton Parish Land Site of Special Scientific Interest (SSSI) reducing compliance with Holford Rule 2. Therefore, the preferred corridor has been taken forward at this stage. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.36	Suggestion that the Project is routed away from Roydon	National Grid has considered a number of alternatives to the currently preferred corridor in the vicinity of Roydon. An alternative corridor further to the west near Redgrave and Lopham Fen, a localised diversion of the preferred corridor to pass to the east of Wortham Ling and two alternatives passing to the east of Diss. Overall the alternatives that avoid closely passing Roydon were considered less preferred. The most western alternative was less preferred for reasons including greater effects on nature conservation interests and east of Diss alternatives less preferred mainly due to the positioning of several properties unavoidably between overhead lines. Of the remaining alternatives close to Roydon, passing to the east of Wortham Ling is preferred at this stage because of reduced effects to heritage assets and woodland. We will aim to reduce effects by use of the Holford Rules to develop the draft alignment. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.37	Suggestion that the Project is routed away from Shelfhanger	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Shelfhanger. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.

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3.11.38	Suggestion that the Project is routed away from Redgrave Fen	National Grid has considered a number of alternatives to the currently preferred corridor in the vicinity of Diss. An alternative further to the west near Redgrave and Lopham Fen, a localised diversion of the preferred corridor to pass to the east of Wortham Ling and two alternatives passing to the east of Diss. Overall the most western alternative nearest Redgrave Fen was less preferred for reasons including greater effects on nature conservation interests and east of Diss alternatives less preferred mainly due to the positioning of several properties unavoidably between overhead lines. Of the remaining alternatives, passing to the east of Wortham Ling is preferred at this stage because of reduced effects to heritage assets and on woodland. We do not on this basis consider effects on Redgrave Fen to be inconsistent with policy. We will aim to reduce effects by use of the Holford Rules to develop the draft alignment. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.39	Suggestion that the Project is routed away from Bunwell	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Bunwell which is approximately 1.6 km to the west of the currently preferred corridor. An eastern alternative further from Bunwell was considered and would be close paralleling the existing 400 kV overhead line but was less preferred. The main reasons were that the alternative was less direct and approximately 2.5 km longer than the preferred corridor, would require two crossings of the existing 400 kV overhead line with the additional costs and technical risks this creates. It would require oversail and require tree removal within Aslacton Parish Land Site of Special Scientific Interest (SSSI) reducing compliance with Holford Rule 2. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.40	Suggestion that the Project is routed away from Great Moulton	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Great Moulton which is around 3 km to the east of the currently preferred corridor. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.41	Suggestion that the Project is routed away from Forncetts	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from the Forncetts. An alternative corridor to the west (deviating to the north of Tacolneston) was considered, given that to the south the preferred corridor does divert further to the west. The alternative would require a longer corridor which would be less compliant with Holford Rule 3 (approximately 25% longer) to avoid the Forncetts as well as Tacolneston, its Conservation area and loss of woodland (a County Wildlife Site (CWS) at Tacolneston Hall) and was considered more likely to lead to increased effects on Grade II* and Grade I Listed buildings and be less consistent with Holford Rule 2. A further alternative corridor to the east would potentially facilitate close paralleling of the existing 400 kV overhead line however, at a number of locations, existing residential property and other commercial

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		property is already present which would lead to greater effects or additional costs and effects of crossing infrastructure and overall was considered less consistent with the Holford Rules. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.42	Suggestion that the Project is routed away from Heywood Road	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Heywood Road. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.43	Suggestion that the Project is routed away from Tacolneston	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Tacolneston. An alternative corridor to the west of Tacolneston was considered, given that to the south the preferred corridor does divert further to the west. The alternative would require a longer corridor which would be less compliant with Holford Rule 3 (approximately 25% longer) to avoid Tacolneston, its Conservation area and loss of woodland (a County Wildlife Site (CWS) at Tacolneston Hall) and was considered more likely to lead to increase effects on Grade II* and Grade I Listed buildings and be less consistent with Holford Rule 2. A further alternative corridor to the east would potentially facilitate close paralleling of the existing 400 kV overhead line however, at a number of locations, existing residential property and other commercial property is already present would lead to greater effects or additional costs and effects of crossing infrastructure and overall was considered less consistent with the Holford Rules. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.44	Suggestion that the Project is routed away from Wreningham	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Wreningham which is approximately 1.6 km from the edge of the preferred corridor (measured from the church). In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.45	Suggestion that the Project is routed away from Low Common	National Grid has considered the feedback to avoid Low Common. An alternative corridor was assessed which deviated westwards to the north of Bunwell Hill passing north and west of Hargate, passing the east side of New Buckenham and re connecting with the preferred corridor to the north of Winfarthing. This would transfer effects to

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		other similar receptors and could increase them such as on the Church of St Michael on Church Road as a result of being a longer and less direct route. As such it was considered less preferred by reducing consistency with Holford Rule 3 and Holford Rule 2). A wider eastern alternative corridor close paralleling the existing 400 kV overhead line was also considered but was also less preferred. The main reasons were that the alternative was less direct and approximately 2.5 km longer than the preferred corridor, would require two crossings of the existing 400 kV overhead line with the additional costs and technical risks this creates. It would require oversail and require tree removal within Aslacton Parish Land Site of Special Scientific Interest (SSSI) reducing compliance with Holford Rule 2. Therefore, the preferred corridor has been taken forward. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.46	Suggestion that the Project is routed away from Cargate Common	National Grid has considered the feedback to move further from Cargate Common. A western alternative corridor was assessed which deviated westwards to the north of Bunwell Hill passing north and west of Hargate, passing the east side of New Buckenham and re connecting with the preferred corridor to the north of Winfarthing. This would transfer effects to other similar receptors and could increase them such as on the Church of St Michael on Church Road as a result of being a longer and less direct route. As such it was considered less preferred by reducing consistency with Holford Rule 3 and Holford Rule 2). A wider eastern alternative corridor close paralleling the existing 400 kV overhead line was also considered but was also less preferred. The main reasons were that the alternative was less direct and approximately 2.5 km longer than the preferred corridor, would require two crossings of the existing 400 kV overhead line with the additional costs and technical risks this creates, and would require oversail and require tree removal within Aslacton Parish Land Site of Special Scientific Interest (SSSI) reducing compliance with Holford Rule 2. Therefore, the preferred corridor has been taken forward at this stage. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.47	Suggestion that the Project is routed away from Winfarthing	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Winfarthing. We have reviewed corridor alternatives as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) and continue to consider that the preferred corridor should be taken forward at this time. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.11.48	Given the significant faults the consultation run afresh including alternatives such as but not	Prior to commencement of the 2022 non-statutory consultation, National Grid prepared a Consultation Strategy, this document sets out the details of how we proposed to consult on the project. The Strategy was shared with Local

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	limited to a strategic offshore ring-main	Authorities for comment, and we took on board their comments to inform how the consultation was carried out where possible. The consultation was run in accordance with the published strategy.
		As we scope our projects, we consider numerous technology solutions. Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia and are part of our preliminary recommended solution. National Grid's appraisals, which were based on our knowledge of the network, understanding of the capacity and costs of developing subsea links as well as evaluation of the environmental and socio—economic implications, reached a preliminary conclusion that, on balance, the most appropriate solution was an offshore Direct Current (DC) link between the Sizewell area and Kent (Sea Link) in combination with onshore reinforcement between Norwich and Tilbury (East Anglia GREEN) and onshore reinforcement between Tilbury and Grain (progressed as a sperate scheme due to the general geographic separation of potential effects). We presented our evaluation and our preliminary preferred solution at the spring 2022 non-statutory consultation, which was an opportunity for members of the public to comment (which they did).  It would have been disingenuous for us to present an offshore option to the public for consultation feedback, knowing this did not comply with the framework requirements.
		Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.
3.11.49	If cables must be routed as suggested in Chapter 7 then to protect the Area of Outstanding Natural Beauty (AONB) they must be buried wherever they fall within 3 miles / 5 km of the	National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. National Grid therefore adopts underground cable technology as mitigation within areas such as AONBs. Policy identifies no set distance by which such mitigation should be extended outside the AONB boundary.
	boundary of the AONB	National Grid identifies the requirement for mitigation (whether by additional planting, type of pylon or choice of alternative technology such as underground cable) based on consideration of the potential effects that may arise on a case-by-case basis. This takes into account the specific details of the designation (including special qualities, key views etc) and local circumstances including landform and existing vegetation. This approach allows consideration of the predicted effects arising from underground cable or overhead line technology and the Cable Sealing End (CSE) compounds (the transition sites between technologies) rather than applying an arbitrary distance that may be too great or too small for the specific circumstances.
3.11.50	Locations for Cable Sealing End (CSE) Compound sites to facilitate end point of underground section must be carefully chosen and subject to further consultation	National Grid acknowledges the requirement to carefully site the Cable Sealing End (CSE) compounds paying particular regard to the Horlock Rules and will consult on its proposals and consider any feedback provided as the Project develops.

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Design qu	uestion	
3.11.51	Query regarding why there are two entry points for the wind farm cables rather than one route	Responsibility for the connections from the offshore wind farms to the National Electricity Transmission System (NETS) and for how the connections are made lies with the individual wind farm developers. National Grid has however identified the currently proposed East Anglia Connection Node (EACN) substation location (the new connection point of the NETS) in part because of the ability to support multiple customer connection routes.
3.11.52	The Project will follow the A140 out of Norfolk. Will future dualling of the A140 be considered whilst developing the Project?	National Grid has not identified or been notified of any potential for the Project to interact with any route for future dualling of the A140 but this would be considered if such information becomes available. As it stands the Project is some distance to the west of the A140 and seems unlikely to interact with it. Similarly, any construction effects would be considered if any proposed dualling emerged as a potentially cumulative project.
Economic	c / employment impact	
3.11.53	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.
		Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include: traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
3.11.54	Request that accompanying investment is made in the transmission networks along the Project in order to meet the needs of existing and planned growth (including along the A11 Corridor, along the Cambridge Norwich Tech Corridor and at the Lotus business area)	The Project is a key part of National Grid's wider investment programme to upgrade our electricity transmission network across East Anglia to ensure we meet the expected energy increase of 15,000 MW of new generation and 4500 MW of new interconnection to connect into the region to meet future demand.
Environm	Environmental impact	
3.11.55	The preferred corridor NB1 is damaging to the environment and has been designed to save money / be easily built	National Grid decision-making is undertaken in the context of its duties and relevant policies (including under the Electricity Act and relevant planning and environmental protection policies). As such the process of route design undertaken to date has considered a wide range of factors including potential environmental effects, engineering factors, cost and programme that would arise through the development of a 400 kV connection within a number of alternative route corridors and combinations of corridors. We will continue to consider feedback provided as the

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		Project develops and back-check previous decision-making. Further findings of the Environmental Impact Assessment (EIA) will inform technology choice, route alignment and identify any necessary mitigation measures to reduce potential effects and ensure legislative compliance.
3.11.56	The South Norfolk landscape needs to be protected	The process of route design will take account of potential significant impacts on landscape and where practicable, will continue to seek to reduce impacts through routeing and other embedded mitigation. National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment of the likely significant effects of the Project on the fabric and character of the South Norfolk landscape.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
		National Grid will also submit a Landscape and Ecology Management Plan (LEMP) setting out landscaping proposals with the Development Consent Order (DCO).
3.11.57	The Project will impact designated sites - e.g. Site of Special Scientific Interest (SSSI), Ancient Woodland and Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Site of Special Scientific Interest (SSSI) and Ancient Woodland.
		The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required mitigation requirements.
		We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
3.11.58	The Project will result in a negative impact on the environment generally (no details given)	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.
3.11.59	The Project will cause a negative impact on landscape / amenity	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.

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		Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
		We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.11.60	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated, however there is currently no green belt land designations within this section. National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.
		The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.
3.11.61	The Tas Valley needs to be protected	Through routeing and siting National Grid has sought to and will continue to seek to reduce as far as practicable the impact to the Tas Valley. We will continue to consider factors that have the potential to impact the Tas Valley such as landscape character and amenity value, as we develop our proposals and seek to reduce effects. Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value, sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
		We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project.
Financial	compensation	
3.11.62	The Project will devalue my property / Impact on property value in this section	National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners

# Ref no. Summary of matters raised

### **National Grid's response**

may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.

If there are any specific concerns about the devaluation of property, please contact the Project team:

- Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.
- Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.

# 3.11.63 Request for adequate financial compensation / Impacted individuals need to be compensated

All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.

If there are any specific concerns, please contact the Project team:

- Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.
- Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.

#### Health and Safety

3.11.64 The Project may result in a negative impact on mental health / health and wellbeing of residents

National Grid recognises people may have concerns about the health effects of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.

We have sought to reduce potential effects on communities and residents through routeing and design. We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.

The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns.

We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:

- Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am 5:30pm)
- Email us: <a href="mailto:contact@n-t.nationalgrid.com">contact@n-t.nationalgrid.com</a>

Ref no.	Summary of matters raised	National Grid's response
		Write to us: FREEPOST N TO T (No stamp or further address details are required)
		The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all of its equipment comply fully with those exposure limits.
		Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed overhead lines, underground cables and substation will be designed to ensure they are fully compliant with these policies and guidelines. This ensures that health concerns relating to EMFs are properly and adequately addressed.
3.11.65	Consideration needs to be given to the operation of light aircraft and gliders from airfields in the area (e.g. Norfolk Gliding Club, Priory Farm and Tibenham / Brook Farm / Wattisham Airfield) / The siting of overhead lines presents a risk to light aircraft in the area	Our review of airfields within 4 km of the preferred corridor identified 10 General Aviation (GA) sites, one military site (Wattisham Flying Station) and the Mid and South Essex National Health Service (NHS) Broomfield Hospital which receives helicopters from a helipad on the roof of the main hospital building.  The airfield operators will be consulted as the design of the Project continues and we will endeavour to design a solution that safely accommodates airfield operations as far as practicable.
Heritage		
3.11.66	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking a cultural heritage assessment as part of the Environmental Impact Assessment (EIA) process to identify likely significant effects on archaeological sites arise. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.11.67	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. In the event that impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.
		Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).

Ref no.	Summary of matters raised	National Grid's response
		We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
Mitigation		
3.11.68	Visual impacts should be mitigated through planting and screening measures	Through the routeing and siting exercise, National Grid has sought to and will continue to seek to maximise the existing landform and vegetation to screen the Project as far as practicable as it passes through the wider landscape.
		Where new infrastructure is required as part of the Project and the Environmental Impact Assessment (EIA) concludes that additional mitigation would be of benefit, screening in the form of planting would be implemented to further integrate infrastructure into the wider landscape.
Public Rig	hts of Way (PRoW).	
3.11.69	Concern around disruption of Public Rights of Way (PRoW) / Mitigation must be put in place for pedestrians / equestrians directly or indirectly impacted	Through routeing and siting, National Grid has sought to and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).  The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. In the event that mitigation is required, measures may include, the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.  Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
Substation	1	
3.11.70	Concerned that transient workers involved in work at the Norwich Main Substation will not take consideration of the local community	We recognise that construction activity affects local people and the environment, and we work closely with our contractors to reduce disruption as much as possible. The agreed measures will be presented within the Code of Construction Practice (CoCP) which presents the control measures to be applied throughout the construction phase of the Project, and those focusing on the management of constructed related traffic will be presented within the Construction Traffic Management Plan (CTMP). It is anticipated the measures with these documents and the contractors own standards of working practices will result in the workforce respecting the local community and environment.
3.11.71	Criticism about Norwich Main Substation Location (general) / The Norwich Main Substation should be re-located elsewhere	The scope of this Project is to reinforce the electricity transmission network to meet the future demand, Norwich Main substation is an existing part of the transmission network, and this Project has not identified a driver to relocate it.

Ref no.	Summary of matters raised	National Grid's response
3.11.72	Suggest the removal of the substation at the rear of Thatchers Needle on Park Road in Diss as a complementary measure to the Project	The substation in Diss is not part of the electricity transmission network, it forms part of the local distribution network. National Grid is working with the local distribution company to identify any suitable areas of system optimisation that can be explored as a result of the Project but the removal of Distribution Network Operators (DNO) substations will not be feasible due to the role sub stations play on managing the flow of electricity to consumers within distribution networks.
3.11.73	Critcism that the Norwich area is not going to benefit from the works proposed at the Norwich Main Substation	There is a need to reinforce the region's electricity network, as the existing high voltage electricity network in East Anglia doesn't have the capability needed to reliably and securely transport the electricity that will be generated and connected to the electricity transmission network by 2030 while working to the required standards. The proposal will benefit the UK as a whole and local communities by contributing to our energy security in the future, ensuing that the national grid meets future power demands.
3.11.74	Suggest moving the Norwich Main Substation closer to the coast	The scope of this Project is to reinforce the electricity transmission network to meet the future demand, Norwich Main substation is an existing part of the transmission network and this Project has not identified a driver to relocate it.
3.11.75	Concerned about over development of the Norwich Main Substation (need to take a joined- up approach)	
3.11.76	Reduce visual impact of Norwich Main Substation	The process of route design will take account of potential significant impacts on visual amenity and will continue to seek to reduce impacts through routeing and other embedded mitigation.  The assessment of potential visual effects arising from the Project, including the connections into Norwich Main, will form part of the Landscape and Visual Impact Assessment (LVIA) which will be undertaken as part of the Environmental Impact Assessment (EIA). This assessment will include consideration of proposals for mitigating potential significant visual effects, provide planting / screening proposals where practicable and conclude with an assessment of residual effects (i.e., with the implementation of mitigation).
Tourism		
3.11.77	Concerned about impact of the Project on leisure and tourism (e.g. Bressingham Garden Centre and Steam Museum)	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure. Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (Dedham Vale

Ref no.	Summary of matters raised	National Grid's response
		Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.
		Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include: traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
Visual Imp	pact	
3.11.78	Cumulative effect of onshore National Grid projects within East Anglia / within this section	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.
3.11.79	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable Sealing End (CSE) Compounds and Substations)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.
		In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
Wildlife / E	Wildlife / Ecology impact	
3.11.80	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.

Ref no.	Summary of matters raised	National Grid's response
		The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.
		We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques, to take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.11.81	Concern about impact on Great Crested Newts (GCN)	It is currently proposed that Great Crested Newt (GCN) ( <i>Triturus cristatus</i> ) would be subject to a District Level Licence (DLL) which will cover mitigation for GCN. Under a DLL, there would be no requirement for any fieldwork for GCN or additional mitigation beyond that included in the DLL agreement. Mitigation would be located 'offsite' and at predetermined location(s) considered most suitable for habitat creation and GCN population management. This mitigation would be managed holistically by Natural England and their partners.
		A letter of comfort which sets out Natural England's agreement in principle to deliver DLL for the Project is included in the Scoping Report which was submitted in November 2022.
3.11.82	Concerned by the negative impact on horses and grazing animals	As well as possible effects on humans, possible effects of Electric and Magnetic Fields (EMFs) on various animals have been studied a number of times. No detectable effects of EMFs have been found on, for example, health, milk production, fertility, and behaviour. This is confirmed in National Policy Statement (NPS) EN-5 which states: "There is little evidence that exposure of crops, farm animals or natural ecosystems to transmission line EMFs has any agriculturally significant consequences."
		As well as the potential direct biological or health effects addressed above, indirect effects such as microshocks can occur as a result of electric fields. Microshocks are small spark discharges which are similar to a static shock after walking across a nylon carpet for example. The Project will be designed in accordance with the principles of the Government's Code of Practice 'Power Lines: Control of Microshocks and other indirect effects of public exposure to electric fields' to ensure these are mitigated.
3.11.83	Concerned by the negative impact on Otters and / or Water Vole	The Project crosses several watercourses and otters and water voles are known to be throughout East Anglia. It is anticipated that major watercourses would be crossed using trenchless techniques while crossings of minor watercourses would typically use open cut techniques. Overhead lines would not be anticipated to affect such species. However, the exact nature and location of watercourse crossings for underground cables or access tracks are unknown at the current time. Protected species surveys for otters and water voles will be undertaken, should suitable habitat be identified mitigation would be proposed in the Environmental Statement (ES). The scope of these surveys would be agreed with the relevant biodiversity stakeholders including Natural England.

Ref no.	Summary of matters raised	National Grid's response
3.11.84	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology - including protected species	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.11.85	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.11.86	Request that impact pathways for birds along the Nature Recovery Network (along the Waveney and	Any potential impacts on birds will be assessed and mitigation proposed as part of the Environmental Impact Assessment (EIA) and based on the approach and scope (including impact pathways) as set out in Chapter 8 (Ecology and Biodiversity) of the Scoping Report, November 2022. The Nature Recovery Network project will also be

Ref no.	Summary of matters raised	National Grid's response
	Little Ouse to the west of Diss) should be avoided / impact is mitigated	included as a separate ecological feature within the Environmental Statement (ES). The potential for any collision risk with new overhead lines will also be assessed and reported in the ES.
3.11.87	Suggestion to mitigate potential impacts to waterfowl using the Waveney Corridor	Potential impacts on wildfowl will be assessed in the biodiversity assessment as part of the Environmental Impact Assessment (EIA). Survey work for wintering /passage birds commenced in September 2022 with the scope of survey being agreed with Natural England. A full desk study of local bird data will also be undertaken. The potential for collision with new overhead lines will be assessed in the EIA.
3.11.88	Concerned about the potential impact of overhead lines on the area identified for a Nature Recovery Network (along the Waveney and Little Ouse to the west of Diss), and suggest that this could provide opportunities for Biodiversity Net Gain (BNG) and for further habitat enhancements	Through the routeing and siting exercise National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity which includes areas considered part of the Nature Recovery Network. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
		As part of this process locations will be identified that provide enhancement that links to Nature Recovery Network sites.

## Section 2: Mid Suffolk feedback

Figure 3.24- Mid Suffolk section map

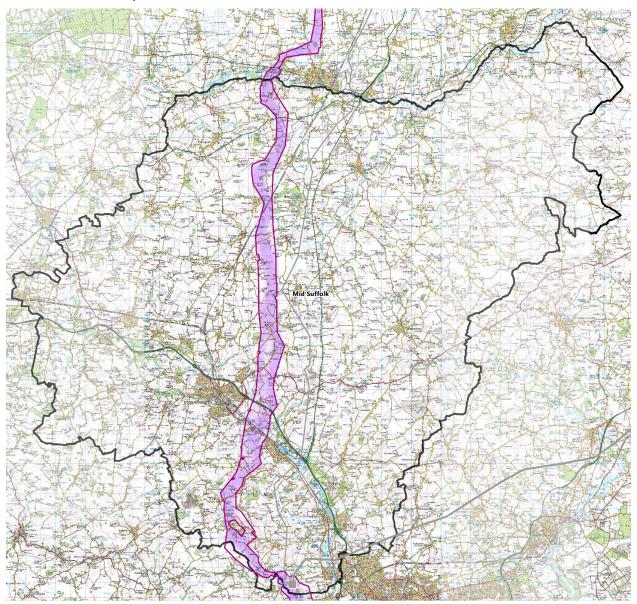


Table 3.12- Summary of consultee comments on Section 2: Mid Suffolk and National Grid's response

Ref no.	Summary of matters raised	National Grid's response	
Agricultur	gricultural land		
3.12.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.	
Communi	ty / Social impact		
3.12.2	Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.	
		We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.	
		The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:	
		• Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)	
		Email us: contact@n-t.nationalgrid.com	
		<ul> <li>Write to us: FREEPOST N TO T (No stamp or further address details are required)</li> </ul>	
Construct	Construction impacts		
3.12.3		National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.	

Ref no.	Summary of matters raised	National Grid's response
Consultat	ion	
3.12.4	Comment supportive of proposal / engagement that has taken place - feel listened to	National Grid note the respondent's feedback.
3.12.5	Opposes overhead lines parallel to the existing Norwich - Bramford line (as suggested by local Members of Parliament (MPs))	When considering how to route a new overhead line between Norwich and Tilbury, we looked at siting the new pylons close to the existing where there are existing overhead lines. Our studies showed that we would need to divert around numerous existing homes and woodland which would require more robust angle pylons with potentially additional visual and environmental effects. We feel the corridor we have put forward will have less adverse impacts, and we are therefore not proposing a parallel overhead line at this stage.
Design Cl	hange	
3.12.6	Underground cables should be used in this section	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Area of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV infrastructure.  No such designations or crossing locations have been identified in this section which is therefore proposed as an overhead line. We will undertake an Environmental Impact Assessment (EIA) to assess the potential impact of the Project, and this will identify any need for additional mitigation.
3.12.7	Existing overhead lines in this section should be removed / undergrounded	The existing electricity transmission network provides power, via the local distribution network, into the local area where it is used in homes and businesses. The need case and funding for the Project is to deliver the new network reinforcement needed, rather than to remove existing overhead lines by undergrounding them. Unless required for mitigation, undergrounding existing overhead lines on the transmission network would not be in accordance with National Policy Statement (NPS) EN-5 and would result in substantial cost to bill payers. There may also be significant environmental impacts due to the removal works on sensitive ecological and archaeological receptors as well as constraints from either existing built form of unsuitable ground conditions.
3.12.8	The Project should run in closer to / parallel to the existing 400 kV overhead lines	We note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, in this section there are constraints and features that mean, overall, we consider close paralleling would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. A number of residential properties are present in close proximity to the existing 400 kV overhead line meaning that if the lines were close paralleled it would result in the properties having an overhead line

Ref no.	Summary of matters raised	National Grid's response
		close to both sides. There are also some locations where the combination of existing physical and environmental features (road infrastructure, commercial and residential properties etc) present very substantial challenges to routeing and siting. As a result, whilst close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the lines have to converge and diverge, and those increased effects on properties with overhead line to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.12.9	Suggest that the existing overhead lines in this section are reinforced / upgraded instead	The existing transmission network in the region is being upgraded to ensure the system is running at its most efficient performance. The existing networks are not able to be upgraded sufficiently to cope with the future demands expected on the network. As a result, new lines and substations will be required to accommodate the changing demands on the network.
3.12.10	Concerned about the Project being in too close proximity to recently built housing developments / land being considered for potential future development	National Grid notes the presence of applications for planning permission. It should be noted that there are no minimum distances prescribed in UK law between overhead lines and homes. Any implications on landscape and visual receptors, on residential amenity, or arising from concerns over electric and magnetic fields (EMFs), are robustly assessed and balanced as part of the decision-making process. If any proposed application is granted, further dialogue would be undertaken with the property owner in the future – subject to any planning application being made.
3.12.11	Suggest that the Project should run alongside the A11	The A11 connects Newmarket to Norwich via Thetford (i.e., not close to Bramford). Whilst appreciating the potential benefits of infrastructure being concentrated geographically (i.e., new connection being aligned with transport corridor) in this case the A11 does not provide an appropriate alignment for a connection to Bramford. The A11 would only potentially be appropriate if the Project was connecting from Norwich Main to Pelham but this has been ruled out in earlier stages of study. On this basis the proposed change has not been taken forward.
3.12.12	Alternative corridor NB6 should not be discounted on the basis of being "technically more complex"	National Grid makes a balanced decision drawing on a number of factors. Greater difficulties (in engineering and technical terms) are considered an appropriate influencing factor. Corridor NB6 necessitates additional complexity due to the need to transition from overhead line to underground cable and back on a number of occasions which adds additional complexity compared with an overhead line only solution. Such complexity also means additional cost (of the multiple Cable Sealing End (CSE) compounds and greater cost of underground cable compared with overhead line) as well as different environmental effects. National Grid therefore remains of the view that NB6 is not preferred with the technical complexity a reasonable factor in the decision-making.
3.12.13	Suggest that the Project should be routed further east to avoid Wortham Ling and the Marsh	Further assessment and technical appraisal has been undertaken on several corridor options around Diss following feedback received from non-statutory consultation.  While an option to the east of Diss would move the preferred corridor further away from Wortham Ling Site of Special Scientific Interest (SSSI) this option would introduce impacts on a greater number of residential receptors, a Grade I Listed church as well as several engineering complexities including two crossings of the railway and a crossing of the

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		existing 400 kV overhead line. This assessment therefore concluded that an alternative corridor option to the east of Diss would be less favourable than the preferred corridor.
3.12.14	The Project should be re-aligned to the west of Great Wenham, rather than to the east	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation. Potential locations for the Cable Sealing End (CSE) compound north of Dedham Vale Area of Outstanding Natural Beauty (AONB) have been assessed and a preferred location to the south of Notley Enterprise Park has been identified. This CSE compound location would result in a change to the preferred corridor to pass north of the business park to the west of Great Wenham rather than to the east.
3.12.15	Seek alternative routeing (no route specified)	National Grid considered alternative strategic proposals as well as alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published in support of the 2022 non-statutory consultation. We have updated our proposals in the light of the 2022 non-statutory consultation feedback, and we will continue to reflect on the detail of any feedback and back-check and update the Project as appropriate and necessary.
3.12.16	Suggest that the Project are routed as far away from populated / residential areas as possible	Deciding where and how to build new high voltage electricity lines is a complex issue and National Grid is mindful of the potential effects this infrastructure may have on local communities and the concerns these may bring. National Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise and potential health impacts. It has sometimes been suggested that minimum distances between properties and overhead lines should be prescribed.
		We do not consider this appropriate since each instance must be dealt with on its merits. However, we have always sought to route new lines away from residential property on grounds of general amenity where possible.
		We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate UK standards, and mitigated where necessary. We set strict technical standards for the equipment we install on our network. These will apply to the proposed new East Anglia Connection Node (EACN) substation located in the Tendring District, and extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.
		Noise from overhead lines is predominately determined by the conductor design, voltage and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types be used, consideration for this would be assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the Environmental Statement (ES).

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		In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an assessment on both landscape character and visual amenity.
		The health and safety of the public, local communities and employees is central to everything that we do. The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. Our approach is to ensure that our network comply with those policies, which are set by Government on the advice of their independent advisors. The Project will be designed to ensure it is fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed.
		Policies for both noise and EMF are incorporated into the decision-making process for development consent as set out in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment complies fully with those policies and guidelines. The Development Consent Order (DCO) application will include assessments against these polices, including both construction and operational noise and EMF.
3.12.17	Cumulative effect of the Project alongside existing overhead lines	National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.
		For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.
3.12.18	Concern around the Project causing communities to become encircled by overhead lines	The current preferred corridor has been routed to achieve some separation from the existing 400 kV overhead line, such that villages are not encircled by overhead lines to both sides. Separation is inevitably reduced in certain locations due to the presence of constraints to routeing and environmental features. Detailed assessment reported in the Environmental Impact Assessment (EIA) will identify any measures considered to be necessary to reduce potential effects which will also consider the potential for effects potentially arising from close paralleling existing 132 kV overhead line and new 400 kV overhead line infrastructure.
3.12.19	Suggestion that the Project should run alongside the A140	Whilst appreciating the potential benefits of infrastructure being concentrated geographically, i.e., by routeing the Project in close proximity to the A140, we do not consider these benefits arise in this section. Whilst the A140 aligns (at least in part) with the general proposed routeing of the Project, there are constraints and features that mean that we do not consider close paralleling in the context of the Project will reduce environmental effects or improve compliance with the Holford Rules or be more consistent with the policy to be economic and efficient. It is notable also that the existing 400 kV overhead line (constructed when fewer constraints were present) does not run alongside the A140. A number of residential properties (isolated as well as hamlets, villages and towns) are present in close proximity to the existing transport infrastructure which, along with diversions to avoid other features (such as

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		woodland) would necessitate multiple diversions of an overhead line. As a result, whilst close paralleling of the A140 may appear beneficial in some short sections, overall the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new corridor separated from existing transport infrastructure.
3.12.20	Suggestion that the Project should go through the Gipping Valley (near Great Gipping Wood) as this is at a lower level, so would reduce the visual impact	This suggestion would be slightly more consistent with one part of the Holford Rules but would introduce additional residential amenity effects in eastern views for residents in Creeting St Peter and therefore would be less consistent with another part of the Holford Rules. When considered in combination with potential effects on heritage assets and engineering implications of alternative alignments, a more easterly routeing alignment within the graduated swathe proposed in the consultation remains preferred in the vicinity of the Gipping Valley. Landscape and visual effects will be assessed and reported within the Environmental Impact Assessment (EIA) along with any identified mitigation.
3.12.21	Concerned about over development of area (e.g. cumulative impact of solar farms, new residential and business development)	With regards to multiple developments impacting specific areas and/ or receptors through overdevelopment. Planning applications for each development would be considered on their own merit by the determining authorities. Any such application would be considered in accordance with planning policy and material considerations, such as scale, suitability and need.
		Where there is certainty of a development, such as a new residential development, being constructed, and there is adequate information in the public domain to understand the impacts of that development on the receiving environment, these will be considered within the cumulative impact assessment of the Project. We will continue to engage with other developers who are proposing development in proximity of the Project to understand their requirements.
3.12.22	Suggestion that the Project should go to the west of Bosmere Hall	This suggestion is that the preferred corridor should close parallel the existing 400 kV overhead line to the south-east of the preferred corridor to the west of Bosmere Hall. Whilst close paralleling may be possible in some locations, National Grid has considered the feedback and concluded that the numerous residential properties, environmental features, woodland and other constraints make it less preferred as an overall solution. In respect of this specific location close paralleling would be particularly difficult with the combination of residential properties, lakes in former mineral working, Beacon Hill Service Station and the A14 and junction with the A140 to be crossed. As such the preferred corridor has been taken forward at this stage as a route west of Bosmere Hall is less preferred.
3.12.23	Suggestion that underground cables are used in the Waveney Valley and Gipping Valley	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that that there may be, at particularly sensitive locations, which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy We may also adopt underground cables in other circumstances such as to cross existing 400 kV overhead line infrastructure.

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		No such designations have been identified in the two identified locations and therefore at this stage this is proposed as overhead line.
		An Environmental Impact Assessment (EIA) will assess the impact of the Project and will identify any need for additional mitigation.
3.12.24	Request that the Project is routed to the north of Flowton Roadside Nature Reserve (RNR) 92, or alternatively the Project is undergrounded through the RNR using tunnelling (Horizontal Directional Drilling (HDD))	The current proposals avoid the Flowton Roadside Nature Reserve (RNR).
3.12.25	Request that the Project is routed to the east of Middle Wood, Offton within the preferred corridor to avoid the need to pass over woodland areas	Following further assessment, National Grid is proposing a corridor to the west of Middle Wood, Offton to enable an alignment that parallels the existing 132 kV overhead line to the west of Middle Wood. This would avoid encircling the Wood as well as Offton Castle as a route to the east of Middle Wood would result in an overhead line to both sides. The preferred corridor avoids passing over or through any woodland in this area by making a crossing of the 132 kV overhead line.
3.12.26	Suggest that the Project is realigned to the west of the swathe (away from St Marys Church, Barking and The Old Rectory)	National Grid has considered the feedback and the potential effects on the various environmental features, residential properties and constraints present and agrees that an alignment to the west of the corridor would on balance be preferred. This reduces effects on the Grade I Listed church and reduces effects for a number of residential properties. Some transfer of effects to a smaller number of residential properties will occur. Assessments carried out as part of the Environmental Impact Assessment (EIA) will consider the potential need for mitigation which will include consideration of rationalisation of the 132 kV overhead line which may otherwise lead to the positioning of up to four residential properties between existing 132 kV overhead line and new 400 kV overhead line.
3.12.27	Suggestion that the Project is routed away from specific location	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation which has resulted in several changes to the current preferred corridor. Further details on these changes can be found in the Design Development Report, published as part of the 2023 non-statutory consultation. Further changes to the preferred corridor and alignment will be considered as the Project develops.
3.12.28	Suggestion that the Project is routed away from Gislingham	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Gislingham. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.29	Suggestion that the Project is routed away from Stowupland	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Stowupland. Other corridors were considered as reported within the Corridor and Preliminary Routeing and

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		Siting Study (CPRSS) but were considered less preferred due to several constraints including residential properties, existing transport infrastructure and environmental assets.
		After further review we continue to consider that the preferred corridor should be taken forward at this time.  Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the
		draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.30	Suggestion that the Project is routed away from Willisham	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Willisham. We have concluded that an alignment to the west of Offton Woods would be preferred which moves the corridor further from Willisham as requested. We will further consider this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.31	Suggestion that the Project is routed away from Wortham Ling	We have considered a number of alternatives to the preferred corridor in the vicinity of Diss. An alternative corridor further to the west near Redgrave and Lopham Fen, a localised diversion of the preferred corridor to pass to the east of Wortham Ling and two alternatives passing to the east of Diss. Overall the alternatives furthest from Wortham Ling were considered less preferred. The most western alternative was less preferred for reasons including greater effects on nature conservation interests and east of Diss alternatives less preferred mainly due to the positioning of several properties unavoidably between overhead lines. Of the remaining alternatives, passing to the east of Wortham Ling is preferred because of lower effects to heritage assets and reduced effects on woodland. We will aim to reduce effects on Wortham Ling by use of the Holford Rules to develop the draft alignment. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.32	Suggestion that the Project is routed away from Bressingham Common	We have considered a number of alternatives to the preferred corridor in the vicinity of Diss. An alternative corridor further to the west near Redgrave and Lopham Fen, a localised diversion of the preferred corridor to pass to the east of Wortham Ling and two alternatives passing to the east of Diss. Overall the alternatives that avoid Bressingham Common were considered less preferred. The most western alternative is less preferred for reasons including greater effects on nature conservation interests and east of Diss alternatives less preferred mainly due to the positioning of several properties unavoidably between overhead lines. Of the remaining alternatives, passing to the east of Wortham Ling is preferred because of reduced effects to heritage assets and woodland. We will aim to reduce effects by use of the Holford Rules to develop the draft alignment. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.

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3.12.33	Suggestion that the Project is routed away from The Waveney Valley	National Grid has considered the feedback, however note that a crossing of the Waveney Valley cannot be avoided in developing a connection between Norwich and Bramford without an undue diversion to the west with a longer, less direct route. We have applied the guidelines on overhead line routeing known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report. A longer and less direct route would be expected to transfer effects to a greater number of other receptors and be less consistent with the Rules and would therefore be considered less preferable.
3.12.34	Suggestion that the Project is routed away from Roydon Fen	We have considered a number of alternatives to the preferred corridor in the vicinity of Diss. An alternative corridor further to the west near Redgrave and Lopham Fen, a localised diversion of the preferred corridor to pass to the east of Wortham Ling and two alternatives passing to the east of Diss. Overall the alternatives furthest from Roydon Fen were considered less preferred. The most western alternative was less preferred for reasons including greater effects on nature conservation interests and east of Diss alternatives less preferred mainly due to the positioning of several properties unavoidably between overhead lines. Of the remaining alternatives, passing to the east of Wortham Ling and closest to Roydon Fen is preferred because of reduced effects to heritage assets and woodland. We will aim to reduce effects on Roydon Fen by use of the Holford Rules to develop the draft alignment. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report
3.12.35	Suggestion that the Project is routed away from Diss	We have reviewed alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that would avoid Diss but consider the reasons for them being considered less preferred to remain valid. We have also considered a number of alternatives to the preferred corridor in the vicinity of Diss. An alternative further to the west near Redgrave and Lopham Fen, a localised diversion of the preferred corridor to pass to the east of Wortham Ling and two alternatives passing to the east of Diss. The most western alternative was less preferred for reasons including greater effects on nature conservation interests and east of Diss alternatives less preferred mainly due to the positioning of several properties unavoidably between overhead lines. Of the remaining alternatives, passing to the east of Wortham Ling is preferred because of lower effects to heritage assets and reduced effects on woodland. We will aim to reduce effects by use of the Holford Rules to develop the draft alignment. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.36	Suggestion that the Project is routed away from Offton	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Offton. We currently consider that a corridor to the west of Offton Woods would be preferred which requires an alignment to the west of the existing 132 kV overhead line. We also reviewed corridors considered within the Corridor and Preliminary Routeing and Siting Study (CPRSS) as well as a deviation to the preferred corridor from Needham Market to Bramford closely paralleling the existing 400 kV overhead line. We considered these less preferred because of the potential requirement for the use of underground cable (so they are less economic) to avoid effects on heritage assets, Ancient Woodland and residential amenity inconsistent with policy. We also considered alternative more western alignments but considered these less preferred because of the transfer of effects and

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		potential inconsistency with policy pertaining to the Grade I listed church at Flowton which may have required underground cable as a form of mitigation. The preferred alternative was to broadly adopt the 132 kV alignment but with increased separation from Offton and Offton castle, going someway to addressing the feedback. We will further consider this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.37	Suggestion that the Project is routed away from Cotton	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Cotton. Noting feedback regarding potential impacts on several assets in and around Cotton, including Carters Meadow, Grade II Listed Hemphalls Hall and Grade I Listed St Andrews Church, we are proposing an alignment within the graduated swathe as far to the east of the preferred corridor as possible without transferring or increasing potential effects unacceptably on other individual residential properties, environmental and historical assets in and around the villages of Mendlesham and Wickham Skeith, as well as following the guidance in the Holford Rules. We will undertake an Environmental Impact Assessment (EIA) to assess the potential impact of the Project, and this will identify any need for additional mitigation which may potentially include alternative pylon designs. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.38	Suggestion that the Project is routed away from Mendlesham Green	The respondents feedback provides a preference for an alternative moved away from Mendlesham Green. In the absence of a specific basis for the change or a proposed alternative corridor, National Grid has considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.39	Suggestion that the Project is routed away from Mellis Common, Thornham	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Mellis Common, Thornham. We considered whether close paralleling the existing 400 kV overhead line to the east was possible, but the close proximity of properties means this is not achievable. In the absence of any other specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.40	Suggestion that the Project is routed away from Gipping	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Gipping. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed

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		at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.41	Suggestion that the Project is routed away from Flowton	We have considered various alternative corridors that amend the position of the Project relative to Flowton. The Corridor and Preliminary Routeing and Siting Study (CPRSS) considered corridors close paralleling the existing 400 kV overhead line (i.e further to the east of Flowton) but considered them less preferred because of some technical constraints to routeing and siting in some locations and greater environmental effects on existing environmental features and residential properties. The CPRSS also considered a corridor a few km to the east of the existing 400 kV overhead line but also considered this less preferred for reasons including technical restrictions to routeing close to Ipswich. Various hybrid corridors, combining sections east, west and close parallel were also considered but were also less preferred by being longer and less direct with greater environmental effects. On balance the preferred corridor (which is recognised to be closer to Flowton) was taken forward at this stage. In light of feedback, we have reviewed the CPRSS findings and consider them to remain valid though with alternative local arrangements in the vicinity of Flowton offering some potential to reduce effects. Overhead alignments to the east and west of Flowton are available with potential effects influenced by consideration of mitigation of the existing 132 kV network. Alternatives to the west of Flowton have the potential for greater effects on the Grade I Listed Church at Flowton, potentially requiring the use of underground cable to achieve a solution consistent with our duties and the National Policy Statement (NPS) framework. Alternatives to the east, whist no further away from Flowton, offer potential to have reduced effects on the Grade I Listed church and reduce cumulative effects on residential amenity by close paralleling or through mitigation of the existing 132 kV network. On balance and recognising that careful consideration of the need for mitigation by considering rationalisation of the existing 132 kV network
3.12.42	Suggestion that the Project is routed away from Burstal	National Grid has reviewed the preferred corridor in this area to respond to this feedback. We are proposing an amendment to the graduated swathe to facilitate an alignment to the east of the preferred corridor. An easterly alignment whilst marginally less direct and longer, does move the Project further away from Burstall.
3.12.43	Suggestion that the Project is routed away from Creeting St Peter	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Creeting St Peter. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.

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3.12.44	Suggestion that the Project is routed away from Wortham Long Green	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Wortham Long Green which lies to the west of the preferred corridor. The proposed changes to the preferred corridor to pass to the east of Wortham Ling will increase the separation to Wortham Long Green as requested. We have further considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.45	Suggestion that the Project is routed away from Wortham	We have considered a number of alternatives to the preferred corridor in the vicinity of Diss. An alternative corridor further to the west near Redgrave and Lopham Fen, a localised diversion of the preferred corridor to pass to the east of Wortham Ling and two alternatives passing to the east of Diss. Overall the alternatives furthest from Wortham were considered less preferred. The most western alternative was less preferred for reasons including greater effects on nature conservation interests and east of Diss alternatives less preferred mainly due to the positioning of several properties unavoidably between overhead lines. Of the remaining alternatives, passing to the east of Wortham Ling is preferred because of reduced effects to heritage assets and woodland. This also supports an alignment that is further away from Wortham by being at the eastern edge of the preferred corridor. We will aim to reduce effects on Wortham by use of the Holford Rules to develop the draft alignment. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.46	Suggestion that the Project is routed away from Forward Green	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Forward Green. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.47	Suggestion that the Project is routed away from Earl Stonham	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Earl Stonham, which currently approximately 2 km from the preferred corridor. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.48	Suggestion that the Project is routed away from Lopham Fen	We have considered a number of alternatives to the preferred corridor in the vicinity of Diss. An alternative corridor further to the west near Redgrave and Lopham Fen, a localised diversion of the preferred corridor to pass to the east of Wortham Ling and two alternatives passing to the east of Diss. Overall the most western alternative nearest

Ref no.	Summary of matters raised	National Grid's response
		Lopham Fen was less preferred for reasons including greater effects on nature conservation interests and east of Diss alternatives less preferred mainly due to the positioning of several properties unavoidably between overhead lines. Of the remaining alternatives, passing to the east of Wortham Ling is preferred because of reduced effects to heritage assets and woodland. We do not on this basis consider effects on Lopham Fen to be inconsistent with policy. We will aim to reduce effects by use of the Holford Rules to develop the draft alignment. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.49	Suggestion that the Project is routed away from conservation areas	Through the routeing and siting exercise National Grid has avoided conservation areas as far as possible. The Environmental Impact Assessment (EIA) will include an assessment of the effects of the Project on the historic environment, including conservation areas. The assessment will identify the potential for significant effects due to change in setting that affects value as a result of the Project and whether any mitigation is required to Offshore Electricity Grid Task Force (OffSET) likely significant effects.
3.12.50	Suggestion that the Project is routed away from Barking	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Barking. We currently consider that an alignment to the northwest edge of the preferred corridor should be taken forward. This would increase separation to Barking and reduce effects on residential amenity and on listed buildings including the Grade I Listed church and position the pylons on slightly lower ground. We also considered other corridors (more closely following the existing 400 kV overhead line but the potential requirement for the use of underground cable made these less economic and less preferred). We have further considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.12.51	Given the significant faults the consultation run afresh including alternatives such as but not limited to a strategic offshore ring-main	Prior to commencement of the 2022 non-statutory consultation, National Grid prepared a Consultation Strategy, this document sets out the details of how we proposed to consult on the project. The Strategy was shared with Local Authorities for comment, and we took on board their comments to inform how the consultation was carried out where possible. The consultation was run in accordance with the published strategy.  As we scope our projects, we consider numerous technology solutions. Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia and are part of our preliminary recommended solution. National Grid's appraisals, which were based on our knowledge of the network, understanding of the capacity and costs of developing subsea links as well as evaluation of the environmental and socio—economic implications, reached a preliminary conclusion that, on balance, the most appropriate solution was an offshore Direct Current (DC) link between the Sizewell area and Kent (SeaLink) in combination with onshore reinforcement between Norwich and Tilbury (East Anglia GREEN) and onshore reinforcement between Tilbury and Grain (progressed as a sperate scheme due to the general geographic separation of potential effects). We presented our evaluation and our preliminary preferred solution at the 2022 non-statutory consultation, which was an opportunity for members of the public to comment (which they did).

Ref no.	Summary of matters raised	National Grid's response
		It would have been disingenuous for us to present an offshore option to the public for consultation feedback, knowing this did not comply with the framework requirements.  Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.
3.12.52	If cables must be routed as suggested in Chapter 7 then to protect the Area of Outstanding Natural Beauty (AONB) they must be buried wherever they fall within 3 miles / 5 km of the boundary of the AONB	National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. National Grid therefore adopts underground cable technology as mitigation within areas such as AONBs. Policy identifies no set distance by which such mitigation should be extended outside the AONB boundary.  National Grid identifies the requirement for mitigation (whether by additional planting, type of pylon or choice of alternative technology such as underground cable) based on consideration of the potential effects that may arise on a case-by-case basis. This takes into account the specific details of the designation (including special qualities, key views etc) and local circumstances including landform and existing vegetation. This approach allows consideration of the predicted effects arising from underground cable or overhead line technology and the Cable Sealing End (CSE) compounds (the transition sites between technologies) rather than applying an arbitrary distance that may be too great or too small for the specific circumstances.
3.12.53	Locations for Cable Sealing End (CSE) Compound sites to facilitate end point of underground section must be carefully chosen and subject to further consultation	National Grid acknowledges the requirement to carefully site the Cable Sealing End (CSE) compounds paying particular regard to the Horlock Rules and will consult on its proposals and consider any feedback provided as the Project develops.
Economic	/ Employment impact	
3.12.54	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.  Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to
		minimise disruption to businesses and their users. These could include: traffic management, signage and routeing measures. These measures will be identified within the Environmental Impact Assessment (EIA) and the Construction Traffic Management Plan (CTMP).

Ref no.	Summary of matters raised	National Grid's response
Environm	ental impact	
3.12.55	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated, however there is currently no green belt land designations within this section. National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.  The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.
3.12.56	The Project will impact designated sites - e.g. Site of Special Scientific Interest (SSSI), Ancient Woodland and an Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Site of Special Scientific Interest (SSSI) and Ancient Woodland.  The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required mitigation requirements.  We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.12.57	The Project will result in a negative impact on the environment generally (no details given)	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.
3.12.58	The Project will cause a negative impact on landscape / amenity	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.  Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.  We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.  The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater

Ref no.	Summary of matters raised	National Grid's response
		in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.12.59	Concerned about the impact on Mellis Common Nature Reserve	The Project currently avoids the reserve and detailed design will look to further reduce any potential impacts. All potential biodiversity impacts will be assessed as part of the Environmental Impact Assessment (EIA) which will include non-statutory designated sites such as Mellis Common Nature Reserve.
3.12.60	Confirmation that soil in the area around Gislingham consists of heavy clay, and is therefore not free draining	A hydrology and land drainage assessment will be undertaken as part of the Environment Impact Assessment (EIA). This will consider the ground conditions, which will be a consideration in the drainage design and the suitability of conditions for Sustainable Drainage Systems (SuDs) where required.
3.12.61	Concern about adverse impact of the Project on peat and sandy soils at Wortham Ling, given their high restoration potential	The habitats at Wortham Ling Site of Special Scientific Interest (SSSI) are supported predominantly by sandy soils developed in glaciofluvial drift deposits. Adjacent low-lying areas along the River Waveney comprise fen peat soils. Both these soil types can support more valuable habitats due to their specific characteristics (either being freely drained, droughty and low in available nutrients or waterlogged and highly organic). The Environmental Statement (ES) will identify where such soils exist within the Project boundary and identify specific measures which will be implemented should it not be possible to avoid direct effects (such as stripping) on these areas. These measures will be detailed in the Soil Management Plan (SMP) which will be developed to ensure that all soils directly affected can be reinstated to support the required post-construction use.
Financial	compensation	
3.12.62	The Project will devalue my property / Impact on property value in this section	National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.
		If there are any specific concerns about the devaluation of property, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>

## **Summary of matters** Ref no. **National Grid's response** raised Request for adequate financial All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a 3.12.63 compensation / Impacted case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. individuals need to be Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with compensated affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works. If there are any specific concerns, please contact the Project team: Norwich-Tilbury @fishergerman.co.uk or by calling us on Freephone 0808 175 3314. Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ. Health and Safety 3.12.64 The Project may result in a National Grid recognises people may have concerns about the health effects of living close to an overhead line, and negative impact on mental health that the uncertainty whilst the proposals are developed may cause some stress and anxiety. / health and wellbeing of We have sought to reduce potential effects on communities and residents through routeing and design. We have residents also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project. The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project: Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm) Email us: contact@n-t.nationalgrid.com Write to us: FREEPOST N TO T (No stamp or further address details are required) The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These

policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all of its equipment comply fully with those exposure limits.

Ref no.	Summary of matters raised	National Grid's response
		Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed overhead lines, underground cables and substation will be designed to ensure they are fully compliant with these policies and guidelines. This ensures that health concerns relating to EMFs are properly and adequately addressed.
3.12.65	Consideration needs to be given to the operation of light aircraft from airfields at Wortham (e.g. Brook Farm) / The siting of overhead lines presents a risk to light aircrafts in the area	Our review of airfields within 4 km of the preferred corridor identified 10 General Aviation (GA) sites, one military site (Wattisham Flying Station) and the Mid and South Essex National Health Service (NHS) Broomfield Hospital which receives helicopters from a helipad on the roof of the main hospital building.  The airfield operators will be consulted as the design of the Project continues and we will endeavour to design a solution that safely accommodates airfield operations as far as practicable.
Heritage		
3.12.66	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. In the event that impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.  Where impacts on the historic environment are identified these will be presented within a Historic Environment
		assessment which is undertaken as part of the Environmental Impact Assessment (EIA).  We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.12.67	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking a cultural heritage assessment as part of the Environmental Impact Assessment (EIA) process to identify likely significant effects on archaeological sites arise. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
Mitigation		
3.12.68	Use planting and screening and mitigate visual impacts	A Landscape and Visual Impact Assessment (LVIA) will be undertaken, and this will identify areas for potential mitigation planting. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.

Ref no.	Summary of matters raised	National Grid's response
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
Public Rig	ghts of Ways (PRoW).	
3.12.69	Concern around disruption of Public Rights of Way (PRoW) /	Through routeing and siting, National Grid has sought to and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).
	Mitigation must be put in place for pedestrians / equestrians directly or indirectly impacted	The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. In the event that mitigation is required, measures may include, the temporary closure of PRoWs during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.
		Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
Substation	n	
3.12.70	Concerned that works at Bramford Substation will impact the surrounding area	National Grid will, as part of the iterative design process for the Project, reduce the land take deemed necessary to construct and / or operate the works associated with the Bramford Substation as far as practicable.
		Where impacts occur that result in effects to the surrounding area, appropriate and proportionate mitigation measures will be adopted where necessary. These measures could include the use of planting for screening and sympathetic colour schemes for better integration into the landscape.
		The methods of identifying significant environmental effects of the Project and any mitigation requirements will be presented within the Environmental Statement (ES) submitted as part of the Development Consent Order (DCO) application.
3.12.71	Consider moving Bramford Substation closer to the coast	The scope of this Project is to reinforce the electricity transmission network to meet the future demand. Bramford substation is an existing part of the transmission network, and this Project has not identified a driver to relocate it from its current location.
Substation	n location	
3.12.72	Concerned about over development of the Bramford Substation (concerns relating to visual / environmental impact and vulnerability of substation to terrorism / warfare / sabotage)	Bramford Substation is a key asset for the region. The electricity network in East Anglia was largely developed in the 1960s. It was built to supply regional demand, centred around Norwich and Ipswich, Bramford Substation is therefore an important connection for the power infrastructure in East Anglia. Future generation is scheduled to be connected to Bramford to aid the Government's energy targets, this will require the existing substation and related transmission circuits to be strengthened to enable the required capability to handle and transport the increased power flows to the consumer, this shall include the addition of the new double overhead line circuits to Norwich and Tilbury being

Ref no.	Summary of matters raised	National Grid's response
		delivered by the Project. When planning and developing the new infrastructure required, for example, the new overhead lines in and out of Bramford, we shall ensure visual impact and environmental impact assessments are completed and their requirements complied with including any appropriate mitigation, likewise when it comes to security of the system, we must ensure the system and any upgrades to it comply with the Security and Quality of Supply Standard (SQSS) which in turn ensures integrity of the system.
Tourism		
3.12.73	Concerned about impact of the Project on leisure and tourism	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure. Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.  Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include: traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
Visual imp	pact	
3.12.74	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable Sealing End (CSE) Compounds and Substations)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.  In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End
		(CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.
		A landscape and visual impact assessment will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.12.75	Cumulative effect of onshore National Grid projects within East Anglia / within this section	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.

Ref no.	Summary of matters raised	National Grid's response
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.  We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.
3.12.76	Negative visual impact on the Gipping Valley	National Grid has a duty to have regard to the desirability of (amongst other things) preserving natural beauty and to do what it reasonably can to mitigate any effects. Embedded measures include the use of underground cables in the areas of highest amenity (Dedham Vale Area of Outstanding Natural Beauty (AONB)) which will reduce the effects of the project. Landscape and visual impacts will be assessed as part of the Environmental Impact Assessment (EIA) to be submitted with the Development Consent Order (DCO) application.
		At this stage the current proposal in this area is based on the use of overhead line technology but with the potential for mitigation to be identified by the Environmental Impact Assessment (EIA). Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.
Wildlife / E	Ecology impact	
3.12.77	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.  The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.
		We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques, to take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.

Ref no.	Summary of matters raised	National Grid's response
3.12.78	Concerned about potential negative impact of the Project on wildlife, habitats and river ecolo—y - including protected species	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.12.79	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.12.80	Concern about impact of overheard lines on birds,	Overwintering birds will be assessed in the biodiversity assessment as part of the Environmental Impact Assessment (EIA). Survey work for wintering /passage birds commenced in September 2022 and the scope of survey has been

Ref no.	Summary of matters raised	National Grid's response
	including migratory species (Canada Geese / House Martens)	agreed with Natural England. The potential for collision with new overhead lines and risk of mortality through electrocution will also be assessed in the EIA.
3.12.81	Negative impact on bats and owls in the area	Bats and owls will be assessed in the biodiversity assessment as part of the Environmental Impact Assessment (EIA). Habitat likely to support a wide range of bat species (including barbastelle ( <i>Barbastella barbastellus</i> ) is present within the preferred corridor. As such, all habitat with the potential to support bats would be considered as 'seek to avoid'.
		In the instance the loss of a tree(s) with potential to support roosting bats cannot be avoided, then these would be inspected / surveyed in accordance with the Bat Conservation Trust guidelines. It is anticipated that a range of habitats within the land required for the construction of the Project would provide suitable habitat to support nesting birds and particularly those associated with farmland habitat, including owls. The requirement for breeding bird surveys would be based on the results of the preliminary assessment, focusing on suitable habitat within the land required for construction.
3.12.82	Negative impact of the Project on available land for grazing animals	National Grid recognises that there is the potential for impacts. We are and will continue to work with all landowners including farmers and equestrian facilities who may be affected by the proposals to understand the impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis.
		Particular agricultural matters can also be written into voluntary land agreements. There will also be mitigation put in place where wild animal grazing maybe affected.
		As well as possible effects on humans, possible effects of Electric and Magnetic Fields (EMFs) on various animals have been studied a number of times. No detectable effects of EMFs have been found on, for example, health, milk production, fertility, and behaviour. This is confirmed in National Policy Statement (NPS) EN-5 which states: "There is little evidence that exposure of crops, farm animals or natural ecosystems to transmission line EMFs has any agriculturally significant consequences."
		As well as the potential direct biological or health effects addressed above, indirect effects such as microshocks can occur as a result of electric fields. Microshocks are small spark discharges which are similar to a static shock after walking across a nylon carpet for example. The Project will be designed in accordance with the principles of the Government's Code of Practice 'Power Lines: Control of Microshocks and other indirect effects of public exposure to electric fields' to ensure these are mitigated.

## Section 3: Babergh, Tendring and Colchester feedback

Figure 3.25- Babergh, Tendring and Colchester section map

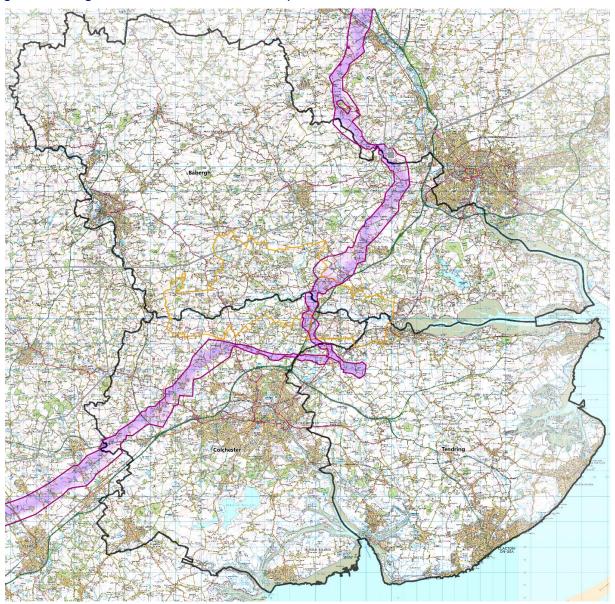


Table 3.13- Summary of consultee comments on Section 3: Babergh, Tendring and Colchester and National Grid's response

Ref no.	Summary of matters raised	National Grid's response
Agricultura	al land	
3.13.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.
Area of Ou	utstanding Natural Beauty (AONB)	
3.13.2	Ensure protection of the Area of Outstanding Natural Beauty (AONB)/ avoid detrimental impact on the Dedham Vale AONB	National Policy Statement (NPS) EN-5 makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology will be adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the Natural Beauty of Dedham Vale AONB. Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater
		in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.  We will also submit a Landscape and Ecology Management Plan (LEMP) setting out landscaping proposals with the Development Consent Order (DCO).

Ref no.	Summary of matters raised	National Grid's response
3.13.3	The proposed undergrounding is inadequate to mitigate adverse visual impacts of pylons and overhead lines on views to and from the Dedham Vale Area of Outstanding Natural Beauty (AONB)	National Policy Statement (NPS) EN-5 states that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy.  The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology will be adopted with the extent of cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the defining characteristics and 'special qualities' of the Natural Beauty of Dedham Vale AONB. Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB including a section at Great Horkesley.  A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.13.4	Only the Area of Outstanding Natural Beauty (AONB has been considered and not the areas in the immediate vicinity of the AONB	National Policy Statement (NPS) EN-5 states that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy.  The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology is adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the Natural Beauty of the AONB. Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley to reduce the changes in views and setting of the AONB from within and adjacent to its designated boundary.  A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project on the AONB and the areas in the immediate vicinity of the AONB, amongst other receptors and will identify the need for mitigation.
3.13.5	Criticism of routeing the Project through Area of Outstanding Natural Beauty (AONB)	The preferred corridor is through the Area of Outstanding Natural Beauty (AONB) with the use of underground cable (both within the Area of Outstanding Natural Beauty (AONB) and beyond the AONB boundaries) to protect the natural beauty and special qualities of the AONB. This is in accordance with relevant policies and National Grid duties. We also considered routes that avoid the Dedham Vale AONB and consider the additional effects arising from alternatives, such as a third line from Bramford to the Twinstead area and a connection from the Twinstead area to Tilbury via an East Anglia Connection Node (EACN) substation, to be greater than those arising from the preferred corridor and less compliant with our duties and relevant policies.
3.13.6	Concerned the section of the Project near the A134 will be visible from the Area of	National Policy Statement (NPS) EN-5 states that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology is adopted with the extent of

Ref no.	Summary of matters raised	National Grid's response
	Outstanding Natural Beauty (AONB)	underground cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the Natural Beauty and defined special qualities of the AONB. The current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB which includes a section in the vicinity of Great Horkesley and the A134.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.13.7	Overhead lines will be seen from the Area of Outstanding Natural	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity that are both important factors to the Dedham Vale Area of Outstanding Natural Beauty (AONB).
	Beauty (AONB)	Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including at Great Horkesley to reduce the changes in views and setting of the AONB from within and adjacent to its designated boundary.
		We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects. Measures to reduce such effects have included the use of underground cables in the areas of highest amenity value (Dedham Vale AONB), sympathetic siting of infrastructure and pylons within the existing landform, and where necessary a range of planting for the purpose of screening.
		We will continue to engage with Natural England, the Dedham Vale and Stour Valley Partnership and the relevant stakeholders on aspects relating to Dedham Vale AONB, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.13.8	Need more information on the mitigation in the Area of Outstanding Natural Beauty (AONB)	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity that are both important factors to the Dedham Vale Area of Outstanding Natural Beauty (AONB).
		We will continue to consider both landscape character and amenity value as we develop our proposals and seek to identify the impacts and reduce effects, these will be assessed within a Landscape and Visual Impact Assessment (LVIA).
		Measures to reduce such effects have included the use of underground cables in the areas of highest amenity value (Dedham Vale AONB), sympathetic siting of infrastructure and pylons within the existing landform, and where necessary a range of planting for the purpose of screening. When the mitigation requirements are finalised we will share these with Natural England and the relevant stakeholders will take their views into account as the Project continues to develop.
Communit	ty / Social impact	
3.13.9	Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.  We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.

Ref no.	Summary of matters raised	National Grid's response
		The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:
		<ul> <li>Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)</li> </ul>
		Email us: contact@n-t.nationalgrid.com
		Write to us: FREEPOST N TO T (No stamp or further address details are required)
3.13.10	Concern around the Project causing communities to become encircled by overhead lines	The preferred corridor has been routed to achieve some separation from the existing 400 kV overhead line, such that villages do not have overhead lines close to both sides. Separation is inevitably reduced in certain locations due to the presence of constraints to routeing and environmental features. Detailed assessment reported in the Environmental Impact Assessment (EIA) will identify any measures considered to be necessary to reduce potential effects which will also consider the potential for effects potentially arising from close paralleling existing 132 kV overhead line and new 400 kV overhead line infrastructure.
3.13.11	Concern regarding schools / There should be a greater distance between schools and the Project	National Grid uses the guidance in the Holford Rules as the basis for routeing. These rules provide guidance regarding routeing away from various features such as residential areas where schools are often located. As a result, we would expect route development to achieve appropriate separation from schools and we will continue to respond to feedback as the Project design develops.
3.13.12	Concerned about over development of area (e.g. cumulative new residential development)	With regards to multiple developments impacting specific areas and/ or receptors through overdevelopment. Planning applications for each development would be considered on their own merit by the determining authorities. Any such application would be considered in accordance with planning policy and material considerations, such as scale, suitability and need.
		Where there is certainty of a development, such as a new residential development, being constructed, and there is adequate information in the public domain to understand the impacts of that development on the receiving environment, these will be considered within the cumulative impact assessment of the Project.
		We will continue to engage with other developers who are proposing development in proximity of the Project to understand their requirements.
3.13.13	Concern over multiple developments impacting the area (e.g. multiple active wind farm applications, business parks)	With regards to multiple developments impacting specific areas and/ or receptors, planning applications for each development would be considered on their own merit by the determining authorities. Any such application would be considered in accordance with planning policy and material considerations, such as scale, suitability and need. Where there is certainty of a development such as a wind farm and business parks being constructed and there is adequate information in the public domain to understand the impacts of that development on the receiving environment, these will be considered within the cumulative impact assessment of the Project.

Ref no.	Summary of matters raised	National Grid's response
		We will continue to engage with other developers who are proposing development in proximity of the Project to understand their requirements.
3.13.14	The local area should be protected from infrastructure related to the North Fall, and Five Estuaries wind farms which will be built off of Clacton-on-Sea	The Government has set targets to increase the generation of the country's energy needs with offshore wind forming a part of that. Those wind farms need to be connected to the National Transmission System (NTS) to connect homes and communities that will use the renewable power they provide so the connection must be made onshore. National Grid has a duty to provide the connections and does this by considering alternatives in developing its proposals to provide the proposed connection with the most economic and efficient solution integrated with wider requirement to strengthen the NTS elsewhere.
Compulso	ory Purchase Order	
3.13.15	Criticism of use of compulsory purchase orders	National Grid may have to rely on compulsory purchase powers as a last resort if voluntarily agreements for land rights cannot be reached with landowners. We will work hard with landowners to reach an agreement. However, if this is not possible when submitting the Development Consent Order (DCO) application, we will also apply for compulsory purchase powers. This will ensure that if the DCO is granted we will be able to obtain all land rights needed to construct and subsequently operate the new electricity transmission assets.
Constructi	ion impacts	
3.13.16	Concerned about damage to landscape resulting from installation of underground cables	The installation of underground cabling would broadly adopt the following process: initially, the removal of topsoil and storage of a width sufficient to allow for construction machinery to work and the digging of the trenching required for underground cabling would be engineered. The underground cabling would then be laid in the trench, soils would be backfilled and hedgerows and shrubs reinstated where practicable. At this point a typical grass seed mixture would be scattered to encourage regrowth.
		It is anticipated that within 6-12 months upon completion of the construction of the underground cabling, there would be minimal visibility of the works at ground level and the landscape would return to pre-construction views and settings.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project, including the undergrounding, and will identify any need for additional mitigation if required, this may include screening at particular locations to reduce a change in views of the Project or to better integrate infrastructure into the wider landscape.
3.13.17	Adverse impact on traffic levels in local area caused by construction works (e.g. construction traffic travelling along local roads, road closures, etc)	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.

Ref no.	Summary of matters raised	National Grid's response
3.13.18	Geological risks and hazards exist in the Great Wenham / Raydon area, with the foundations of structures from the World War Two (WW2) airbase that was previously sited, and unexploded munitions	Through the routeing and siting exercise National Grid has sought to and will continue to seek to minimise as far as practicable the potential disruption and disturbance of known contaminated land.  Ground Investigations works will be undertaken, including trail pits and boreholes, to inform design and also to identify areas of likely contamination. In the event that unknown geological risks or contamination are encountered during the construction phase of the Project, this will be managed in accordance with current legislation and best practice remediation measures.  In addition to the above, we will be undertaking Unexploded Ordnance (UXO) surveys in areas of moderate and high risk of disturbing historical munitions and to propose specific mitigation measures to be adopted during the construction phase for the safety of the workforce.
3.13.19	Consideration needs to be given to gas pipelines that the Project intersects and / or follows	In developing its projects National Grid maps all known utility considerations that will inform the routeing and siting, these include gas pipelines.  The Project has been and will continue to be developed to avoid or minimise impacts on the gas pipeline.  We will engage with all utilities that the Project interacts with including the gas transmission network and we will continue to do so as the Project design progresses.
3.13.20	Suggestion that construction traffic is routed from the A12 via Holton St Mary (or via Raydon to the north)	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform the drafting of the Construction Traffic Management Plan (CTMP) for the Project. Within the CTMP, it will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
Consultati	on	
3.13.21	Comment supportive of proposal / engagement that has taken place – feel listened to	National Grid note the respondent's feedback.
3.13.22	Request for exact location of the Cable Sealing End (CSE) Compounds at either end of the undergrounding through the Area of Outstanding Natural Beauty (AONB)	The Dedham Value Area of Outstanding Natural Beauty (AONB) and its setting is a sensitive area and we felt it important to undertake further assessment before siting of the Cable Sealing End (CSE) compounds at either end of the undergrounding through the AONB.  We received several suggestions in the consultation for areas that people thought were important to protect in the setting of the AONB and this information has been used to shape our proposals for locating the transition from overhead line to underground cable.  More information on what factors we have considered in making the decision on the site of the CSE compounds, including how feedback has influenced our decisions will be published at our next stage of consultation.

Ref no.	Summary of matters raised	National Grid's response
3.13.23	Further consultation on the location of the substation is needed	National Grid ran its first consultation on the Project from the 21 April to the 16 June 2022. Responses to that consultation have now been reviewed and used to inform the proposed siting of the substation. Further consultation will be held in 2023. This consultation will provide further information on the substation site and design and will allow people to provide us with further feedback on the Project in this area.
3.13.24	Concern that planning applications for elements of the Tendring Substation are being progressed prematurely as the consultation is still ongoing	No planning applications for the East Anglia Connection Node (EACN) substation on the Tendring Peninsula are being progressed. We believe this comment may relate to work associated with National Grid's Bramford to Twinstead Reinforcement which is located some distance from the Project. Further information about the Bramford to Twinstead Reinforcement can be found at: <a href="https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/bramford-twinstead">www.nationalgrid.com/electricity-transmission/network-and-infrastructure/bramford-twinstead</a>
3.13.25	The Babergh and Tendring session should have been recorded for those of who could not attend	To support our 2022 non-statutory consultation, we held 12 face-to-face events along the route of the Project and 12 webinars. Six of the webinars contained information on the whole Project, and six were more focused on defined locations along the preferred corridor. The session for Babergh and Tendring was recorded and made available on the Project website for people who were not able to attend.
3.13.26	Concerned that there was no consultation event held in Capel Saint Mary	Prior to commencement of the 2022 non-statutory consultation, we prepared a Consultation Strategy, this document sets out the details of how we proposed to consult on the Project. The Strategy was shared with Local Authorities for comment and where possible we took on board their comments to inform how the consultation was carried out. The consultation was run in accordance with the published strategy. During the consultation we held 12 face-to-face events along the route of the Project and 12 webinars to allow people to attend an event convenient to them. A face-to-face event was held on the 17 May 2022 in Holton St Mary which is approximately three miles from Capel St Mary.
Design Ch	nange	
3.13.27	An alternative route should be seriously considered. It is not clear why existing pylon routes broadly taking the same route cannot be upgraded, or that cables could not follow existing infrastructure such as the A12	The existing transmission network in the region is currently being upgraded to ensure the system is running at its most efficient performance. The existing networks are not able to be upgraded sufficiently to cope with the new demands expected on the network. As a result, new lines and substations will be required to accommodate the changing demands of the network.  The Corridor and Preliminary Routeing and Siting Study (CPRSS) explored and explained the reasoning behind the selection of the preferred corridor.
		Whilst appreciating the potential benefits of infrastructure being concentrated geographically, i.e. by routeing the Project in close proximity to existing road infrastructure, or parallel to existing overhead lines we do not consider this to provide benefits in this section. Major roads potentially align (at least in part) with the general routeing of the Project required. However, in this section there are constraints and features that mean that we do not consider close paralleling with them will reduce environmental effects or improve compliance with the Holford Rules or be more consistent with the policy to be economic and efficient. A number of residential properties (isolated as well as hamlets, villages and towns) are present near the existing transport infrastructure necessitating multiple diversions of an overhead line. There are also some locations where the combination of existing physical and environmental

Ref no.	Summary of matters raised	National Grid's response
		features (railway and road infrastructure, commercial and residential property, woodlands and orchards) present very substantial challenges to routeing and siting. As a result, whilst close paralleling of transport infrastructure may appear beneficial in some short sections. Overall, the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new corridor separated from existing transport infrastructure.
3.13.28	Given the significant faults the consultation run afresh including alternatives such as but not limited to a strategic offshore	Prior to commencement of the consultation, National Grid prepared a Consultation Strategy, this document sets out the details of how we proposed to consult on the project. The Strategy was shared with Local Authorities for comment, and we took on board their comments to inform how the consultation was carried out where possible. The consultation was run in accordance with the published strategy.
	ring-main	As we scope our projects, we consider numerous technology solutions. Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia and are part of our preliminary recommended solution. National Grid's appraisals, which were based on our knowledge of the network, understanding of the capacity and costs of developing subsea links as well as evaluation of the environmental and socio—economic implications, reached a preliminary conclusion that, on balance, the most appropriate solution was an offshore Direct Current (DC) link between the Sizewell area and Kent (Sea Link) in combination with onshore reinforcement between Norwich and Tilbury (East Anglia GREEN) and onshore reinforcement between Tilbury and Grain (progressed as a sperate scheme due to the general geographic separation of potential effects). We presented our evaluation and our preliminary preferred solution at the spring 2022 non-statutory consultation, which was an opportunity for members of the public to comment (which they did).
		It would have been disingenuous for us to present an offshore option to the public for consultation feedback, knowing this did not comply with the framework requirements.
		Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final.
		Further opportunities to provide feedback will be available as the Project develops.
3.13.29	An offshore route would avoid any damage to the Area of Outstanding Natural Beauty (AONB)	Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Study (CPRSS) Report examines several strategic options that were considered for the Project that might achieve the required reinforcement including offshore options. These options were not taken forward as they did not fully address technical or physical/geographical constraints or enable the network to operate to the required standards.
		An offshore connection would have a third of the capacity of the proposed overhead line connection and therefore to transfer the anticipated levels of power generation, three offshore connections would be required including associated infrastructure such as converter stations. This would make the connection significantly costlier to energy bill payers.
		In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich. Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area.

Ref no.	Summary of matters raised	National Grid's response
		We are proposing to build underground cable through the Dedham Vale Area of Outstanding Natural Beauty (AONB) and we will carry out an Environmental Impact Assessment (EIA) and will consider and assess the likely significant environmental effects of our projects. And how we can seek to avoid and reduce impacts on the environment.
3.13.30	The Project should run in closer to / parallel to the existing 400 kV overhead lines	We note the potential for close paralleling to reduce the level of effects that may arise from a new connection. However, in this section there is no existing 400 kV infrastructure connecting to the proposed East Anglia Connection Node (EACN) substation location and the existing 132 kV overhead line through the Area of Outstanding Natural Beauty (AONB) and where National Grid would consider overhead line to be inconsistent with relevant policy. Closer paralleling of existing infrastructure would only be possible by the installation of a third line from Bramford to the Twinstead area as well as paralleling the line from the Twinstead area towards Braintree. It would also either need a double connection to the EACN substation location or require customer connections to be routed to a relocated EACN substation. There are constraints and features that mean that overall, in the context of the Project we consider close paralleling in this area would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. A number of residential properties are present in close proximity to the existing 400 kV overhead line meaning that close paralleling would result in the properties having overhead lines on both sides. There are also some locations where the combination of existing physical and environmental features (road infrastructure, commercial and residential property, rivers, conservation areas and woodlands) present very substantial challenges to routeing and siting. In addition, we consider either a relocation of the EACN substation or connection of customer connections to a relocated EACN substation to lead to a greater level of adverse environmental effects and be less compliant with the Holford rules.
3.13.31	Suggest that the Project is routed as far away from populated / residential areas as possible	Deciding where and how to build new high voltage electricity lines is a complex issue and National Grid is mindful of the potential effects this infrastructure may have on local communities and the concerns these may bring. National Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise and potential health impacts. It has sometimes been suggested that minimum distances between properties and overhead lines should be prescribed.  We do not consider this appropriate since each instance must be dealt with on its merits. However, we have always
		sought to route new lines away from residential property on grounds of general amenity where possible.  We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate UK standards, and mitigated where necessary. We set strict technical standards for the equipment we install on our network. These will apply to the proposed new East Anglia Connection Node (EACN) substation located in the Tendring District, and extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.
		Noise from overhead lines is predominately determined by the conductor design, voltage and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types be used, consideration for this would be

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		assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the Environmental Statement (ES).
		In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an assessment on both landscape character and visual amenity.
		The health and safety of the public, local communities and employees is central to everything that we do. The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. Our approach is to ensure that our network comply with those policies, which are set by Government on the advice of their independent advisors. The Project will be designed to ensure it is fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed
		Policies for both noise and EMF are incorporated into the decision-making process for development consent as set out in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment complies fully with those policies and guidelines. The Development Consent Order (DCO) application will include assessments against these polices, including both construction and operational noise and EMF.
3.13.32	Suggest that the Project is aligned south of the A12	The Corridor and Preliminary Routeing and Siting Study (CPRSS) reports on consideration of alternative corridors south of the A12 and none were preferred. Whilst potentially feasible, the extent of residential development restricts potential routeing of connections. In addition, they were considered to lead to greater adverse effects on different receptors most notably on locations such as Flatford Mill (heritage and socio-economic effects) and were also considered more likely to affect a Special Area of Conservation (SAC). Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.
3.13.33	Suggestion that the Project runs adjacent to motorways and built up areas to avoid more overhead lines in rural areas	Whilst appreciating the potential benefits of infrastructure being concentrated geographically, i.e., by routeing the Project in close proximity to existing road infrastructure, we do not consider this to provide benefits in this section. Major roads potentially align (at least in part) with the general routeing of the Project. However, in this section there are constraints and features that mean that we do not consider close paralleling with them will reduce environmental effects or improve compliance with the Holford Rules or be more consistent with the policy to be economic and efficient. A number of residential properties (isolated as well as hamlets, villages and towns) are present in close proximity to the existing transport infrastructure necessitating multiple diversions of an overhead line. There are also some locations where the combination of existing physical and environmental features (railway and road infrastructure, commercial and residential property, woodlands and orchards) present very substantial challenges to routeing and siting. As a result, whilst close paralleling of transport infrastructure may appear beneficial in some

Ref no.	Summary of matters raised	National Grid's response
		short sections, overall the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new corridor separated from existing transport infrastructure. More generally, routeing is undertaken in accordance with the Holford Rules which guide to a balanced decision rather than favouring urban areas over rural areas as proposed.
3.13.34	Underground cables should be used wherever the Project falls within 3 miles / 5 km of the boundary of the Area of Outstanding Natural Beauty (AONB)	National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. National Grid therefore adopts underground cable technology as mitigation within areas such as AONBs. Policy identifies no set distance by which such mitigation should be extended outside the AONB boundary.
		National Grid identifies the requirement for mitigation (whether by additional planting, type of pylon or choice of alternative technology such as underground cable) based on consideration of the potential effects that may arise on a case-by-case basis. This takes into account the specific details of the designation (including special qualities, key views etc) and local circumstances including landform and existing vegetation. This approach allows consideration of the predicted effects arising from underground cable or overhead line technology and the Cable Sealing End (CSE) compounds (the transition sites between technologies) rather than applying an arbitrary distance that may be too great or too small for the specific circumstances.
3.13.35	Suggest that Tendring Substation is sited at the old Langham Airfield / Suggest that the direct route from Bramford to Tilbury is considered / Suggest that substation is sited on a direct route from Bramford to Tilbury (rather than deviating into Tendring)	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS).
		We have updated our proposals for the 400 kV connections and also considered alternative locations for the EACN substation including the former Royal Air Force (RAF) Boxted (near Langham) in light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or which would require multiple corridors to be used with greater environmental effects. We consider the EACN substation location close to Lawford 132 kV Substation to be the preferred basis to take forward the Project at this stage. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.13.36	Suggest that the Project is routed to the west of Colchester between Bramford and Chelmsford	The Project is routed to the west of Colchester between Bramford and Chelmsford.
3.13.37	The Project should run adjacent to existing transport infrastructure (e.g. A12, A14 and A140)	Whilst there could be potential benefits from infrastructure being concentrated geographically, i.e., by routeing the Project in close proximity to existing road and rail infrastructure, we do not consider these benefits arise for the whole route. Rail lines or roads potentially align (at least in part) with the general routeing of the connection. However, there are constraints and features that mean that we do not consider close paralleling will reduce environmental effects or

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		improve compliance with the Holford Rules or be more consistent with the policy requirement to be economic and efficient.  A number of residential properties, as well as hamlets, villages and towns, are present in close proximity to the existing transport infrastructure necessitating multiple diversions of an overhead line. There are also some locations where the combination of existing physical and environmental features (railway and road infrastructure, commercial and residential property, woodlands and orchards) present very substantial challenges to routeing and siting. As a result, whilst close paralleling of transport infrastructure may appear beneficial in some short sections, overall, the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new route alignment.
3.13.38	Support for alternative route proposed (grey route) from Bramford to Hadleigh	National Grid is already progressing separate proposals that involve replacing this existing 132 kV connection with a 400 kV connection (the Bramford to Twinstead Reinforcement). Adoption of a similar route for a third connection has been considered (as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS)) and is less preferred due to greater environmental effects and costs from a longer connection and the potential for a longer double connection route to the north of Colchester.
3.13.39	Suggest that power should be brought ashore from the offshore wind sites at the old Bradwell power station, routed towards Basildon and then connected to the 'green' route or an alternative route from Bromley to Langham is used	Several options were considered in developing the Project and information on these is available in the Corridor and Preliminary Routeing and Siting Study (CPRSS). Following the close of the 2022 non-statutory consultation and review of feedback we have backchecked our previous work and considered other potential routeing options in this area and felt they had different impacts and offered no benefit over the option we are taking forward.
		In respect of connecting at the old Bradwell power station, there is an existing overhead line connection to the Bradwell B site. This has been operating at lower voltage (132 kV) and has not been used for a few years and is in generally poor condition. This overhead line would need to be rebuilt however this onward connection via Rayleigh to Tilbury is also constrained by urban development and further designations and some sections may need to be rerouted if connections were made at Bradwell. Additionally, any connection point also requires two points of connection to the National Electricity Transmission System (NETS) (to meet compliance standards) requiring either a double overhead line through the Bradwell peninsula and onwards to separate locations or a connection back to Bramford (in addition to one towards Tilbury). A connection to Bramford would require connections to cross the Special Protection Area (SPA) designated Blackwater Estuary (3 km to 7 km tunnel likely to be required at much greater cost) as well as interact with other Special Area of Conservation (SAC) and SPA designations.
		The existing network through Norfolk, Suffolk and Essex would also still need to be upgraded to transport the electricity due to come onto the network in the Norwich area and provide the necessary two points of connection to the NETS. Taken together a Bradwell point of connection requires a greater amount of new infrastructure and is therefore less economic and efficient and expected to be associated with greater environmental effects.
3.13.40	Suggestion that the use of underground cables is extended further south to the A12	Informed by feedback and further study National Grid is proposing to extend the use of underground cable through the Area of Outstanding Natural Beauty (AONB) through to the East Anglia Connection Node (EACN) substation. This extends to the south of the A12 as proposed by the feedback.

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3.13.41	Suggest routeing the Project east of Hadleigh	National Grid set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) the basis for route option selection and has updated the Project in the light of the 2022 non-statutory consultation feedback. This included various options routeing in the vicinity of Hadleigh and all were considered less preferred due to additional effects arising from introducing a third connection between Bramford to the Twinstead Tee area, overall longer routes and particularly given the need to route two connections (to Bramford and to Tilbury) from the East Anglia Connection Node (EACN) substation. With no specific additional information provided in the feedback we do not consider further change required at this stage. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.13.42	Suggestion that the Project is relocated to be further west of Capel St Mary – the route should be aligned to the north and then west of Notley Industrial Park and / or through the Brett Vale golf course	National Grid has undertaken further studies to inform the siting of the Cable Sealing End (CSE) compound on the north of the Area of Outstanding Natural Beauty (AONB) and also listened to feedback. We are now proposing a CSE compound to the south of Notley Enterprise Park where it is adjacent to other large structures and where it will be at around 2 km from Holton St Mary. The overhead line connection from Bramford is proposed to be routed to the north of Notley Enterprise Park with underground cable passing Holton St Mary in open fields close to Brett Vale Golf Club.
3.13.43	Suggestion that the overhead line could be routed across the A134 / A12 bridge, contrary to National Grid findings	National Grid has considered this feedback but remains of the view that routeing via corridor H (along the approximate alignment of the A12 including crossing the A134) does not provide a deliverable solution given the presence of existing residential properties east of the A134 on the north of the A12 and the extent of consented development proposals south of the A12. Together these existing and proposed residential properties constrain the ability to create an overhead line corridor appropriately separated from the properties.
3.13.44	The Project should run through the lighter part of the graduated swathe (to the southern extents of the graduated swathe through open farmland where the impact will affect fewer people directly)	The graduated swathe provided an initial interpretation of the application of the Holford Rules. We consider an alignment within that swathe provides an appropriate interpretation of the Holford Rules and is in line with National Grid's duties and relevant policy framework. We will continue to back check and review our proposals in light of feedback and technical assessment as the Project develops.
3.13.45	Suggestion that Cable Sealing End (CSE) Compounds are sited outside of the Area of Outstanding Natural Beauty (AONB)	National Grid has undertaken further studies to inform the proposed siting of the Cable Sealing End (CSE) compounds on the north and south of the Area of Outstanding Natural Beauty (AONB) and also listened to feedback. To the north of the AONB we propose a CSE compound to the south of Notley Enterprise Park where it is adjacent to other large structures and where it will be at around 2 km from Holton St Mary. To the south we propose to extend the use of underground cable through to the East Anglia Connection Node (EACN) substation, which removes the requirement for a CSE compound at this location. We are also proposing to underground a section of the route near the AONB in the vicinity of Great Horkesley with CSE compounds sited outside the AONB.
3.13.46	Consider undergrounding the transmission line to the south of the Area of Outstanding Natural	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that

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	Beauty (AONB), including the route to and from the substation site and as it runs east to west to the south of the Dedham Vale	make it inconsistent with our duties and relevant planning policy. The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology is adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the development to unacceptably affect the Natural Beauty of the AONB.
	AONB	In particular we are proposing that the connection from Bramford is installed as underground cable from the northern edge of the AONB through to the East Anglia Connection Node (EACN) substation. This responds to both the potential for overhead line and/or Cable Sealing End (CSE) compounds to have effects on the AONB and the effects of a double overhead line for the last few km into the EACN substation. The current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley.
		Extending the undergrounding from the EACN substation east to west along the south of the AONB was considered, however following further assessment, we are not proposing to utilise underground cable in this section as the landscape and visual impacts from an overhead line on the setting of the AONB in this area were not considered to be inconsistent with national grids duties and the relevant planning policy framework.
3.13.47	Minimise the amount of land taken to deliver the Project	National Grid will be minimising the land taken to deliver the Project so far as practicable.
3.13.48	Avoid routeing the Project to north or east of Home Farm	National Grid has considered the respondents feedback which suggested avoiding a route to the north or east of Home Farm, Sproughton due to this being higher ground. We are currently proposing a change to the graduated swathe to facilitate an alignment to the east of the preferred corridor to the south of Bramford Substation, this is in response to feedback to move the route away from Burstall. The draft alignment would then continue south and pass to the west of Home Farm and meeting the requested change to the extent possible. Due to several constraints further west within the preferred corridor, opportunities to route the alignment further west are limited, however we will continue to update our proposals as the Project develops following further assessment and feedback.
3.13.49	Suggest underground cables should be used between Lawford and Marks Tey (close to Area of Outstanding Natural Beauty (AONB) and Stour Valley)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology is adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the Natural Beauty of the AONB. In particular we are proposing that the connection from Bramford is installed through the AONB as underground cable with the underground cable continuing from the southern edge of the AONB through to the East Anglia Connection Node (EACN) substation. This responds to both the potential for overhead line and/or Cable Sealing End (CSE) compounds to have effects on the AONB and the effects of a double overhead line for the last few km into the EACN substation. The current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley.

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3.13.50	Suggest that the Project is routed to the east side of the A12 from Copdock past Capel St Mary and on to the west side of East Bergholt	National Grid considered various potential alternative corridors in developing the corridor options described within the Corridor and Preliminary Routeing and Siting Study (CPRSS) which include elements forming part of the change proposed. We considered these alternatives less preferred because of greater effects on an extensive area of woodland to the west of East Bergholt and the effects expected to arise from routes either east or west of Dedham. East of Dedham, effects on locations such as Flatford Mill were much greater and west of Dedham routeing is highly constrained by numerous residential properties. We will continue to consider feedback and back-check our proposals as the Project progresses.
3.13.51	Suggest that the proposed underground cables in the vicinity of Boxhouse Lane, Parney Heath, Dedham, CO7, should be located as far west as possible, close to the existing A12 corridor and distant from residential properties in Boxhouse Lane	National Grid note the feedback and have considered this in developing the proposed underground cable route which must also consider the potential for effects on other environmental features (such as woodland) and other residential properties and not simply transfer effects from one group of residential properties to other residential properties. We consider that the draft alignment for the underground cable balances potential effects whilst not unduly increasing the length of the Project through undue diversion. We will continue to reflect on feedback as the Project develops.
3.13.52	Seek alternative routeing (no route specified)	National Grid considered alternative strategic proposals as well as alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published in support of the non-statutory consultation. We have updated our proposals in the light of non-statutory consultation feedback, and we will continue to reflect on the detail of any feedback and back-check and update the Project as appropriate and necessary.
3.13.53	Suggest that the Project should avoid Dedham Vale Area of Outstanding Natural Beauty (AONB)	National Grid considered route corridors that avoid the Dedham Vale Area of Outstanding Natural Beauty (AONB) (as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS)) and consider that the additional effects arising from alternatives, such as a third line from Bramford to the Twinstead area and a connection from the Twinstead area to Tilbury via an East Anglia Connection Node (EACN) substation, to be greater than those arising from the preferred corridor and to be less compliant with its duties and relevant policies.  The preferred corridor through the AONB, with the use of underground cable (both within the AONB and beyond the boundaries) to protect the natural beauty and special qualities of the AONB is in line with relevant policies and our duties.
3.13.54	Underground cables should be used in this section	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONB). Potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant

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		planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV overhead line infrastructure.  National Grid is proposing approximately 19.3 km of underground cable at areas that are identified as of highest landscape value for example within the Dedham Vale AONB and within the vicinity of the AONB near Great Horkesley. Elsewhere along the preferred corridor, the higher cost of underground cables to bill-paying consumers, and the environmental implications of installing and maintaining them, are not considered to be justifiable in the context of national policy or National Grid's statutory duties.  Nevertheless, an Environmental Impact Assessment (EIA) will assess the impact of the Project and will identify any need for additional mitigation.
3.13.55	Suggest use of underground cables in residential areas	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, and the duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy At this stage no locations have been proposed to be underground cable on the basis of residential effects alone although potential effects on residential property occupiers have formed part of the decision-making. Underground cable is proposed through the Area of Outstanding Natural Beauty (AONB) and in some locations near the AONB as well as for a crossing of the 400 kV overhead line and for the line entry to Tilbury Substation. A landscape and visual impact assessment will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation if required, this may include measures at particular locations to reduce a change in views of the Project or to better integrate infrastructure into the wider landscape.
3.13.56	Suggest that the cables should be underground along Langham Road and across Straight Road in Colchester	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology is adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the development to unacceptably affect the Natural Beauty of the AONB. In particular we are proposing that the connection from Bramford is installed as underground cable from the northern edge of the AONB through to the East Anglia Connection Node (EACN) substation. This responds to both the potential for overhead line and/or Cable Sealing End (CSE) compounds to have effects on the AONB and the effects of a double overhead line for the last few km into the EACN substation. The current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley. Extending the undergrounding from the EACN substation east to west along the south of the AONB, including across Langham Road and Straight Road was considered, however following further assessment, we are not proposing to

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		utilise underground cable in this section as the landscape and visual impacts from an overhead line on the setting of the AONB in this area were not considered to be inconsistent with our duties and the relevant planning policy framework.
3.13.57	Propose that Tendring Substation is re-located away from the Green Belt / Suggest that Tendring Substation is re-located to a brownfield site / industrial land	The proposed location of the new East Anglia Connection Node (EACN) substation is not within, or close to, any designated Green Belt land.
3.13.58	Propose that Tendring Substation is sited at industrial land to Northeast of Colchester	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to National Grid infrastructure and customer connections across potential sites (including the potential for siting of infrastructure on industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS). National Grid has updated its proposals for the 400 kV connections and also considered alternative locations for the EACN substation in the light of the 2022 non-statutory consultation feedback.
		No additional areas of industrial / brownfield land have been identified. Although the former Royal Air Force (RAF) Boxted site was identified in the feedback and the site has some potential, the connection corridor is too constrained for the multiple customer connections that need to be made to it requiring multiple corridors to be used (two of which would be through the Area of Outstanding Natural Beauty (AONB)) and increasing the level of environmental effects. We consider the EACN substation location close to Lawford 132 kV Substation to be the preferred site to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.13.59	Tendring Substation should be built underground	The currently proposed East Anglia Connection Node (EACN) substation location has been identified at least partly because it benefits from existing vegetation screening and is consistent with the guidance in the Horlock Rules. Substation elements may be in the order of 20 m above ground level necessitating very extensive depth and extent of excavation if the site were to be placed underground. This would lead to a range of environmental effects (from the construction works and disposal of material) and be at substantive additional cost. As such this would be less compliant with National Grid's duties and policies and has therefore not been taken forward.
3.13.60	Suggest that the existing overhead line that crosses the A134 at Assington is upgraded / replaced instead	National Grid is already progressing separate proposals that involve replacing this existing 132 kV overhead line that crosses the A134 at Assington with a 400 kV overhead line (the Bramford to Twinstead Reinforcement). Adoption of a similar route for a third connection has been considered and is less preferred due to greater level of environmental effects and reduced compliance with our duties and relevant policies.
3.13.61	Existing overhead lines in this section should be removed / undergrounded	The existing electricity transmission network provides power, via the local distribution network, into the local area where it is used in homes and businesses. The need case and funding for the Project is to deliver the new network reinforcement needed, rather than to remove existing overhead lines by undergrounding them. Unless required for

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		mitigation, undergrounding existing overhead lines on the transmission network would not be in accordance with National Policy Statement (NPS) EN-5 and would result in substantial cost to bill payers. There may also be significant environmental impacts due to the removal works on sensitive ecological and archaeological receptors as well as constraints from either existing built form of unsuitable ground conditions.
3.13.62	Suggestion that Tendring Substation is built on an existing brownfield site	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS) in the 2022 non-statutory consultation. We have updated our proposals and also considered alternative locations for the EACN substation (the former Royal Air Force (RAF) Boxted) in the light of the 2022 non-statutory consultation feedback. No additional areas of industrial / brownfield land have been identified. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or which would require multiple corridors to be used through the Area of Outstanding Natural Beauty (AONB) with greater environmental effects. We consider the proposed EACN substation location close to Lawford 132 kV Substation to be the preferred basis to take forward the Project at this stage. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.13.63	Suggestion that the Tendring Substation be located away from the Tendring Peninsular allowing for a more direct route further West, minimising the impact of overhead lines alongside the Area of Outstanding Natural Beauty (AONB)	The currently proposed East Anglia Connection Node (EACN) substation location was preferred after consideration of the environmental effects, engineering issues and costs associated with the 400 kV connections and customer connections. An EACN substation located further west may potentially shorten the 400 kV connection but would require multiple customer connections to be extended. The corridor requirements for such multiple customer connections are either similar or potentially greater than for the 400 kV connections (depending on location chosen). We consider the effects of the proposed location near the UK Power Networks (UKPN) Lawford Substation to be acceptable in policy terms and in greater accordance with National Grid policies and duties than other locations. We would also note that in response to feedback the proposals now include an extension of underground cable through the Area of Outstanding Natural Beauty (AONB) to the EACN substation thus reducing effects on residential amenity by removing the double overhead line section and also include an additional section of underground cable in the vicinity of Great Horkesley where the Project is in close proximity to the AONB.
3.13.64	Suggestion to use / upgrade existing substations	The existing transmission network in the region is currently being upgraded to ensure the system is running at its most efficient performance. The existing networks are not able to be upgraded sufficiently to cope with the new future demands expected on the network. As a result, new lines and substations will be required to accommodate the changing demands on the network.
3.13.65	Suggest routeing the Project offshore out at sea / Should consider routeing the Project undersea	Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Study (CPRSS) examines several strategic options that were considered for the Project that might achieve the required reinforcement including offshore options. These options were not taken forward as they did not fully address technical or physical/ geographical constraints or enable the network to operate to the required standards.

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		An offshore connection would have a third of the capacity of the proposed overhead line connection and therefore to transfer the anticipated levels of power generation, three offshore connections would be required including associated infrastructure such as convertor stations. This would make the connection significantly costlier to energy bill payers. In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich, Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area.
3.13.66	Reinforce the existing 132 kV overhead lines from Bramford to avoid Area of Outstanding Natural Beauty (AONB)	National Grid is already progressing separate proposals that involve replacing this existing 132 kV connection with a 400 kV connection (the Bramford to Twinstead Reinforcement). Adoption of a similar route for a third connection has been considered and we consider it less preferred due to greater level of environmental effects and costs. Other existing 132 kV connections between Bramford and Lawford all route through Areas of Outstanding Natural Beauty (AONB) and whilst considered were not taken forward either as overhead line options or for underground cable routes because they are inconsistent with policy or lead to greater level of environmental effects.
3.13.67	Consideration should be given to locating the Tendring Substation within the near Boxted instead	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS). We have updated our proposals and also considered alternative locations for the EACN substation including the former Royal Air Force (RAF) Boxted (near Langham) in light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or which would require multiple corridors to be used with greater environmental effects. We consider the proposed EACN substation location close to Lawford 132 kV Substation to be the preferred basis to take forward the Project at this stage. We will continue to
3.13.68	Oppose the siting of Cable Sealing End (CSE) compound in or near to the Holton St Mary	reflect on the detail of any feedback and update the Project as appropriate and necessary.  National Grid has undertaken further studies to inform the proposed siting of the Cable Sealing End (CSE) compound, to the north of the Area of Outstanding Natural Beauty (AONB), and listened to feedback. We propose a CSE compound to the south of Notley Enterprise Park where it is adjacent to other large structures and where it will be at around 2 km from Holton St Mary. The overhead line from Bramford is proposed to be routed to the north of Notley Enterprise Park with underground cable passing Holton St Mary.
3.13.69	Suggest the use of the underground ducting already in place from Bullen Power Station	Use of existing underground infrastructure would not be suitable for accommodating 400 kV underground cables. The installation of National Grid underground cables, occupy a lot more space due to the need for underground cable cooling considerations. Existing assets that have not been designed with housing 400 kV transmission assets in mind would be ineffective at facilitating the Project. The typical working corridor for a 400 kV underground cable would be approximately 120 m in width to be able to install the typically 18 underground cables that would make up the circuits on the Project.

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3.13.70	Extend use of underground cables from Area of Outstanding Natural Beauty (AONB) (near Birchwood Motel on the A12) through to Old Langham Airfield	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation, this has resulted in several changes to the preferred corridor. National Grid are now proposing to underground the route beyond the Area of Outstanding Natural Beauty (AONB) into the proposed East Anglia Connection Node (EACN) substation. We have updated our proposals and considered alternative locations for the EACN substation including the former Royal Air Force (RAF) Boxted (also known as Old Langham Airfield) in light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or requires the use of multiple corridors for the connections with greater environmental effects. We consider the EACN substation location close to Lawford 132 kV Substation to be the preferred basis to take forward the Project at this stage. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.13.71	The Cable Sealing End (CSE) compound should be sited immediately north or west of Notley Industrial Park	National Grid has reviewed the preferred corridor in this area following further assessment of potential Cable Sealing End (CSE) compound locations. We now propose to extend the underground cable section of the preferred corridor to a CSE compound location to the south of Notley Enterprise Park. The preferred corridor is then proposed to continue as overhead line to the north and east of Notley Enterprise Park.
3.13.72	Suggestion that underground cables must be used in the vicinity of Hall Road, Stitching Wood and Hill House Wood	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. The features identified are not of a type which would typically experience effects to justify the use of 400 kV underground cable technology. However, their presence has influenced the proposed routeing and the positioning of a Cable Sealing End (CSE) compound at the southern end of a section of underground cable considered necessary to respond to potential effects on the Dedham Vale Area of Outstanding Natural Beauty (AONB) just to the north of these woods (as design respond to the guidance of the Holford and Horlock Rules).
3.13.73	Suggest that National Grid coordinate proposed infrastructure with other energy providers (e.g. at Bramford Substation)	The Project is required to provide sufficient capacity to accommodate the growth in new energy generation from offshore wind, nuclear power, and interconnection with other countries, with current connection agreements with two offshore wind farms. The proposed infrastructure will therefore provide capacity for future energy providers. Any energy providers planning to connect to the National Grid network must apply for a connection, this starts a process or collaboration between the energy provider and National Grid to form a coordinated plan of the best connection location and establish any enablement works such as reinforcement or extension to the existing network. Therefore, energy providers have been coordinated with in the development of proposed National Grid infrastructure.
3.13.74	Concern regarding narrow pinch point at Great Horkesley where the proposed crossing point over the A134 is so narrow as to imply that the Project cannot be moved more than 100 m north or south	National Grid has followed the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:  1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers  The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the

Ref no.	Summary of matters raised	National Grid's response
	(in breach of the gunning principles)	proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.  2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response  We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.
		3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
		4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account.  In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities, and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website.
		We do note that some locations are heavily constrained, including at Great Horkesley, and in developing our proposals consider the potential effects along with feedback. In this location we are proposing the use of underground cable for around a 5.3 km distance including the A134 crossing.
3.13.75	Suggest that consideration is given to routeing the Project to the south of Colchester and the use of Section H alongside the A12, to avoid adverse impact on the Area of Outstanding Natural Beauty (AONB)	These potential corridors were considered by National Grid. Corridor H is not considered deliverable for the Project due to the extent of existing and consented development leaving no space to appropriately route an overhead line. Corridors to the south of Colchester lead to unavoidable effects on qualifying features of designated sites (Special Protection Areas (SPA) and Special Area of Conservation (SAC)) and as such cannot be taken forward when alternatives without such effects (i.e., the preferred corridor) are available.
3.13.76	Oppose the northern branch of Section F through the Great Horkesley / Little Horkesley / Fordham area	In considering this and other feedback National Grid notes that the alternative southern branch of corridor F would affect features such as Scheduled Monuments and Ancient Woodland along with transferring effects to other similar receptors to the respondent and considers the northern branch to be preferred. In light of further study and feedback, we consider that the additional costs of underground cable are justified in the context of our duties and relevant policy framework in the vicinity of Great Horkesley where an approximately 5.3 km section of underground cable is proposed. We consider the northern half of the preferred corridor to be most appropriate given in particular the

Ref no.	Summary of matters raised	National Grid's response
		Ancient Woodland and Scheduled Monument that would be affected by an overhead line in the more southern part of the preferred corridor.
3.13.77	Request that the Project should follow the north western edge of the preferred corridor to avoid impacts on the Marks Tey Brickpit Site of Special Scientific Interest (SSSI) and associated sediments extending from the SSSI (to the north and west of the SSSI boundary)	National Grid has reviewed the preferred corridor in this area to respond to this feedback. A change to the graduated swathe to the northern edge of the preferred corridor was assessed, however an alignment in the northern part of the corridor would be less preferable as it would not be possible to route the alignment in that area without oversailing residential properties or woodland. Therefore, we are proposing to keep the graduated swathe to the southern edge of the preferred corridor at this stage. We will seek to avoid impacts on the Site of Special Scientific Interest (SSSI) at Marks Tey during routeing and siting and any remaining impacts will be assessed in the Environmental Impact Assessment (EIA) and mitigated where appropriate.
3.13.78	Suggestion that the Project is routed away from specific location	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation which has resulted in several changes to the current preferred corridor. Further details on these changes can be found in the Design Development Report, published as part of the 2023 non-statutory consultation. Further changes to the preferred corridor and draft alignment will be considered as the Project develops.
3.13.79	Suggestion that the Project is routed away from Burstall	National Grid has reviewed the preferred corridor in this area to respond to this feedback. We are proposing an amendment to the graduated swathe to facilitate an alignment to the east of the preferred corridor. An easterly alignment whilst marginally less direct and longer, does move the Project further away from Burstall.
3.13.80	Suggestion that the Project is routed away from Aldham	National Grid has reviewed the preferred corridor in this area to respond to this feedback. We are proposing an amendment to the graduated swathe to facilitate an alignment to the south of the preferred corridor, which would move the Project further away from Aldham. A more eastern crossing of the Colne Valley was also considered but less preferred due to increased effects on woodland, additional changes of direction and greater interaction with floodplain areas.
3.13.81	Suggestion that the Project is routed away from Holton St Mary	National Grid has reviewed the preferred corridor in this area following further assessment of potential Cable Sealing End (CSE) compound locations. We now propose to extend the underground cable section of the preferred corridor beyond Holton St Mary to a CSE compound location to the south of Notley Enterprise Park. This also moves the underground cable further from Holton St Mary.
3.13.82	Suggestion that the Project is routed away from Raydon and Raydon Airfield	National Grid has reviewed the preferred corridor in this area following further assessment of potential Cable Sealing End (CSE) compound locations. We now propose to extend the underground cable section of the preferred corridor to a CSE compound location to the south of Notley Enterprise Park. In proposing this change we have proposed an overhead line alignment approaching from the west that reduces the separation to the runway but remains parallel to the runway (to the south) to allow east and west approaches to and from Raydon Airfield. This change is proposed at least in part to reduce potential effects on Grade I Listed buildings at Little Wenham and because this is a preferred CSE compound siting location.

Ref no.	Summary of matters raised	National Grid's response
3.13.83	Suggestion that the Project is routed away from Chattisham	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Chattisham. We have reviewed alternative corridors for the connection to the East Anglia Connection Node (EACN) substation but continue to conclude that this remains the preferred corridor at this stage. In the absence of a specific basis for the change or a proposed alternative corridor, we have also considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Whilst this means an alignment is not further away from Chattisham we consider the preferred corridor is consistent with the Holford Rule guidance. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford rules is provided within Chapter 1 of this report.
3.13.84	Suggestion that the Project is routed away from Hillhouse Woods	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Hillhouse Wood (near West Bergholt). We can confirm that the preferred corridor can be constrained to avoid this woodland. In considering the feedback we are guided by the Holford Rules specifically avoiding woodland where this is possible without undue diversion. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.85	Suggestion that the Project is routed away from The Colne Valley	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from the Colne Valley. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.86	Suggestion that the Project is routed away from Great Horkesley	National Grid has reviewed the preferred corridor in this area following further assessment. We have also reviewed the other corridors considered in the Corridor and Preliminary Routeing and Siting Study (CPRSS) and remain of the view that the preferred corridor should be taken forward at this time. We do however propose to adopt underground cable technology for a distance of around 5.3 km from a CSE compound in the east between Horkesley Plantation and Harrow Wood and in the west on land to the west of Crabtree Lane and north of the B1508.
3.13.87	Suggestion that the Project is routed away from Great Wenham and Little Wenham	National Grid has reviewed the preferred corridor in this area following further assessment of potential Cable Sealing End (CSE) compound locations. We now propose to extend the underground cable section of the preferred corridor to a CSE compound location to the south of Notley Enterprise Park. The preferred corridor is then proposed to continue on overhead line to the north and east of Notley Enterprise Park, which would move the Project further away from Great Wenham and Little Wenham.
3.13.88	Suggestion that the Project is routed away from Church Lane	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Church Lane. The current proposals include an alignment within the north-western side of the preferred corridor to the north of Upp Hall Farm. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford"

Ref no.	Summary of matters raised	National Grid's response
		Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.89	Suggestion that the Project is routed away from Boxted	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Boxted. We have reviewed alternative corridors that were considered in the Corridor and Preliminary Routeing and Siting Study (CPRSS) but remain of the view that the preferred corridor should be taken forward at this time. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.90	Suggestion that the Project is routed away from Fordham	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Fordham. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. We also considered a more easterly crossing of the Colne valley but considered this less preferred because of greater effects on woodland, more direction changes and greater interaction with floodplain. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.91	Suggestion that the Project is routed away from Langham	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Langham. We have reviewed other corridors that were considered within the Corridor and Preliminary Routeing and Siting Study (CPRSS) and continue to conclude that the preferred corridor should be taken forward at this time. We would also note that the Project closest to Langham is proposed to be installed as underground cable. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.92	Suggestion that the Project is routed away from West Bergholt	National Grid has reviewed the preferred corridor in this area following further assessment. We now propose to adopt underground cable technology for a distance of 5.3 km from a Cable Sealing End (CSE) compound to the east between Horkesley Plantation and Harrow Wood and to the west on land to the west of Crabtree Lane and north of the B1508. The proposed siting of the CSE compound supports an alignment to the west of the corridor further from West Bergholt. A more westerly corridor was considered, potentially going on to close parallel an existing 400 kV overhead line but this would be longer and less direct and would lead to greater environmental effects overall and considered less consistent with the Holford Rules used as guidance to route decision-making.

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3.13.93	Suggestion that the Project is routed away from Little Horkesley Valley	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Little Horkesley Valley. We have reviewed the preferred corridor in this area following further assessment and we have also reviewed the other corridors considered in the Corridor and Preliminary Routeing and Siting Study (CPRSS) and remain of the view that the preferred corridor should be taken forward at this time. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.94	Suggestion that the Project is routed away from Little Bromley	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Little Bromley which is around 1.5 km to the east of the East Anglia Connection Node (EACN) substation and also note the connections from the EACN substation route to the west. We have considered other locations for the EACN substation but concluded that they would lead to greater environmental effects. Current proposals include one of the two connections entering the EACN substation from the west to be underground cable. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.95	Suggestion that the Project is routed towards Notley Enterprise Park	National Grid has reviewed the preferred corridor in this area following further assessment of potential Cable Sealing End (CSE) compound locations. We now propose to extend the underground cable section of the preferred corridor to a CSE compound location to the south of Notley Enterprise Park. The preferred corridor is then proposed to continue on overhead line to the north and east of Notley Enterprise Park.
3.13.96	Suggestion that the Project is routed away from Fordham Heath	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Fordham Heath. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. The outcome is a draft alignment to the west of the preferred corridor relatively further from Fordham Heath. This was preferred to alignments closer to Fordham Heath which are constrained by numerous residential properties leading to alignments that would be less direct, with greater effects on woodland and more angle changes as well as more interaction with floodplain. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.97	Suggestion that the Project is routed away from Eight Ash Green	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Eight Ash Green. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. The outcome is a draft alignment to the west of the preferred corridor

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		relatively further from Eight Ash Green. This was preferred to alignments closer to Eight Ash Green which are constrained by numerous residential properties leading to alignments that would be less direct, with greater effects on woodland and more angle changes as well as more interaction with floodplain. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.98	Suggestion that the Project is routed away from Dedham Village	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Dedham Village which is currently approximately 2 km from the preferred corridor and proposed as underground cable. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on underground cable routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.99	Suggestion that the Project is routed away from Marks Tay	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Marks Tay. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.100	Suggestion that the Project is routed away from Ardleigh	We have reviewed alternative corridors but continue to conclude that the preferred corridor should be taken forward at this time. Alternatives to Bramford would lead to greater effects either on Grade I Listed buildings at Flatford Mill or on areas and the qualifying species associated with Special Protection Area (SPA) meaning alternatives need to be taken forward where available. Such SPA effects also mean alternatives east and south of Colchester cannot be taken forwards. In light of feedback and in consideration of potential effects from Cable Sealing End (CSE) compound siting or a double overhead line we are proposing to continue the underground cable through the Area of Outstanding Natural Beauty (AONB) all the way to the East Anglia Connection Node (EACN) substation. This also allows adjustment of the overhead line near Ardleigh to increase the separation of the overhead line (from the EACN substation to Tilbury) from the village.
3.13.101	Suggestion that the Project is routed away from Little Tey	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Little Tey. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.

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3.13.102	Suggestion that the Project is routed away from Colchester	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Colchester. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.103	Suggestion that the Project is routed away from Hintlesham	National Grid has reviewed the preferred corridor in this area to respond to this feedback. We are proposing an amendment to the graduated swathe in order to facilitate an alignment to the east of the preferred corridor. An easterly alignment whilst marginally less direct and longer, would move the Project further away from Hintlesham.
3.13.104	Suggestion that the Project is routed away from Capel St Mary	National Grid has reviewed the preferred corridor in this area following further assessment of potential Cable Sealing End (CSE) compound locations. We now propose to extend the underground cable section of the preferred corridor to a CSE compound location to the south of Notley Enterprise Park. The preferred corridor is then proposed to continue on overhead line to the north and east of Notley Enterprise Park, which would move the Project further away from Capel St Mary.
3.13.105	Suggestion that the Project is routed away from Babergh	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Babergh. We have considered the corridors previously reviewed as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) but consider that the preferred corridor should be taken forward at this time. We will continue following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.13.106	If cables must be routed as suggested in Chapter 7 then to protect the Area of Outstanding Natural Beauty (AONB) they must be buried wherever they fall within 3 miles / 5 km of the boundary of the AONB	National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. National Grid therefore adopts underground cable technology as mitigation within areas such as AONBs. Policy identifies no set distance by which such mitigation should be extended outside the AONB boundary.  National Grid identifies the requirement for mitigation (whether by additional planting, type of pylon or choice of alternative technology such as underground cable) based on consideration of the potential effects that may arise on a case-by-case basis. This considers the specific details of the designation (including special qualities, key views etc) and local circumstances including landform and existing vegetation. This approach allows consideration of the predicted effects arising from underground cable or overhead line technology and the Cable Sealing End (CSE) compounds (the transition sites between technologies) rather than applying an arbitrary distance that may be too great or too small for the specific circumstances.

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3.13.107	Locations for Cable Sealing End (CSE) Compound sites to facilitate end point of underground section must be carefully chosen and subject to further consultation	National Grid acknowledges the requirement to carefully site the Cable Sealing End (CSE) compounds paying particular regard to the Horlock Rules and will consult on its proposals and consider any feedback provided as the Project develops.
3.13.108	The underground section is far from sufficient to mitigate blight of the Area of Outstanding Natural Beauty (AONB). At the very least, Section F which abuts the AONB should also be undergrounded as will have a significant adverse impact on the AONB, as recognised in Chapters 5 and 7 Corridor and Preliminary Routeing and Siting Study (CPRSS)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy.  The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology is adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the Natural Beauty of the AONB.  Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley to reduce the changes in views and setting of the AONB from within and adjacent to its designated boundary. Elsewhere in the corridor north of Colchester, we do not consider the effects of an overhead line to be inconsistent with our duties and policies, including in respect of the AONB.  A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any mitigation required.
3.13.109	A detailed study will be required in all underground areas and detailed route options presented for consideration	National Grid will present its proposals for undergrounding, that have increased from those presented at the 2022 non-statutory consultation, along with the alternatives considered in the Design Development Report published as part of the 2023 non-statutory consultation.
3.13.110	The consultation was inadequate and only one alternative for the proposed Tendring Substation is provided as the de-facto choice	In developing our proposals for the East Anglia Connection Node (EACN) substation we worked closely with the offshore wind developers who will connect their renewable generation into the substation. In making the decision we considered the effects of the proposed new 400 kV connections required, the transmission substation, the need for the customers lower voltage substations, underground cable routes from the coast and landing points/ marine cables from the wind farms. We feel that our work shows that the substation site presented for consultation at Lawford best balances all these requirements and at the same time reduces impacts on the environment. Several other sites were considered and information on these is available in the Corridor and Preliminary Routeing and Siting Study (CPRSS) which was published at the 2022 non-statutory consultation but ultimately, we felt that the site at Lawford provided the best option based on the factors we need to consider when siting a substation. Our decision-making process will be back-checked and reviewed at each stage of the Project and further consultation will be undertaken on our proposals.

### **Summary of matters** Ref no. raised

## **National Grid's response**

We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:

1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers

The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.

2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response

We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the CPRSS which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.

- 3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
- 4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account. In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities, and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website.

Substation is in close proximity to the Dedham Vale Area of Outstanding Natural Beauty Routeing and Siting Study (CPRSS) Chapters 5 and 7 of the CPRSS recognise the potential

for significant damage to the

and out from the sub-station

AONB as a result of cables in to

The proposed Tendring

3.13.111

National Grid carefully considers the development of the Project design to seek to avoid or reduce the potential for effects. We also carefully assess that design to identify whether any mitigation is necessary, and the form of that mitigation as the work progresses. We have concluded that some extension of the use of underground cables (beyond the boundary of the Area of Outstanding Natural Beauty (AONB)) is required for the Project to be consistent (AONB). Corridor and Preliminary with our duties and relevant policy framework.

> The use of underground cable to a Cable Sealing End (CSE) compound in the vicinity of Notley Enterprise park reduces such effects on the AONB to the north. To the south we propose to extend the use of underground cable through to the East Anglia Connection Node (EACN) substation in part to respond to potential effects on the AONB and in part to reduce the effects of what would have been a double overhead line in close vicinity to Ardleigh. We consider this reduces the effects to be in line with our duties and policy framework.

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	which are scheduled to run along the southern length of the AONB	
3.13.112	An alternative site to the Tendring Substation should be sought for the sub-station and options away from the Area of Outstanding Natural Beauty (AONB) presented for full consultation	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS). We have updated our proposals for the 400 kV connections (including the use of 400 kV underground cable through the Area of Outstanding Natural Beauty (AONB) to the EACN substation. We have also considered alternative locations for the EACN substation (including the former Royal Air Force (RAF) Boxted site closer to the A12) in the light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or requires the use of multiple corridors with greater environmental effects to achieve the connections. We consider the proposed EACN substation location close to Lawford 132 kV Substation with one connection as underground cable and one as overhead line to be the preferred basis to take forward the Project at this stage consistent with our duties and the relevant policy framework. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.13.113	Consultation parameters should include not only the site of the Tendring Substation, but the implications of that site with respect to the impact of cables in and out from the site.  These options must include offshore alternatives as part of a strategic grid as well as brownfield sites onshore. In particular, offshore substations mut be considered and presented for consultation.	Consultation materials included information on the proposed 400 kV connections into the East Anglia Connection Node (EACN) substation, the EACN substation itself and on the offshore wind farms proposing to connect at the EACN substation.  The offshore wind farm developers have subsequently held their own respective consultations which have shown details of both their proposed landing points near Clacton including their routes and substation sites required to enable them to connect back to the EACN substation.  We continue to work closely with wind farm developers and Tarchon Energy to coordinate the proposals as far as practicable and to share the relevant design information to assist in each proposal to generate any further consultation material.
3.13.114	No consideration of the impact on the Area of Outstanding Natural Beauty (AONB) in the section F part of the route, and the narrow pinch point at Great Horkesley appears to be a forgone conclusion in breach of the gunning principles	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. National Grid noted in non-statutory consultation that it would reflect on feedback and the results of further assessment to develop the Project.  We do note that some locations are heavily constrained and in developing our proposals consider the potential effects along with feedback. National Grid agrees that in the vicinity of Great Horkesley the potential effects of an

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overhead line would not be consistent with policy. We are therefore proposing to use underground cable for a distance of approximately 5.3 km between carefully sited Cable Sealing End (CSE) compound.

We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:

1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers

The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.

2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response

We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the Corridor and Preliminary Routeing and Siting Study (CPRSS) which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.

- 3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation

  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
- 4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account.

  In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities and technical stakeholders. All responses received have been read and

public, elected members, Local Authorities and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website.

3.13.115 I oppose the route selected in particular near to Great-Horkesley, Little Horkesley and Fordham where the route is in extremely close proximity to the Dedham Vale Area of Outstanding Natural Beauty (AONB).

The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. National Grid noted in the 2022 non-statutory consultation that it would reflect on feedback and the results of further assessment to develop the Project.

National Grid agrees that in the vicinity of the Area of Outstanding Natural Beauty (AONB) in this area the potential effects of an overhead line would not be consistent with policy. We are therefore proposing to use underground cable for a distance of approximately 5.3 km between carefully sited Cable Sealing End (CSE) compounds. The proposed routeing of the underground cables and the connecting overhead line has been informed by the Holford Rules and

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the location of various constraints and environmental features. This still routes the underground cables in close proximity to the AONB, but this is considered not to be inconsistent with relevant policy framework.

3.13.116 National Grid itself identifies the significant adverse visual effects and the need for mitigation along the route where it abuts the Area of Outstanding Natural Beauty (AONB) (CH. 7.5.15-16 CPRSS; Appendix B30), yet National Grid still selected this route, without presenting any other options (contrary to the Gunning principles and National Policy Statement (NPS) EN-1), and its proposals fail to provide or cost for any mitigation (contrary to the Electricity Act, EN-1 and EN-5)

National Grid recognises the challenges inherent in routeing within and close to the Dedham Vale Area of Outstanding Natural Beauty (AONB). The Corridor and Preliminary Routeing and Siting Study (CPRSS) set out the reasons for preferring the corridor that was consulted upon rather than others and noted that the potential for effects on the AONB would require additional consideration of mitigation that may be required whether by route alignment within the corridor, alternative pylon designs or the use of underground cable technology. Our proposals have responded to feedback and further study and include adoption of underground cable from a Cable Sealing End (CSE) compound located near Notley Enterprise Park through the AONB to the East Anglia Connection Node (EACN) substation and an additional length of approximately 5.3 km of underground cable in the vicinity of Great Horkesley adjacent to the AONB.

The need for this and other mitigation arises with all potential routes (on and offshore) and we backcheck previous findings to ensure we continue to take forward the Project that best meets the duties and policies that govern our activities. Visual impacts will be assessed in the Landscape and Visual Impact Assessment (LVIA) as part of the Environmental Impact Assessment (EIA). We remain of the view that the Project, with the additional mitigation, is the optimum solution that best meets our duties and the relevant policy framework.

We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:

1. Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers

The Project is still in the early stages. This was our first round of consultation, and we will be looking to bring the proposals for further public consultation as the Project develops. The Project is still at a formative stage with our preferred corridor and graduated swathe being indicative to help shape and inform feedback we receive.

2. There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response

We have published a considerable amount of information to support the consultation, and this is all available on our website and at our public exhibitions. This includes a technical report, the CPRSS which contains detailed information of the work we have done and a summary document, the Project Background document, which provides this information in a more accessible format.

- 3. There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation

  The consultation ran for a period of eight weeks, and this gave sufficient time for people to review the information provided, attend a face-to-face event, webinar, or contact the Project team with any questions to enable them to provide an informed response. We follow advice and guidance provided in relation to consultation for a project of this nature and are confident we go over and above any statutory requirements to engage fully with all stakeholders.
- 4. Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account.

# Ref no. Summary of matters raised 3.13.117 National Grid itself concluded that the route from Bramford to the East Anglia Connection Node (EACN) should proceed underground through the Area of Outstanding Natural Beauty (AONB) on the basis that building overhead lines so closely along the southern edge would be as or

more damaging than burying

National Grid recognises that

cables within it (CPRSS Ch.5).

significant damage to the AONB would result from overhead lines near to the AONB (5.1.4; 5.5.5; 5.5.24;7.5.15; 7.5.16; Appendix B30) and that mitigation in the form of alternate routes (5.1.4; 5.5.5) alternative pylon design (5.5.18; Appendix B30) or more likely significant sections

underground would be required in respect of section F close to the AONB (1.3.40; 3.1.9; 5.5.8; 5.5.9; Appendix B30); however National Grid has then FAILED to apply such to the route leaving the EAC

## **National Grid's response**

In response to the consultation, we received over 3,000 responses. Responses were received from members of the public, elected members, Local Authorities, and technical stakeholders. All responses received have been read and considered by the Project team. Information from the feedback has been considered as we have developed our proposals and information is available on how feedback has influenced the Project is available as part of our consultation within this report and the other Project documents available on the Project website.

3.13.117 National Grid itself concluded that the route from Bramford to the East Anglia Connection Node (EACN) should proceed underground through the Area of Underground through the Undergro

The use of underground cable to a Cable Sealing End (CSE) compound in the vicinity of Notley Enterprise park reduces such effects on the AONB to the north. To the south we propose to extend the use of underground cable through to the East Anglia Connection Node (EACN) substation in part to respond to potential effects on the AONB and in part to reduce the effects of what would have been a double overhead line in close vicinity to Ardleigh. We consider this reduces the effects to be in line with our duties and policy framework. We are also proposing approximately 5.3 km of underground cable near Great Horkesley where the preferred corridor is closest to the AONB.

### Design question

3.13.118 Why is the substation required when the new wind farms at North Falls and Five Estuaries could be attached to Bradwell to

at Section F.

There is an existing overhead line connection to the Bradwell B site. This has been operating at lower voltage (132 kV) and has not been used for a few years and is in generally poor condition. This overhead line would need to be rebuilt however this onward connection via Rayleigh to Tilbury is also constrained by urban development and further designations and some sections may need to be re-routed if connections were made at Bradwell. Additionally, any

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	utilise the unenergized 132 kV overhead line? / Suggest substation is sited at Bradwell / Suggests a more coordinated approach with the North Falls and Five Estuaries developments	connection point also requires two points of connection to the National Electricity Transmission System (NETS) (to meet compliance standards) requiring either a double overhead line through the Bradwell peninsula and onwards to separate locations or a connection back to Bramford (in addition to one towards Tilbury). A connection to Bramford would require connections to cross the Special Protection Area (SPA) designated Blackwater Estuary (3 km to 7 km tunnel likely to be required at much greater cost) as well as interact with other Special Area of Conservation (SAC) and SPA designations.
		The existing network through Norfolk, Suffolk and Essex would also still need to be upgraded to transport the electricity due to come onto the network in the Norwich area and provide the necessary two points of connection to the NETS. Taken together a Bradwell point of connection requires a greater amount of new infrastructure and is therefore less economic and efficient and expected to be associated with greater environmental effects.
3.13.119	How will underground cables cross rivers along the Project?	Where underground cables need to pass beneath rivers and watercourses these crossings require individual assessment to determine the best suited construction methodology. These assessments consider physical engineering as well as environmental and ecological constraints.
		Smaller, less complex watercourses may be suitable for the installation of underground cables by utilising an open cut trench excavation. This may require the watercourse to be temporarily dammed upstream and the watercourse temporarily diverted / over pumped around the work area, discharging back into the watercourse downstream thus creating a dry temporary work area to allow the route to be excavated, underground cables laid and backfilled prior to the watercourse being restored to its normal flow path.
		The environmental impacts caused by the Project will be assessed within the Environmental Impact Assessment (EIA) and mitigated where required.
		More complex watercourse may be best suited to a trenchless method of excavation and installation, for example, Horizontal Directional Drilling (HDD). HDD is a method of drilling horizontally beneath the ground / riverbed. The drilled borehole is then ducted, and the underground cables pulled through. This method is regularly used to excavate beneath rivers, railways, roads etc. and ensures minimal disturbance above ground. At each end of the HDD there will be a pit excavated to start and receive the drilling. The HDD section between these pits can be up to 750 m apart dependent on the width of the complex crossing 250 m. This will be sufficient for all river widths along the proposed route.
3.13.120	Will there be extensive burying of underground cables along the route from Clacton to the Tendring Substation? If so, what impact will there be to local people, local traffic and to the skyline along the route?	National Grid interprets the feedback question as referring to Clacton-on-Sea (Ordnance Survey (OS) Grid Reference TM17577 14844) to the East Anglia Connection Node (EACN) substation. Whilst we continue to work closely with electricity generation customers who will feed into the national network, it would be for the proponents of those projects to consider the use and subsequently identify the impacts on people, local traffic, and the skyline of installing extensive underground cabling from Clacton-on-Sea to the EACN substation.

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Economic	/ Employment impact		
3.13.121	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.	
		Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include: traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).	
3.13.122	The Project will result in decreased Government revenue via stamp duty revenues	National Grid recognises that development of this Project may cause uncertainty for people wishing to move home. We are keen to work closely with anyone who has concerns about the impacts on their property value or ability to sell their property and we would encourage people to contact us direct if they have concerns through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:  • Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)	
		Write to us: FREEPOST N TO T (No stamp or further address details are required)	
		mailto: It is unlikely that the Project will have any impact on Government revenue via stamp duty.	
3.13.123	Concerned about the Project being in too close proximity to new housing developments / land being considered for potential future housing development	National Grid has obtained information on development proposals within the planning system for the area potentially impacted by the Project. The nature of our response varies as in some cases proposals can be amended to be designed around our proposed infrastructure but in other cases our proposals may need to be amended at a corridor level or factored into detailed route design. Based on known information we consider our proposals are consistent with relevant policy and guidelines and routes designed such that they do not prevent proposed housing developments. It should also be noted that there are no minimum distances prescribed in United Kingdom (UK) law between overhead lines and homes. Any implications on landscape and visual receptors, residential amenity or from concerns about electric and magnetic fields (EMFs) are robustly assessed and balanced as part of the decision-making process. We will continue to review planning applications and engage with developers to back-check and update our proposals as necessary.	
Environme	Environmental impact		
3.13.124	Other areas within this section should be protected, not just the Area of Outstanding Natural Beauty (AONB)	National Grid develops its proposals informed by National Policy Statement (NPS) EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy.	

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		National Grid has proposed to extend the use of underground cable technology beyond the Area of Outstanding Natural Beauty (AONB) boundary in response to the potential for the development to unacceptably affect the defined special qualities of the AONB. The current proposals include approximately 14 km of underground cable from a Cable Sealing End (CSE) compound around 1 km to the north of the AONB through the AONB and on past Ardleigh to the East Anglia Connection Node (EACN) substation along with a further approximately 5.3 km of underground cable in the vicinity of the AONB around Great Horkesley.
		A landscape and visual impact assessment will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.13.125	The Project will impact designated sites – e.g. Site of Special Scientific Interest (SSSI), Ancient Woodland and an Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Site of Special Scientific Interest (SSSI) and Ancient Woodland.
		The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required mitigation requirements.
		We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.13.126	The Project will result in a negative impact on the environment generally (no details given)	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.
3.13.127	The pylon design needs to be reviewed in this section to ensure they are sympathetic to their surroundings (e.g. designed to blend in and have minimal impact on the wildlife)	For the purposes of this initial assessment, the preferred draft alignment reflects the use of standard lattice pylons and where we might locate pylons, underground cables, Cable Sealing End (CSE) compounds (where underground cables join with overhead lines) and the proposed East Anglia Connection Node (EACN) substation. The use of other pylon designs is still under consideration, if an overhead line route is progressed. We will be carrying out further assessments on pylon design. Our assessments will include visual impacts and mitigation, environmental and ecological considerations, construction, and lifetime maintenance effects.  Different designs in use in the UK include:  • standard lattice;
		lower height lattice; and
		• T-pylons.
		We will present the findings from our assessments at our statutory consultation.

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3.13.128	The Project will cause a negative impact on landscape / amenity	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
		Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
		We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.  As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for
		mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.13.129	Suggest that hedgerows are planted along the length of the underground cables	Where required the planting of hedgerow would form part of the Project's mitigation requirements and/ or Biodiversity Net Gain (BNG) strategy, which will consider local schemes such as Nature Recovery Networks to maximise the benefits to wildlife. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
		However, it will not be possible or practical to plant hedgerows along the length of the underground cables as in doing so would interfere with the existing farming practice on the land, which will be return to the landowner at the end of the construction phase.
3.13.130	Engage with wildlife trusts to adopt restored areas and help assist to develop them for wildlife	In developing the Project National Grid will engage with a variety of technical stakeholders including local Wildlife Trusts. We will work with them to understand the effects of the Project and what mitigation and enhancement they feel is appropriate.
	<ul> <li>creating a positive legacy</li> </ul>	The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater

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		in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.13.131	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated, however there is currently no green belt land designations within this section. National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.
		The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.
3.13.132	Concern regarding disruption of groundwater (e.g., impact on drinking water, drainage and ground stability) / Concern regarding contamination of groundwater	The likely significant effects on groundwater (including levels, flow and quality) from the Project, which may impact e.g. private and public water supplies, will be assessed in the Geology and Hydrogeology chapter of the Environmental Impact Assessment (EIA). This will be based on and supported by a contamination risk assessment in line with relevant guidance contained within Land Contamination Risk Management (LCRM) which will identify areas of potentially contaminated land and the potential risks to sensitive receptors, including groundwater. The Geology and Hydrogeology chapter will also be informed and supported by a preliminary groundwater risk assessment, as appropriate, where impacts on levels and flows are identified. In addition, there will be an assessment of the potential for natural geohazards to be present which may impact on ground stability.
3.13.133	Concern that the Project may not adhere to the Queens Green Canopy (QGC) Initiative	The Queens Green Canopy (QGC) scheme celebrated the Queens Platinum Jubilee and encourages the planting of trees during 2022 (now extended to 2023 following the passing of the Queen). We will seek to avoid removing trees where practicable in developing the Project. Where we need to remove trees we will replant trees, either in the same location or in the area. We will also work with other stakeholders in the area to identify opportunities for additional tree planting.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.13.134	Within the Area of Outstanding Natural Beauty (AONB)	The installation of underground cabling would broadly adopt the following process: initially, the removal of topsoil and storage of a width sufficient to allow for construction machinery to work and the digging of the trenching required for

### **Summary of matters** Ref no. **National Grid's response** raised undergrounding still causes underground cabling would be engineered. The underground cabling would then be laid in the trench, soils would be significant damage and blight, backfilled and hedgerows and shrubs reinstated where practicable. At this point a typical grass seed mixture would with swathes up to 100 metres be scattered to encourage regrowth. wide dug up It is anticipated that within 6-12 months upon completion of the construction of the underground cabling, there would minimal visibility of the works at ground level and the landscape would return to pre-construction views and settings. A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project, including the undergrounding, and will identify any need for additional mitigation if required, this may include screening at particular locations to reduce a change in views of the Project or to better integrate infrastructure into the wider landscape. In the event mitigation is required, these will be presented within the Code of Construction Practice (CoCP) for the Project. Section F route at Great and Little The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead 3.13.135 Horkesley impinges upon the lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at Dedham Vale Area of particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that **Outstanding Natural Beauty** make it inconsistent with our duties and relevant planning policy. National Grid noted in the 2022 non-statutory consultation that it would reflect on feedback and the results of further assessment to develop the Project. (AONB) due to its extremely close proximity (only 50 metres National Grid agrees that in the vicinity of the Area of Outstanding Natural Beauty (AONB) in this area the potential away in places) and positioning effects of an overhead line would not be consistent with policy. We are therefore proposing to use underground cable atop a ridge in open countryside for a distance of approximately 5.3 km between carefully sited Cable Sealing End (CSE) compound. The proposed such that it will be clearly visible routeing of the underground cables and the connecting overhead line has been informed by the Holford Rules and from inside the AONB, blighting the location of various constraints and environmental features. This still routes the underground cables in close its special and protected amenity proximity to the AONB but this is considered not to be inconsistent with the NPS. (disregarding s.38 and Schedule 9 Electricity Act; contravening National Policy Statement (NPS) EN-1 and Holford Rule 1 Financial compensation The Project will devalue my National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value 3.13.136 known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in property / Impact on property accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights value in this section in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct

If there are any specific concerns about the devaluation of property, please contact the Project team:

Norwich-Tilbury @fishergerman.co.uk or by calling us on Freephone 0808 175 3314.

result of the works.

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		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>	
3.13.137	Need more information on compensation and disruption (e.g. for landowners)	National Grid acknowledges that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. National Grid will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with National Grid's Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works. Any compensation offered by National Grid would comply with all policy requirements as set out above.	
3.13.138	Request for adequate financial compensation / Impacted individuals need to be compensated	All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.	
		If there are any specific concerns, please contact the Project team:	
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>	
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>	
3.13.139	Request that National Grid revise the level of access license payments provided to compensate landowners	As per National Grid's Land rights strategy, a payment of £250 (advanced compensation) is made to a landowner on signing a survey licence for a 12 month period. Should any losses be incurred by a landowner greater than £250, National Grid will be liable to cover this loss on submission of a valid claim.	
Health an	Health and Safety		
3.13.140	The Project may result in a negative impact on mental health / health and wellbeing of residents	National Grid recognises people may have concerns about the health effects of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.	
		We have sought to reduce potential effects on communities and residents through routeing and design. We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.	

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		The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns.
		We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:
		• Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)
		Email us: contact@n-t.nationalgrid.com
		Write to us: FREEPOST N TO T (No stamp or further address details are required)
		mailto: The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all of its equipment comply fully with those exposure limits.
		Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed overhead lines, underground cables and substation will be designed to ensure they are fully compliant with these policies and guidelines. This ensures that health concerns relating to EMFs are properly and adequately addressed.
3.13.141	Consideration needs to be given to the operation of light aircrafts from airfields at Nayland and	Our review of airfields within 4 km of the preferred corridor identified 10 General Aviation (GA) sites, one military site (Wattisham Flying Station) and the Mid and South Essex National Health Service (NHS) Broomfield Hospital which receives helicopters from a helipad on the roof of the main hospital building.
	between Wattisham to Colchester / The siting of overhead lines presents a risk to light aircraft in the area	The airfield operators will be consulted as the design of the Project continues and we will endeavour to design a solution that safely accommodates airfield operations as far as practicable.
3.13.142	The Project affects Gliding club (near West Bergholt) and impacts ability to operate due to taking away landing sites	Following our review of airfields within 4 km of the preferred corridor, it is expected that our assets will not have any adverse effect on your airfield, noting that your site is circa 2.3 km away from our proposed assets.  Nevertheless, you will be consulted as the design of the route proceeds and we will endeavour to design a solution that accommodates your airfield operations as far as practicable.
Heritage		
3.13.143	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. If impacts on the historic

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		environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.
		Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).
		We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.13.144	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking a Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify likely significant effects on archaeological sites arise. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.13.145	Special archaeological character of area surrounding Colchester; Iron Age, Bronze Age, Roman and Saxon sites including those of potentially international	Through the routeing and siting exercise National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking a Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify if likely significant effects on archaeological sites arise. To inform this assessment, we will be undertaking a suite of archaeological surveys (geophysical and targeted trail trenching) to help understand the baseline historic environment and refine the Project design further.
	importance have been found locally in the Horkesley and Fordham areas including by local archaeological societies. National Policy Statement (NPS) requires that these sites are treated as if scheduled until they are not and that detailed onsite study is carried out where there is probable cause to suspect presence of archaeology.	We will continue to engage with Historic England and local planning authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.13.146	Close proximity to a cluster of 18 listed buildings (including Grade II* Chapel Cottage less than 50 m from the swathe) at the Great Horkesley pinchpoint; where it bisects the village at its historic centre; and will need to pass	Through the routeing and siting exercise National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking a Historic Environment assessment including listed buildings as part of the Environmental Impact Assessment (EIA) process. To inform this assessment, we will be collecting information and data on existing listed structures supplemented with site visits to help understand the baseline historic environment, undertake an assessment and identify if mitigation is required.

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	close to residential properties (including at Breewood Hall); contravenes Holford Rules.	We will continue to engage with Historic England and local planning authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.13.147	Lack of consideration of local area rich in heritage, many local buildings close to the swathe date from 15 <sup>th</sup> Century or earlier including those where uninterrupted view over farmland is of significant value; there are approximately 100 listed buildings in Great and Little Horkesley, 8 of which are Grade II, including Westwood Park within the swathe.	be collecting information and data on existing listed structures supplemented with site visits to help understand the baseline historic environment, undertake an assessment and identify if mitigation is required.  We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.13.148	Due to the known and probable presence of archaeology described in my answer to (10) if cables of any type are to be positioned in the western area of Segment F further extensive study is required and proposed routes must be subject to additional consultation.	Through the routeing and siting exercise National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking an Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify if likely significant effects on archaeological sites arise. To inform this assessment, we will be undertaking a suite of archaeological surveys (geophysical and targeted trail trenching) to help understand the baseline historic environment and refine the Project design further. Further information will be presented in future consultation stages.  We will continue to engage with Historic England and local planning authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
Mitigation		·
3.13.149	Visual impacts should be mitigated through planting and screening measures	Through the routeing and siting exercise, National Grid has sought to and will continue to seek to maximise the existing landform and vegetation to screen the Project as far as practicable as it passes through the wider landscape.  Where new infrastructure is required as part of the Project and the Environmental Impact Assessment (EIA) concludes that additional mitigation would be of benefit, screening in the form of planting would be implemented to further integrate infrastructure into the wider landscape.
3.13.150	Ensure that any environmental damage is mitigated and that areas are returned to their	National Grid will reinstate all land temporarily required for construction to a standard no worse than prior to construction in areas where disturbance has occurred. This includes the creation of additional planting for the purpose of screening views where new infrastructure would be located.

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	previous state following construction	In addition to the above, where land would be temporarily impacted during the construction phase, the control measures, and processes to reinstate land will be defined within a Soil Resource Plan (SRP) which will be submitted as part of the Development Consent Order (DCO) application.
		Measure to control soil storage and how we would reinstate disturbed land would include; how and where the topsoil and subsoil would be stripped and stockpiled (such as dimensions to maintain soil nutrients and quality), if any stockpiles would be treated to reduce weed growth and where soil is to be reinstated, and the mechanisms how this would be achieved without being to the detriment of soil quality (such as over-compaction).
3.13.151	National Grid recognise that that mitigation in the form of alternate routes (Corridor and Preliminary Routeing and Siting Study (CPRSS) 5.1.4; 5.5.5) alternative pylon design (CPRSS 5.5.18; Appendix B30) or more likely significant sections underground would be required in respect of section F close to the Area of Outstanding Natural Beauty (AONB) (CPRSS 1.3.40; 3.1.9; 5.5.8; 5.5.9; Appendix B30)	National Grid carefully considers the development of the Project design to seek to avoid or reduce the potential for effects. We also carefully assess that design to identify whether any mitigation is necessary, and the form of that mitigation as the work progresses. We have concluded that some use of underground cables is required (in the vicinity of Great Horkesley and for one of the connections entering the East Anglia Connection Node (EACN) substation for the Project to be consistent with our duties and relevant policy framework.
Project Fi	nance / Costs	
3.13.152	Need full cost breakdowns for all the options for the Project that pass through the Area of Outstanding Natural Beauty (AONB)	The corridor and Preliminary Routeing and Siting Study (CPRSS), published to support the 2022 non-statutory consultation, provided an overview of the cost information that National Grid used for strategic appraisals to compare feasible transmission system development options. As part of the consideration of strategic options, National Grid prepares indicative capital cost estimates. These include costs for the transmission equipment and for the installation of that equipment. For any new transmission circuits required as part of a strategic option, National Grid prepares lifetime cost estimates. These lifetime cost estimates include the capital cost estimates and also take account of the transmission losses and maintenance costs for transmission equipment over a 40-year lifetime as well as the associated indicative capital cost estimate.
		At each stage of the Project, as more detailed design information is available, we will review and update the costs of all relevant options and publish these as part of the consultation.
Public Rig	ghts of Ways (PRoWs).	
3.13.153	Concern around disruption of Public Rights of Way (PRoW) / Mitigation must be put in place for	Through routeing and siting, National Grid has sought to and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).

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	pedestrians / equestrians directly or indirectly impacted	The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. If mitigation is required, measures may include, the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.  Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
Substation	n	
3.13.154	Need more information to justify the location of the substation	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors including our infrastructure and customer connections across potential sites throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS).  National Grid has backchecked and reviewed its proposals for the 400 kV connections and considered alternative locations for the EACN substation (north of Ardleigh and the former Royal Air Force (RAF) Boxted) in the light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it. We are continuing to take forward the EACN substation location close to Lawford 132 kV Substation. We will continue to backcheck our proposals at each stage of the Projects' development and in response to feedback from later stages of consultation.
3.13.155	Proposed location for Tendring substation is invasive / can't be mitigated	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure.  The likely significant effects of the proposed EACN substation will be considered in the Environmental Impact Assessment (EIA) including the landscape and visual and historic environment assessments. Mitigation will be considered, where appropriate.
3.13.156	The Tendring Substation needs to be re-located (no specific location suggested)	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections. We have reviewed our proposals for the EACN substation in the light of the 2022 non-statutory consultation feedback. We consider the EACN substation location close to Lawford 132 kV Substation to be an appropriate basis to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.13.157	The visibility of the Tending Substation needs to be considered (impact on residents and surrounding area) and appropriate mitigation should be provided (i.e., minimising building	Through the routeing and siting exercise, National Grid has sought to and will continue to seek to maximise the use of existing landform and vegetation to screen the Project including the proposed East Anglia Connection Node (EACN) substation located at Tendring as far as practicable as it passes through the wider landscape.

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	and electrical equipment height of the substation)	Where the Environmental Impact Assessment (EIA) concludes that additional mitigation would be of benefit, screening in the form of planting would be implemented to further integrate the proposed EACN substation into the wider landscape.
3.13.158	Criticism around the use of the 'Tendring Peninsula' descriptor, due to impact of Tendring Substation on local populations (there are nearby towns / villages including Clacton)	The siting area for the proposed East Anglia Connection Node (EACN) substation is within Tendring District Council area and therefore we feel that this is an appropriate description of the location of the EACN substation. Consultation materials included information on the offshore wind farms proposing to connect at the EACN substation and the offshore wind farm developers have subsequently held their own respective consultations which show details of both their proposed landing points near Clacton and their routes/ substation sites required to enable them to connect back to the proposed National Grid substation at Lawford. National Grid continues to work closely with connection customers to ensure that our proposals are coordinated and to share relevant information and will ensure that information on the full scope of the proposals (including offshore wind farms) is shown in its consultation materials.
3.13.159	Suggest that Tendring Substation is located away from residential areas	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors including our infrastructure and customer connections across potential sites throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS).  National Grid has backchecked and reviewed its proposals for the 400 kV connections and considered alternative locations for the EACN substation (north of Ardleigh and the former Royal Air Force (RAF) Boxted) in the light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it. We are continuing to take forward the EACN substation location close to Lawford 132 kV Substation. We will continue to backcheck our proposals at each stage of the Projects' development and in response to feedback from later stages of consultation.
3.13.160	Route to and from Tendring Substation should be considered (impact on residents and surrounding area)	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure. In response to feedback, we have updated our proposals for the 400 kV connections and propose that the connection from Bramford will be made as underground cable from around 1 km north of the edge of the Dedham Vale Area of Outstanding Natural Beauty (AONB) all the way to the EACN substation. This was informed in part by consideration of the potential effects on residential amenity of a double overhead line arrangement to and from the EACN substation around Ardleigh.  We consider the retention of overhead line for the connection to Tilbury to be in accordance with policy. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary in response to assessments and the identification of mitigation requirements.
3.13.161	Suggestion that the Tendring Substation should be located closer to the A12 to minimise impact on the community	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS) at the 2022 non-statutory

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		consultation. We have updated our proposals for the 400 kV connections and considered alternative locations for the EACN substation (including the former Royal Air Force (RAF) Boxted site closer to the A12) in the light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it. The development of the proposals has also progressed with the proposal that the connection from Bramford is now proposed to be made as underground cable through the Area of Outstanding Natural Beauty (AONB) and all the way to the EACN substation. We consider the EACN substation location close to Lawford 132 kV Substation with one connection as underground cable and one as overhead line to be an appropriate basis to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.13.162	Bramford substation is located in a suitable location	National Grid note the respondent's view.
3.13.163		The Corridor and Preliminary Routeing and Siting Study (CPRSS) reports on consideration of alternative corridors that would be more direct, but none were preferred. Whilst potentially feasible, the extent of residential development restricts potential routeing of connections and, as well as involving the transfer of effects to other receptors, was considered to lead to greater adverse effects most notably on locations such as Flatford Mill (heritage and socioeconomic effects) and were also considered more likely to affect a Special Protection Area (SPA) under the Habitats Directive.
3.13.164	The Tendring Substation does not have sufficient infrastructure in place to justify the location – the building of roads to access rural substation locations will be disruptive	National Grid will as part of the iterative design process will undertake an assessment to understand the local road network which the Project may need to utilise during both the construction and operation phases. As part of this assessment, we will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network around the East Anglia Connection Node (EACN) substation.  Where temporary haul roads are required to be constructed to access the location of a EACN substation, these will be carried out in consultation with the landowners and the local highway authority, to reduce any potential impacts to local road users.  This information will be used to inform the drafting of the Construction Traffic Management Plan (CTMP) for the Project. Within the CTMP, it will define the local road network that is to be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.13.165	Substation is located too close to the village of Ardleigh	National Grid consider the proposed East Anglia Connection Node (EACN) substation to be sited appropriately in accordance with the Horlock Rules (as set out in Chapter 1 of this report). We note that Ardleigh is at approximately 1.5 km distance from the proposed EACN substation with areas of existing vegetation between the village and substation providing screening.
3.13.166	The Tendring Substation should be located in the area its needed – if the power generation is not	National Grid develops its proposals to provide an efficient National Electricity Transmission System (NETS) responding to new connections requirements in the context of the existing system. The proposed East Anglia Connection Node (EACN) substation has been carefully sited considering the customer connections it is providing (located off the Tendring peninsula) and the location of the NETS with which it needs to connect. The Corridor and

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	for Colchester area then it needs to be moved	Preliminary Routeing and Siting Study (CPRSS) described alternative locations that were considered and the reasons why they were less preferred.
3.13.167	Suggest substation located away from Ardleigh / Criticism of substation siting at Ardleigh	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS) at the 2022 non-statutory consultation. We have updated our proposals for the 400 kV connections and considered alternative locations for the EACN substation including the former Royal Air Force (RAF) Boxted in light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or which would require multiple corridors to be used with greater environmental effects. We consider the EACN substation location close to Lawford 132 kV Substation to be the preferred basis to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.  We would also highlight that our proposals have developed to include the use of underground cable through the Area of Outstanding Natural Beauty (AONB) to the EACN substation which removes the potential for a double overhead line and reduces the potential effects on residential amenity.
3.13.168	Concern regarding size of Tendring Substation (i.e., landtake and height)	The substation proposals and land take requirement will be established based on the requirements for permanent infrastructure along with land for mitigation measures and for temporary construction. The height of infrastructure will be in the order of 20 m for the tension gantries to which overhead lines connect with other equipment being lower. Dimensions will be the minimum necessary to meet the project design requirements and relevant safety standards.
3.13.169	Build the Tendring Substation at or near to East Bergholt	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land and brownfield sites) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS). A location at East Bergholt would require multiple customer connections to be routed through the Area of Outstanding Natural Beauty (AONB) in addition to the Project and is considered to have greater environmental effects potentially including multiple crossings of a Special Area of Conservation (SAC). On this basis it is less preferred.
3.13.170	Tendring Substation should be built west of the A12 on farmland / golf course	National Grid developed its current proposals for the East Anglia Connection Node (EACN) substation location after careful consideration of a range of environmental, cost and engineering factors relating to our infrastructure and customer connections across potential sites (including industrial land) throughout the Tendring peninsula. The results were reported within the Corridor and Preliminary Routeing and Siting Study (CPRSS). We have updated our proposals for the Project and considered alternative locations for the EACN substation (including the former Royal Air Force (RAF) Boxted site closer to and to the west of the A12) in the light of the 2022 non-statutory consultation feedback. Whilst the former RAF Boxted site has some potential it presents a location for which the connection corridor is too constrained for the multiple customer connections that need to be made to it or which requires multiple corridors to be used with greater environmental effects. The development of the proposals has also evolved from that described in the 2022 non-statutory consultation with the connection from Bramford now proposed to be made

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		as underground cable through the Area of Outstanding Natural Beauty (AONB) and all the way to the EACN substation. We consider the EACN substation location close to Lawford 132 kV Substation with one connection as underground cable and one as overhead line to be the preferred basis to take forward the Project. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.	
3.13.171	Suggestion that the Tendring Substation is located at Bawdsey instead	National Grid considered the use of Felixstowe area landing points as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS), these were considered less preferred due to the additional technical challenges and environmental effects associated particularly with the 400 kV connections required to the north and to the south. Such routes are technically challenging to the north of Ipswich and interact more extensively with Special Areas of Conservation (SAC) and Areas of Outstanding Natural Beauty (AONBs) than the currently proposed East Anglia Connection Node (EACN) substation location consulted upon and as such are less consistent with our duties and relevant policy frameworks.	
Technolog	gy / Operations		
3.13.172	The existing 132 kV overhead line through Dedham Vale is not used and should be dismantled	The existing 132 kV overhead line is owned by UK Power Network (UKPN) and it is understood to still be in use by them as part of their Electricity Distribution Network and we are in regular discussions with UKPN regarding the interactions between our Project and their network.	
Tourism			
3.13.173	Concerned about impact of the Project on leisure and tourism	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure. Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.	
		Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include: traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP).	
Visual imp	Visual impact		
3.13.174	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable Sealing End (CSE) Compounds and Substations)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.	

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		In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.13.175	Cumulative effect of onshore National Grid projects within East Anglia / within this section	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.
3.13.176	Concern around the siting of Cable Sealing End (CSE) compound/s	The siting of Cable Sealing End (CSE) compounds considers environmental, engineering and cost considerations and the potential for effects. National Grid will be consulting on the locations and will consider any feedback provided as the Project develops.
3.13.177	Cumulative effect of the Project alongside existing overhead lines	National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.
		For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.
3.13.178	View to and from Area of Outstanding Natural Beauty (AONB) need to be considered (e.g. overhead lines on higher	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity that are both important factors to the Dedham Vale Area of Outstanding Natural Beauty (AONB). Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley to reduce the changes in views and setting of the AONB

Ref no.	Summary of matters raised	National Grid's response	
	ground will increase visibility of the infrastructure)	from within and adjacent to its designated boundary. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to identify the impacts and reduce effects, these will be presented within a Landscape and Visual Impact Assessment (LVIA). Measures to reduce such effects have included the use of underground cables in the areas of highest amenity value (both within and in the immediate geographic location of the Dedham Vale AONB), sympathetic siting of infrastructure and pylons within the existing landform, and where necessary a range of planting for the purpose of screening.	
3.13.179	National Grid recognise that significant damage to the Area of Outstanding Natural Beauty (AONB) would result from use of overhead lines even near to the AONB (Corridor and Preliminary Routeing and Siting Study (CPRSS) 5.1.4; 5.5.5; 5.5.24;7.5.15; 7.5.16; Appendix B30)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of overhead line infrastructure that make it inconsistent with our duties and relevant planning policy. The Area of Outstanding Natural Beauty (AONB) designation in this section is one such location where there is a presumption that underground cable technology will be adopted with the extent of underground cabling extending beyond the boundary in response to the potential for the Project to unacceptably affect the Natural Beauty of Dedham Vale AONB. Our current proposals include a total of approximately 19.3 km of underground cable through and in the vicinity of the Dedham Vale AONB, including a section at Great Horkesley.	
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will consider likely significant effects on visual amenity and landscape character in the proximity of the AONB and will identify any need for additional mitigation. As part of the assessment a number of representative viewpoints will be agreed with statutory stakeholders including the local authorities.	
3.13.180	Substation does critical damage	Through the routeing and siting exercise National Grid has sought to identify locations where new and existing substation infrastructure could be located which meet a range of Project objectives such as minimising environmental impact, customer need and deliverability.  We continue to refine the exact location of any proposed infrastructure for the East Anglia Connection Node (EACN) substation as the design develops and further baseline information is gathered on the surrounding environment. Where it is required, we will explore a range of mitigation measures such as planting for the purpose of screening and careful siting to minimise the impact the village of Ardleigh and other affected receptors. Any mitigation required	
		for the Project will be presented within the Environmental Statement (ES) submitted as part of the Development Consent Order (DCO) application.	
Wildlife / E	Wildlife / Ecology impact		
3.13.181	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.  The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.	

Ref no.	Summary of matters raised	National Grid's response
		We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques, to take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.13.182	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology – including protected species	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities (LPAs) on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.13.183	Negative impact of the Project on available land for grazing animals and horses	National Grid recognises that there is the potential for impacts. We are and will continue to work with all landowners including farmers and equestrian facilities who may be affected by the proposals to understand the impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements. There will also be mitigation put in place where wild animal grazing maybe affected.
		As well as possible effects on humans, possible effects of Electric and Magnetic Fields (EMFs) on various animals have been studied a number of times. No detectable effects of EMFs have been found on, for example, health, milk production, fertility, and behaviour. This is confirmed in National Policy Statement (NPS) EN-5 which states: "There

Ref no.	Summary of matters raised	National Grid's response
		is little evidence that exposure of crops, farm animals or natural ecosystems to transmission line EMFs has any agriculturally significant consequences."
		As well as the potential direct biological or health effects addressed above, indirect effects such as micro shocks can occur as a result of electric fields. Micro shocks are small spark discharges which are similar to a static shock after walking across a nylon carpet for example. The Project will be designed in accordance with the principles of the Government's Code of Practice 'Power Lines: Control of Micro shocks and other indirect effects of public exposure to electric fields' to ensure these are mitigated.
3.13.184	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands, and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.13.185	Concern about local badger populations and impacts on them	Based on the suitability of habitats and rural location of most of the Project, it is envisaged that badgers ( <i>Meles meles</i> ) are widespread throughout the areas required for construction and operation related activities. Given the length of programme and the fact that badger setts can appear (as well as be abandoned) at any time, it is proposed that a survey as part of the Environmental Impact Assessment (EIA) will focus on main badger setts as well as existing data from local record centres. Further badger survey work relating to all other badger setts would be undertaken as part of the pre-construction works post submission of the Development Consent Order (DCO) application to ensure adherence to legislation and animal welfare.
		Pre-construction surveys and sett classifications will be undertaken and, where appropriate, agreed working practices will be set out in the Code of Construction Practice (CoCP). These measures will be implemented to minimise potential impacts on badgers as far as practicable.
3.13.186	Local areas have populations of protected species of birds (e.g.	Protected species of breeding birds are included in the biodiversity assessment as part of the Environment Impact Assessment (EIA). It is anticipated that a range of habitats within the land required for the construction of the Project

Ref no.	Summary of matters raised	National Grid's response
	Skylarks, nightingales, yellow hammers, Red Kites)	would provide suitable habitat to support nesting birds and particularly those associated with farmland habitat. The requirement for breeding bird surveys would be based on the results of the preliminary assessment, focusing on suitable habitat within the land required for construction. The Biodiversity Net Gain (BNG) strategy will take into account protected/notable species such as those species mentioned.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.13.187	The Project should aim for a Biodiversity Net Gain (BNG) of at least 10%	The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.13.188	Consideration should be given to use of tunnelling (HDD) under water courses	Horizontal Directional Drilling (HDD) is used as an alternative to a trenched (cut and cover) approach to install underground cables, which is more disruptive in terms of the level of disturbance to the landscape and environment. The benefits of using HDD need to be carefully considered to ensure ground conditions are suitable and that the balance of potential environmental effects is achieved. National Grid will assess ground conditions and any potential effects resulting from drilling, before deciding on where HDD should be used.

## Section 4: Braintree feedback

Figure 3.26- Braintree section map

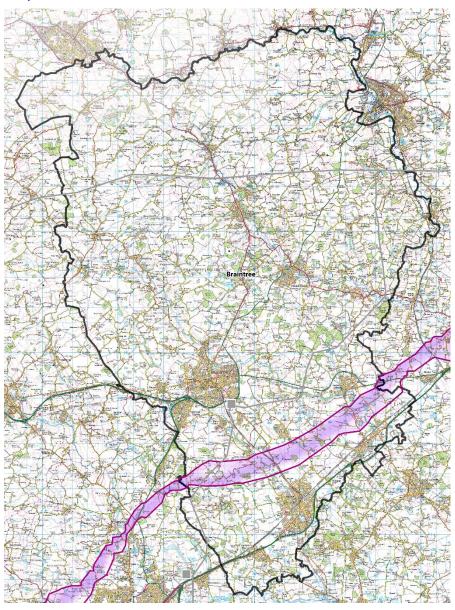


Table 3.14- Summary of consultee comments on Section 4: Braintree and National Grid's response

Summary of matters raised	National Grid's response
al land	
The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.
ty / Social impact	
Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.  We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.  The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:  • Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)  • Email us: contact@n-t.nationalgrid.com  • Write to us: FREEPOST N TO T (No stamp or further address details are required)
Company of and annual stine office	· · · · · · · · · · · · · · · · · · ·
Concern about cumulative effect on development in the area (e.g. planned prison, incinerator, solar farm, housing developments, major roads, quarrying)	National Grid will as part of the Environmental Statement (ES) for the Project undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This, in summary, is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.  This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that
	raised  al land  The Project will be taking away valuable agricultural land / disrupt farming operations  ty / Social impact  Concerned about impact of the Project on children / families / residents  Concern about cumulative effect on development in the area (e.g. planned prison, incinerator, solar farm, housing developments,

Ref no.	Summary of matters raised	National Grid's response
		(Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments. Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will engage with stakeholders such as Local Planning Authorities (LPAs) to understand the other relevant proposed developments in the Project area that should be included in the long/short list for assessment, such as solar farms, housing developments and major roads. We will work closely with other developers where there may be a cumulative impact to ensure that we understand their proposals so that these can be considered in our own assessment.
Construct	ion impacts	
3.14.4	Adverse impact on traffic levels in local area caused by construction works (e.g. construction traffic travelling along local roads, road closures, etc)	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.14.5	Concerned about damage to landscape resulting from installation of underground cables	The installation of underground cabling would broadly adopt the following process: initially, the removal of topsoil and storage of a width sufficient to allow for construction machinery to work and the digging of the trenching required for underground cabling would be engineered. The underground cabling would then be laid in the trench, soils would be backfilled, and hedgerows and shrubs reinstated where practicable. At this point a typical grass seed mixture would be scattered to encourage regrowth.
		It is anticipated that within 6-12 months upon completion of the construction of the underground cabling, there would be minimal visibility of the works at ground level and the landscape would return to pre-construction views and settings.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project, including the undergrounding, and will identify any need for additional mitigation if required, this may include screening at particular locations to reduce a change in views of the Project or to better integrate infrastructure into the wider landscape.
3.14.6	Concerned the Project will conflict with the potential route for the proposed A120 link road.	National Grid is aware of these proposals, and we are confident at this stage that pylon positioning and route alignment can be developed so that they do not affect the proposed A120 link road.
Consultati	ion	
3.14.7	Comment supportive of proposal / engagement that has taken place – feel listened to	National Grid note the respondent's feedback.

Ref no.	Summary of matters raised	National Grid's response
3.14.8	Errors in website content – e.g. incorrect link for Braintree (marked as 'Brentwood and Basildon') and spelling errors (Horndon not Hornden)	Minor typographical errors were identified, and changes made immediately. These minor changes were not substantive and would not have affected anyone's understanding of the proposals. We apologise for any inconvenience this caused.
Design Cl	nange	
3.14.9	Underground cables should be used in this section	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape, and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV overhead line infrastructure.
		We are proposing a short section (approximately 0.7 km) of underground cable to cross under the existing 400 kV overhead line north of Fairstead. We will undertake an Environmental Impact Assessment (EIA) to assess the potential impact of the Project, and this will identify any need for additional mitigation.
3.14.10	Existing overhead lines in this section should be removed / undergrounded	The existing electricity transmission network provides power, via the local distribution network, into the local area where it is used in homes and businesses. The need case and funding for the Project is to deliver the new network reinforcement needed, rather than to remove existing overhead lines by undergrounding them. Unless required for mitigation, undergrounding existing overhead lines on the transmission network would not be in accordance with National Policy Statement (NPS) EN-5 and would result in substantial cost to bill payers. There may also be significant environmental impacts due to the removal works on sensitive ecological and archaeological receptors as well as constraints from either existing built form of unsuitable ground conditions.
3.14.11	The Project should run in closer to / parallel to the existing 400 kV overhead lines	We note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, in this section there are constraints and features that mean, overall, we consider close paralleling would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. Several residential properties are present in close proximity to the existing 400 kV overhead line meaning that if the lines were close paralleled it would result in the properties having an overhead line close to both sides. There are also some locations where the combination of existing physical and environmental features (road infrastructure, commercial and residential properties etc) present very substantial challenges to routeing and siting. It is also noted that further south a corridor parallel to existing overhead lines would lead to greater effects on the Special Protection Area (SPA) designation where legislation is such that alternatives that do not lead to such effects should be followed. As a result, whilst close paralleling may appear beneficial in some sections, overall, the

Ref no.	Summary of matters raised	National Grid's response
		increased environmental effects where the overhead lines must converge and diverge, and those increased effects on properties with an overhead line to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.14.12	Suggest that the existing overhead lines in this section are reinforced / upgraded instead	The existing transmission network in the region is being upgraded to ensure the system is running at its most efficient performance. The existing networks are not able to be upgraded sufficiently to cope with the future demands expected on the network. As a result, new lines and substations will be required to accommodate the changing demands on the network.
3.14.13	Seek alternative routeing (no route specified)	National Grid considered alternative strategic proposals as well as alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published in support of the 2022 non-statutory consultation. We have updated our proposals in the light of the 2022 non-statutory consultation feedback, and we will continue to reflect on the detail of any feedback and back-check and update the Project as appropriate and necessary.
3.14.14	Cumulative effect of the Project alongside existing overhead lines	National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.
		For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.
3.14.15	Concern around the Project causing communities to become encircled by overhead lines	The preferred corridor has been routed to achieve some separation from the existing 400 kV overhead line, such that villages do not have overhead lines close to both sides. Separation is inevitably reduced in certain locations due to the presence of constraints to routeing and environmental features. Detailed assessment reported in the Environmental Impact Assessment (EIA) will identify any measures considered to be necessary to reduce potential effects which will also consider the potential for effects potentially arising from close paralleling existing 132 kV overhead line and new 400 kV overhead line infrastructure.
3.14.16	Suggestion that the Project is aligned south of the A12	The current preferred corridor is routed to the north and west of Colchester and Chelmsford. As set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) alternative corridors to the south (which would be south of the A12) were less preferred mainly due to the greater level of effects on Special Protection Area (SPA) along the coastal estuaries and other sites. Diversion of the route south of the A12 between Colchester and Chelmsford could be made locally but would be longer and less direct and less compliant with the Holford Rules without material benefit (effects, such as on residential amenity and nature conservation, would be transferred and for some topics increased).

Ref no.	Summary of matters raised	National Grid's response
3.14.17	The Project should follow the northerly route (e.g following the route of the existing overhead lines)	National Grid note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, there are constraints and features adjacent to the existing overhead line that mean that overall, we consider close paralleling would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. Several residential properties are present in close proximity to the existing 400 kV overhead line meaning that if the lines were close paralleled it would result in the properties having an overhead line close to both sides. As a result, whilst close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the lines must converge and diverge, and those increased effects on properties with overhead line to both sides are considered greater than those introduced by a new route alignment separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.14.18	Suggest routeing the Project offshore out at sea / Should consider routeing the Project undersea	Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Study (CPRSS) examines several strategic options that were considered for the Project that might achieve the required reinforcement including offshore options. These options were not taken forward as they did not fully address technical or physical/ geographical constraints or enable the network to operate to the required standards.  An offshore connection (current designs are a maximum of 2 GW capacity) would have a third of the capacity of the proposed overhead line connection and therefore to transfer the anticipated levels of power generation, three offshore connections would be required including associated infrastructure such as convertor stations. This would make the connection significantly costlier to energy bill payers.  In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich. Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce
		the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area.
3.14.19	Suggest that the Project are routed as far away from populated / residential areas as possible	Deciding where and how to build new high voltage electricity lines is a complex issue and National Grid is mindful of the potential effects this infrastructure may have on local communities and the concerns these may bring. National Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise and potential health impacts. It has sometimes been suggested that minimum distances between properties and overhead lines should be prescribed.
		We do not consider this appropriate since each instance must be dealt with on its merits. However, we have always sought to route new lines away from residential property on grounds of general amenity where possible.
		We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate UK standards, and mitigated where necessary. We set strict technical standards for the equipment we install on our network. These will apply to the proposed new East Anglia Connection Node (EACN) substation located in the Tendring District, and extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include

Ref no.	Summary of matters raised	National Grid's response
		requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.
		Noise from overhead lines is predominately determined by the conductor design, voltage, and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types be used, consideration for this would be assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers, and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the Environmental Statement (ES).
		In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an assessment on both landscape character and visual amenity.
		The health and safety of the public, local communities and employees is central to everything that we do. The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. Our approach is to ensure that our network comply with those policies, which are set by Government on the advice of their independent advisors. The Project will be designed to ensure it is fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed.
		Policies for both noise and EMF are incorporated into the decision-making process for development consent as set out in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment complies fully with those policies and guidelines. The Development Consent Order (DCO) application will include assessments against these polices, including both construction and operational noise and EMF.
3.14.20	Suggestion that the Project should run adjacent to existing transport infrastructure	Whilst there could be potential benefits from infrastructure being concentrated geographically, i.e., by routeing the Project in close proximity to existing road and rail infrastructure, we do not consider these benefits arise for the whole route. Rail lines or roads potentially align (at least in part) with the general routeing of the Project. However, there are constraints and features that mean that we do not consider close paralleling will reduce environmental effects or improve compliance with the Holford Rules or be more consistent with the policy requirement to be economic and efficient.
		Several residential properties, as well as hamlets, villages and towns, are present in close proximity to the existing transport infrastructure necessitating multiple diversions of an overhead line. There are also some locations where the combination of existing physical and environmental features (railway and road infrastructure, commercial and residential property, woodlands and orchards) present very substantial challenges to routeing and siting. As a result, whilst close paralleling of transport infrastructure may appear beneficial in some short sections, overall, the

Ref no.	Summary of matters raised	National Grid's response
		increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new route alignment.
3.14.21	The Project should be routed North of Colchester and Braintree	The Project does route to the north of Colchester, but a route to the north of Braintree would be longer and less direct (and less compliant with the Holford Rules) and transfer effects (such as on residential amenity) to other receptors without discernible benefit. A direct connection from Norwich to Tilbury may follow the alignment suggested but does not meet the requirements for the Project to connect customers or provide system flexibility under a range of scenarios as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) and had therefore not been taken forward.
3.14.22	Fairstead church would be better preserved if the Northerly route is adopted / Suggest the Project should run to the north of Fairstead Village	National Grid has undertaken further assessment and technical appraisal following feedback received from the 2022 non-statutory consultation and now proposes a change to the graduated swathe to the north of the preferred corridor which would facilitate an alignment to the north of Fairstead. We are also proposing a short section of underground cable to the north of Fairstead as the route crosses under the existing 400 kV overhead line.
3.14.23	Local topography: Concerned about potential for the Project to be on an elevated area of land near Coggeshall and Kelvedon.	National Grid develops its proposals using the Holford Rules and must respond to the presence of existing constraints and environmental features. Whilst the use of lower lying ground is favoured, there are some instances where higher ground cannot be avoided as a result of the constraints and features present or where diversions to utilise lower ground are with undue additional changes of direction and additional effects of longer connections. Where higher ground cannot be avoided the design work has sought to reduce visibility as far as possible, utilising screening from existing woodland to filter views. The Environmental Impact Assessment (EIA) process will assess these potential effects and identify and report any additional mitigation, where considered appropriate.
3.14.24	More people walk the Essex Way from Fairstead to Terling than from Fairstead to White Notley. Therefore, the Northerly route will negatively impact less people.	National Grid has undertaken further assessment and technical appraisal following feedback received from the 2022 non-statutory consultation and now proposes a change to the graduated swathe to the north of the preferred corridor which would facilitate an alignment to the north of Fairstead. We are also proposing a short section of underground cable to the north of Fairstead as the route crosses under the existing 400 kV overhead line.
3.14.25	Underground cables should be used in areas close to listed properties or nationally important landmarks	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations.  These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape, and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that that
		there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.  As part of our project development process, we carefully consider whether the use of underground cables, rather than overhead lines, is an appropriate approach in the context of national policy and our various statutory duties. We propose underground cable at areas that are identified as of highest landscape value for example within the Dedham

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		Vale Area of Outstanding Natural Beauty (AONB) and have identified an area close to the AONB at Great Horkesley where undergrounding because of potential effects on the AONB is also considered to be justified.
		Elsewhere along' the route, the higher cost of underground cables to bill-paying consumers, and the environmental implications of installing and maintaining them, are not considered to be justifiable in the context of national policy or our statutory duties. There are however two locations for crossing of an existing 400 kV line and from north of the Lower Thames Crossing to Tilbury substation require the use of cable for technical and efficiency reasons.
		We have sought to reduce as far as practicable impacts on the historic environment. The impacts on historic environment will be fully assessed as part of the Environmental Impact Assessment (EIA). Where impacts on the historic environment are identified, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible. This process of impact identification and mitigation requirements will be presented within the Environmental Statement (ES) for the Project.  We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
3.14.26	A reduced number of residential properties (including listed properties) at Fairstead would be impacted if the Northerly route is adopted. Additionally, there are currently no overhead lines along the alignment of the Southerly route.	National Grid has undertaken further assessment and technical appraisal following feedback received from the 2022 non-statutory consultation and now proposes a change to the graduated swathe to the north of the preferred corridor which would facilitate an alignment to the north of Fairstead. We are also proposing a short section of underground cable to the north of Fairstead as the route crosses under the existing 400 kV overhead line.
3.14.27	Suggestion that the Project should use open farmland to the north of Skye Green	National Grid has considered the respondents feedback highlighting a preference for an alternative to the north of Skye Green. We have considered alternative corridors to the north (passing north of Coggeshall) but these were less direct and considered to have greater environmental effects than the more direct preferred corridor and likewise considered corridors to the south of the A12 but again these are less direct with greater environmental effects. Nonetheless, we have considered this feedback and propose a slight change to the graduated swathe within which to develop an alignment to the north and then west of Skye Green. We will continue to consider feedback by following the in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.14.28	Provide an alternative corridor within this section which passes north and west of Coggeshall in Braintree District before moving southward, and minimises impact on 'Teys Green' development	National Grid has considered alternative corridors to the north and west of Coggeshall and considers them to be less preferred due to being longer and less direct with more changes of direction required and thus less compliant with the Holford Rules. These alternative corridors would also transfer effects to other receptors with potential for these to be increased as a result of the longer route required and more angle changes. We are aware of the Tey Green proposals and consider that an appropriate alignment could be developed within the preferred corridor that would not materially affect the proposals.

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3.14.29	Suggest that alternative route National Grid has identified, towards the northern edge of the swathe should be encouraged over the southern route	National Grid has undertaken further assessment and technical appraisal following feedback received from the 2022 non-statutory consultation and we now propose a change to the graduated swathe to the north of the preferred corridor which would facilitate an alignment to the north of Fairstead. We are also proposing a short section of underground cable to the north of Fairstead as the route crosses under the existing 400 kV overhead line.
3.14.30	Suggest that the Project should be taken as far to the north of Fuller Street as possible to avoid a concentration or 'wirescape'	National Grid has undertaken further assessment and technical appraisal following feedback received from the 2022 non-statutory consultation and we now propose a change to the graduated swathe to the north of the preferred corridor which would facilitate an alignment to the north of Fairstead. We are also proposing a short section of underground cable to the north of Fairstead as the route crosses under the existing 400 kV overhead line.
3.14.31	Suggest that overhead lines are routed following the northern edge of the purple swathe, to keep as far north as possible from Forge Cottage and listed properties in Fairstead	National Grid has undertaken further assessment and technical appraisal following feedback received from the 2022 non-statutory consultation and we now propose a change to the graduated swathe to the north of the preferred corridor which would facilitate an alignment to the north of Fairstead. We are also proposing a short section of underground cable to the north of Fairstead as the route crosses under the existing 400 kV overhead line.
3.14.32	Suggestion that the Project is routed south of White Barn, on the border with Feering Parish as this would impact fewer residents	National Grid has considered various alternatives in this location including by developing localised route alignments to the south of White Barns to allow comparison. Alternatives to the south of White Barns were considered less preferred to an option at the southern edge of the graduated swathe as they are less direct and require more and sharper changes of direction (less consistent with Holford Rule 3), would route close to a similar number of properties overall and potentially much closer to some properties at the crossing of Coggeshall road or lead to greater effects on areas of woodlands that need to be crossed (less consistent with Holford Rule 2).
3.14.33	Suggestion that the Project is routed away from specific location	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation which has resulted in a number of changes to the current preferred corridor. Further details on these changes can be found in the Design Development Report, published as part of the 2023 non-statutory consultation. The proposals will be backchecked as the Project continues to develop and if appropriate further changes to the proposed corridor and route alignment will be considered.
3.14.34	Suggestion that the Project is routed away from Kelvedon	National Grid has considered the respondents feedback highlighting preference for an alternative moved away from Kelvedon. We have considered alternative corridors to the north (passing north of Coggeshall) but these were less direct and considered to have greater environmental effects than the more direct preferred corridor and likewise considered corridors to the south of the A12 but again these are less direct with greater environmental effects. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.

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3.14.35	Suggestion that the Project is routed away from Witham	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Witham. We have considered alternative corridors to the north (passing north of Coggeshall) but these were less direct and considered to have greater environmental effects than the more direct preferred corridor and likewise considered corridors to the south of the A12 but again these are less direct with greater environmental effects. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.14.36	Suggestion the Project is routed away from the Blackwater River Valley	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Blackwater River Valley. We have considered alternative corridors to the north (passing north of Coggeshall) but these were less direct and considered to have greater environmental effects than the more direct preferred corridor and likewise considered corridors to the south of the A12 but again these are less direct with greater environmental effects. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.14.37	Suggestion that the Project is routed away from Coggeshall	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Coggeshall. We have considered alternative corridors to the north (passing north of Coggeshall) but these were less direct and considered to have greater environmental effects than the more direct preferred corridor and likewise considered corridors to the south of the A12 but again these are less direct with greater environmental effects. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.14.38	Suggestion that the Project is routed away from Feering	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Feering. We have considered alternative corridors to the north (passing north of Coggeshall) but these were less direct and considered to have greater environmental effects than the more direct preferred corridor and likewise considered corridors to the south of the A12 but again these are less direct with greater environmental effects. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.

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3.14.39	Suggestion that the Project is routed away from Skye Green	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Skye Green. We have considered alternative corridors to the north (passing north of Coggeshall) but these were less direct and considered to have greater environmental effects than the more direct preferred corridor and likewise considered corridors to the south of the A12 but again these are less direct with greater environmental effects. Nonetheless, we have considered this feedback and propose a slight change to the graduated swathe within which to develop an alignment to the north and then west of Skye Green. We will continue to consider feedback by following the in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.14.40	Suggestion that the Project is routed away from Rivenhall	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Rivenhall. We have considered alternative corridors to the north (passing north of Coggeshall) but these were less direct and considered to have greater environmental effects than the more direct preferred corridor and likewise considered corridors to the south of the A12 but again these are less direct with greater environmental effects. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.14.41	Suggestion that the Project is routed away from Faulkbourne	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Faulkbourne. We have considered alternative corridors to the north (passing north of Coggeshall) but these were less direct and considered to have greater environmental effects than the more direct preferred corridor and likewise considered corridors to the south of the A12 but again these are less direct with greater environmental effects. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.14.42	Suggestion that the Project is routed away from Fairstead	National Grid has undertaken further assessment and technical appraisal following feedback received from non-statutory consultation and we now propose an amendment to the graduated swathe to facilitate an alignment to the north of Fairstead. We are also proposing a short section of underground cable to the north of Fairstead as it crosses under the existing 400 kV overhead line.
3.14.43	Given the significant faults the consultation run afresh including alternatives such as but not	Prior to commencement of the 2022 non-statutory consultation, National Grid prepared a Consultation Strategy, this document sets out the details of how we proposed to consult on the project. The Strategy was shared with Local Authorities for comment, and we took on board their comments to inform how the consultation was carried out where possible. The consultation was run in accordance with the published strategy.

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	limited to a strategic offshore ring-main	As we scope our projects, we consider numerous technology solutions. Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia and are part of our preliminary recommended solution. National Grid's appraisals, which were based on our knowledge of the network, understanding of the capacity and costs of developing subsea links as well as evaluation of the environmental and socio—economic implications, reached a preliminary conclusion that, on balance, the most appropriate solution was an offshore Direct Current (DC) link between the Sizewell area and Kent (Sea Link) in combination with onshore reinforcement between Norwich and Tilbury (East Anglia GREEN) and onshore reinforcement between Tilbury and Grain (progressed as a sperate scheme due to the general geographic separation of potential effects). We presented our evaluation and our preliminary preferred solution at the 2022 non-statutory consultation, which was an opportunity for members of the public to comment (which they did).  It would have been disingenuous for us to present an offshore option to the public for consultation feedback, knowing this did not comply with the framework requirements.
		Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.
3.14.44	If cables must be routed as suggested in Chapter 7 then to protect the Area of Outstanding Natural Beauty (AONB) they must be buried wherever they fall within 3 miles / 5 km of the	National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. National Grid therefore adopts underground cable technology as mitigation within areas such as AONBs. Policy identifies no set distance by which such mitigation should be extended outside the AONB boundary.
	boundary of the AONB	National Grid identifies the requirement for mitigation (whether by additional planting, type of pylon or choice of alternative technology such as underground cable) based on consideration of the potential effects that may arise on a case-by-case basis. This considers the specific details of the designation (including special qualities, key views etc) and local circumstances including landform and existing vegetation. This approach allows consideration of the predicted effects arising from underground cable or overhead line technology and the Cable Sealing End (CSE) compounds (the transition sites between technologies) rather than applying an arbitrary distance that may be too great or too small for the specific circumstances.
3.14.45	Locations for Cable Sealing End (CSE) Compound sites to facilitate end point of underground section must be carefully chosen and subject to further consultation	National Grid acknowledges the requirement to carefully site the Cable Sealing End (CSE) compounds paying particular regard to the Horlock Rules and will consult on its proposals and consider any feedback provided as the Project Develops.
Economic	/ Employment impact	

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3.14.46	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.  Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include: traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
3.14.47	Concerned about the Project being in too close proximity to new housing developments / land being considered for potential future housing development	National Grid has obtained information on development proposals within the planning system for the area potentially impacted by the Project. The nature of our response varies as in some cases proposals can be amended to be designed around our proposed infrastructure but in other cases our proposals may need to be amended at a corridor level or factored into detailed route design. Based on known information we consider our proposals are consistent with relevant policy and guidelines and routes designed such that they do not prevent proposed housing developments. It should also be noted that there are no minimum distances prescribed in UK law between overhead lines and homes. Any implications on landscape and visual receptors, residential amenity or from concerns about electric and magnetic fields (EMFs) are robustly assessed and balanced as part of the decision-making process. We will continue to review planning applications and engage with developers to back-check and update our proposals as necessary.
Environme	ental impact	
3.14.48	The Project will impact designated sites – e.g. Site of Special Scientific Interest (SSSI), Ancient Woodland and a Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Site of Special Scientific Interest (SSSI) and Ancient Woodland.  The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental
	(NOFD) leselve	Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required mitigation requirements.
		We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.14.49	The Project will result in a negative impact on the environment generally (no details given)	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.

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3.14.50	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated, however there is currently no green belt land designations within this section. National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.
		The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.
3.14.51	The Project will cause a negative impact on landscape / amenity	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
		Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
		We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.14.52	The Project should seek to avoid significant impacts on mineral resources – i.e. Bradwell Quarry	Quarrying activities and the routeing of overhead lines may not be incompatible, for example it may be possible to oversail extraction areas. Likewise, where oversail may not be possible the potential loss of resource (which may primarily be financial) must be considered against the effects arising from possible alternative routes.
	and Rivenhall	In the Bradwell Quarry area National Grid consider that an alignment which oversails the existing consented area and minimises interaction with a future expansion area (for which no planning application has been made at this time) provides an appropriate balance at this stage. A more extensive alternative route would be longer with larger changes of direction, greater effects on residential amenity (i.e. an existing property as well as new housing for which an application has been submitted) and increased effects on listed buildings, whilst still requiring some oversail of the potential quarry expansion area.
3.14.53	Concerned about impact of the Project on designated protected	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network including the identification of protected lanes.

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	lanes (e.g. Fairstead Lodge Road, Fairstead Road, Pole Road, Peg Millars Lane, and Fairstead Hall Road)	This information will be used to inform the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
		The effects on protected lanes from both a heritage and landscape and visual perspective will be considered within the Environmental Impact Assessment (EIA) process. The findings of which will be presented within the Environmental Statement (ES).
Financial	compensation	
3.14.54	The Project will devalue my property / Impact on property value in this section	National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.
		If there are any specific concerns about the devaluation of property, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>
3.14.55	Request for adequate financial compensation / Impacted individuals need to be compensated	All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.  If there are any specific concerns, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>

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3.14.56	The Project may result in a negative impact on mental health / health and wellbeing of residents	National Grid recognises people may have concerns about the health effects of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.  We have sought to reduce potential effects on communities and residents through routeing and design. We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.  The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns.  We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:  • Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)  • Email us: contact@n-t.nationalgrid.com  • Write to us: FREEPOST N TO T (No stamp or further address details are required)  mailto: The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment comply fully with those exposure limits.  Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their
Heritage		
3.14.57	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. If impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.  Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).  We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.

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3.14.58	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking a Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify likely significant effects on archaeological sites arise. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
Mitigation		
3.14.59	Visual impacts should be mitigated through planting and screening measures	Through the routeing and siting exercise, National Grid has sought to and will continue to seek to maximise the use of existing landform and vegetation to screen the Project as far as practicable as it passes through the wider landscape.
		Where new infrastructure is required as part of the Project and the Environmental Impact Assessment (EIA) concludes that additional mitigation would be of benefit, screening in the form of planting would be implemented to further integrate infrastructure into the wider landscape.
3.14.60	Need mitigation measures to protect the countryside / measures to minimise impact on the countryside (generally)	Due to the potential scale and nature of the Project, impacts on the countryside and areas designated as Green Belt are anticipated, there is currently no green belt land designations within this section.
		Through the routeing and siting exercise, National Grid has sought to and will continue to seek to minimise these impacts as far as practicable, and we will continue to refine land take and infrastructure within areas typically referred to as 'countryside' as the Project design develops and seek to reduce effects. To reduce effects, we have included in the design of the Project the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)) and are continuing to appraise the benefits of similar techniques across the Project as a whole.
		In the event such effects arise where undergrounding is not a practical mitigation solution, additional measures can include, the sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening to better integrate the Project into the wider landscape and landform.
		The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.
3.14.61	Mitigate any disruptive impacts on wildlife during the construction period	2023. This will assist with our understanding of the baseline environment on which the biodiversity assessment will be based upon and the approach to mitigation.
		During construction biodiversity mitigation measures may include protecting areas and habitat from construction activities, relocating species from areas where construction is required and providing and upskilling the construction workforce to identify notable species that may be identified during routine activities and the protocol to halt work if needed. Measure such as these will be included within the Code of Construction Practice (CoCP) for the Project.

## **Summary of matters** Ref no. **National Grid's response** raised Public Rights of Ways (PRoW). 3.14.62 Concern around disruption of Through routeing and siting, National Grid has sought to and will continue to reduce, as far as practicable, impacts Public Rights of Way (PRoW) / and disruption to Public Rights of Way (PRoW). Mitigation must be put in place for The iterative process of route design has identified the existing PRoW network and their wider connectivity and pedestrians / equestrians directly sought where practicable to reduce and where possible remove impacts to PRoW. If mitigation is required, measures or indirectly impacted may include the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network. Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops. Tourism 3.14.63 Concerned about impact of the National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) Project on leisure and tourism preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure. Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users. Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP). Visual impact Overhead lines and related The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead 3.14.64 infrastructure are unsightly / lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it visually intrusive (including Cable Sealing End (CSE) Compounds inconsistent with our duties and relevant planning policy. and Substations) In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects. A landscape and visual impact assessment will be undertaken as part of the Environmental Impact Assessment

(EIA). This will assess the impact of the Project and will identify any need for additional mitigation.

Ref no.	Summary of matters raised	National Grid's response
3.14.65	Cumulative effect of onshore National Grid projects within East Anglia / within this section	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.
Wildlife / E	Ecology impact	
3.14.66	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.
		We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques, to take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.14.67	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology – including protected species	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact

Ref no.	Summary of matters raised	National Grid's response
		Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities (LPAs) on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.14.68	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands, and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.

## Section 5: Chelmsford feedback

Figure 3.27- Chelmsford section map

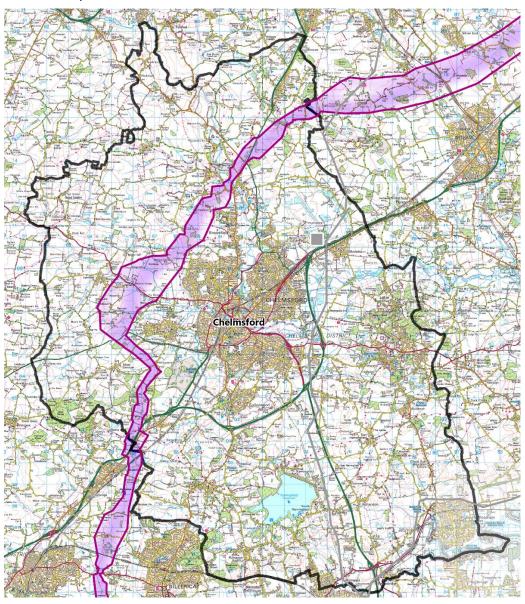


Table 3.15- Summary of consultee comments on **Section 5: Chelmsford** and National Grid's response

Ref no.	Summary of matters raised	National Grid's response	
Agricultura	Agricultural land		
3.15.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.	
3.15.2	Build on agricultural / farmland to avoid residential areas	National Grid develops its proposals using the Holford Rules (as described in Chapter 1 of this report) and must respond to the presence of existing constraints and environmental features. Residential properties will be avoided wherever possible and whilst the use of open, flat land is favoured, there are some instances where areas closer to residential receptors cannot be avoided as a result of the constraints and features present, or where diversions to utilise, open land would result in a longer route with additional changes of direction.	
Communit	ty / Social impact		
3.15.3	Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.	
		We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.	
		The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:	
		• Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)	
		Email us: contact@n-t.nationalgrid.com	
		Write to us: FREEPOST N TO T (No stamp or further address details are required)	

Ref no.	Summary of matters raised	National Grid's response
3.15.4	Concern around the Project causing communities to become encircled by overhead lines	The current preferred corridor, has been routed to achieve some separation from the existing 400 kV overhead line, such that villages do not have overhead lines close to both sides. Separation is inevitably reduced in certain locations due to the presence of constraints to routeing and environmental features. Detailed assessment reported in the Environmental Impact Assessment (EIA) will identify any measures considered to be necessary to reduce potential effects which will also consider the potential for effects potentially arising from close paralleling existing 132 kV overhead line and new 400 kV overhead line infrastructure.
Constructi	ion impacts	
3.15.5	Adverse impact on traffic levels in local area caused by construction works (e.g. construction traffic travelling along local roads, road closures, etc)	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.15.6	Local road infrastructure is not suitable for heavy construction vehicles and machinery	National Grid will as part of the iterative design process undertake an assessment to understand the existing local road network which the Project may need to utilise during both the construction and operation phases. As part of this assessment, we will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network.
		Where temporary haul roads are required to be constructed to access the location of a substation, these will be carried out in consultation with the landowners and the local highway authority, to reduce impacts to local road users.
		This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. Within the CTMP, it will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.15.7	Concerned about damage to landscape resulting from installation of underground cables	The installation of underground cabling would broadly adopt the following process: initially, the removal of topsoil and storage of a width sufficient to allow for construction machinery to work and the digging of the trenching required for underground cabling would be engineered. The underground cabling would then be laid in the trench, soils would be backfilled, and hedgerows and shrubs reinstated where practicable. At this point a typical grass seed mixture would be scattered to encourage regrowth.
		It is anticipated that within 6-12 months upon completion of the construction of the underground cabling, there would be minimal visibility of the works at ground level and the landscape would return to pre-construction views and settings.
		A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project, including the undergrounding, and will identify any

Ref no.	Summary of matters raised	National Grid's response
		need for additional mitigation if required, this may include screening at particular locations to reduce a change in views of the Project or to better integrate infrastructure into the wider landscape.
3.15.8	Concern that the preferred corridor contains several utilities (gas mains, gas compressor stations, etc)	Within the preferred corridor there are several constraints, third party utilities being one of these. As the alignment is developed within the preferred corridor, interactions and mitigation will be understood and National Grid will liaise as necessary with the statutory undertakers who are impacted by the Project to develop the necessary mitigation required.
3.15.9	Concerns regarding water pollution due to heavy construction traffic in the area	Measures will be included in the outline Code of Construction Practice (CoCP) which will support the Development Consent Order (DCO) application to capture and present the environmental commitments / measures to control water runoff from construction areas and to manage other water environment pollution risks. The likelihood of water pollution would be assessed in the hydrology and land drainage assessment as part of the Environmental Impact Assessment (EIA) and mitigation will be identified where appropriate.
Consultati	on	
3.15.10	Comment supportive of proposal / engagement that has taken place – feel listened to	National Grid note the respondent's feedback.
3.15.11	The Project breaches Chelmsford City Council's Green Infrastructure Strategic Plan 2018-2036	In its present form, the Project is a Nationally Significant Infrastructure Project (NSIP) for which the primary policy basis for any decision are National Policy Statements (NPSs) EN-1 and EN-5.
		The Development Consent Order (DCO) application will consider local planning policy through the Planning Statement and where relevant within the topic chapters in the Environmental Impact Assessment (EIA).
		Local Impact Reports submitted by each local authority will also consider local planning policy. Section 104 of the Planning Act 2008 sets out how the Secretary of State (SoS) must also have regard to any local impact reports submitted by a relevant local authority.
		Issues relating to local planning policy will be discussed with local planning authorities via ongoing engagement as the Project progresses and the Project will seek to minimise and mitigate any local impacts as far as practicable.
3.15.12	The Project is contrary to the Writtle Parish Plan and Writtle Neighbourhood Plan	In its present form, the Project is a Nationally Significant Infrastructure Project (NSIP) for which the primary policy basis for any decision are National Policy Statements (NPSs) EN-1 and EN-5.
		The Development Consent Order (DCO) application will consider local planning policy through the Planning Statement and where relevant within the topic chapters in the Environmental Impact Assessment (EIA).
		Local Impact Reports submitted by each local authority will also consider local planning policy. Section 104 of the Planning Act 2008 sets out how the Secretary of State (SoS) must also have regard to any local impact reports submitted by a relevant local authority.
		Issues relating to local planning policy will be discussed with local planning authorities via ongoing engagement as the Project progresses and the Project will seek to minimise and mitigate any local impacts as far as practicable.

Ref no.	Summary of matters raised	National Grid's response
3.15.13	Criticism that Chelmsford Local Plan has not been considered	In its present form, the Project is a Nationally Significant Infrastructure Project (NSIP) for which the primary policy basis for any decision are National Policy Statements (NPSs) EN-1 and EN-5.  The Development Consent Order (DCO) application will consider local planning policy through the Planning Statement and where relevant within the topic chapters in the Environmental Impact Assessment (EIA).  Local Impact Reports submitted by each local authority will also consider local planning policy. Section 104 of the Planning Act 2008 sets out how the Secretary of State (SoS) must also have regard to any local impact reports submitted by a relevant local authority.  Issues relating to local planning policy will be discussed with local planning authorities via ongoing engagement as the Project progresses and the Project will seek to minimise and mitigate any local impacts as far as practicable.
Design Ch	hange	
3.15.14	Underground cables should be used in this section	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV overhead line infrastructure.  No such designations or crossing locations have been identified in this section which is therefore proposed as an overhead line at this stage. We will undertake an Environmental Impact Assessment (EIA) to assess the potential impact of the Project, and this will identify any need for additional mitigation.
3.15.15	Existing overhead lines in this section should be removed / undergrounded	The existing electricity transmission network provides power, via the local distribution network, into the local area where it is used in homes and businesses. The need case and funding for the Project is to deliver the new network reinforcement needed, rather than to remove existing overhead lines by undergrounding them. Unless required for mitigation, undergrounding existing overhead lines on the transmission network would not be in accordance with National Policy Statement (NPS) EN-5 and would result in substantial cost to bill payers. There may also be significant environmental impacts due to the removal works on sensitive ecological and archaeological receptors as well as constraints from either existing built form of unsuitable ground conditions.
3.15.16	The Project should run in closer to / parallel to the existing 400 kV overhead lines	We note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, in this section there are constraints and features that mean, overall, we consider close paralleling would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. Several residential properties are present in close proximity to the existing 400 kV overhead line meaning that if the lines were close paralleled it would result in the properties having an overhead line close to both sides. There are also some locations (such as at Sandon to the east of Chelmsford) where the combination of

Ref no.	Summary of matters raised	National Grid's response
		existing physical and environmental features (road infrastructure, commercial and residential property etc) present very substantial challenges to routeing and siting. It is also noted that further south a corridor parallel to existing overhead lines would lead to greater effects on the Special Protection Area (SPA) designation where legislation is such that alternatives that do not lead to such effects should be followed. As a result, whilst close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the lines must converge and diverge, and those increased effects on properties with overhead line to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.15.17	Suggest routeing the Project offshore out at sea / Should consider routeing the Project undersea	Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Study (CPRSS) examines several strategic options that were considered for the Project that might achieve the required reinforcement including offshore options. These options were not taken forward as they did not fully address technical or physical/ geographical constraints or enable the network to operate to the required standards.
		An offshore connection would have a third of the capacity of the proposed overhead line connection and therefore to transfer the anticipated levels of power generation, three offshore connections would be required including associated infrastructure such as convertor stations. This would make the connection significantly costlier to energy bill payers.
		In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich. Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area.
3.15.18	Concerns over the impact of the Project crossing reclaimed land (e.g. reclaimed gravel pits, restored landfill sites, etc)	Our currently preferred corridor crosses a number of different constraints. The next phase of the Project is to work out how the alignment of the overhead line will fit within the preferred corridor and minimise its impacts as far as reasonably practicable on several sensitive receptors such as landfill sites, reclaimed gravel pits and Sites of Special Scientific Interest (SSSI's). The routeing of overhead lines may not be incompatible with many sensitive receptors, for example it may be possible to oversail extraction areas, SSSIs and historic landfill. Likewise, where oversail may not be possible the potential impacts must be considered against the effects arising from possible alternative routes.
3.15.19	Minimum buffers should be applied around major settlements to safeguard the potential for future development / Need to consider impact on future development opportunities	National Grid has obtained information on development proposals within the planning system for the area potentially impacted by the Project and considered whether the Project needs to be amended. The nature of response varies as in some cases proposals can be amended to be designed around our infrastructure but in other cases our proposals may need to be amended. Based on known information we consider our proposals are consistent with relevant policy and guidelines and routes designed such that they do not prevent proposed or future housing developments. It should also be noted that there are no minimum distances prescribed in UK law between overhead lines and homes. Any implications on landscape and visual receptors, residential amenity or from concerns about Electric and Magnetic Fields (EMFs) are robustly assessed and balanced as part of the decision-making process. We will

Ref no.	Summary of matters raised	National Grid's response
		continue to review planning applications and engage with developers to back-check and update our proposals as necessary.
3.15.20	Suggest that the existing overhead lines in this section are reinforced / upgraded instead	The existing transmission network in the region is currently being upgraded to ensure the system is running at its most efficient performance. The existing assets networks are not able to be upgraded sufficiently to cope with the new future demands expected on the network. As a result, new lines and substations will be required to accommodate the changing demands on the network.
3.15.21	Suggestion that the Project is routed away from Broomfield	In response to feedback a western diversion of the preferred corridor was assessed, that would move the Project away from Broomfield. However due to constraints including a gas pipeline, residential properties and Ancient Woodland, the preferred corridor, was considered to be appropriate to take forward at this stage. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary. Nonetheless National Grid has considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred or as otherwise amended corridor. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.15.22	Suggestion that the Project is routed away from Chelmsford	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Chelmsford. We have reviewed alternative corridors to the east (as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS)) but continue to consider these less preferred. We have also considered a western diversion of the preferred corridor however due to constraints including a gas pipeline, residential properties, and Ancient Woodland the preferred corridor was considered to be more preferred to take forward. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.15.23	Seek alternative routeing (no route specified)	National Grid considered alternative strategic proposals as well as alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published in support of the 2022 non-statutory consultation. We have updated our proposals in the light of the 2022 non-statutory consultation feedback, and we will continue to reflect on the detail of any feedback and back-check and update the Project as appropriate and necessary.
3.15.24	Suggestion the Project is routed north and west of both Bedford Fields and the new Bloor Homes development (avoiding King Edward VI Grammar School playing fields).	The respondents feedback provides a preference for an alternative corridor north and west of both Bedford Fields and the new Bloor Homes development (avoiding King Edward VI Grammar School playing fields).  National Grid is aware of the Bloor Homes development and the preferred corridor avoids both this development and the school playing fields. We will consider this further in developing an alignment informed by the Holford Rules.

Ref no.	Summary of matters raised	National Grid's response
3.15.25	Given the significant faults the consultation run afresh including alternatives such as but not limited to a strategic offshore ring-main	Prior to commencement of the 2022 non-statutory consultation, National Grid prepared a Consultation Strategy, this document sets out the details of how we proposed to consult on the project. The Strategy was shared with Local Authorities for comment, and we took on board their comments to inform how the consultation was carried out where possible. The consultation was run in accordance with the published strategy.
		As we scope our projects, we consider numerous technology solutions. Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia and are part of our preliminary recommended solution. National Grid's appraisals, which were based on our knowledge of the network, understanding of the capacity and costs of developing subsea links as well as evaluation of the environmental and socio—economic implications, reached a preliminary conclusion that, on balance, the most appropriate solution was an offshore Direct Current (DC) link between the Sizewell area and Kent (Sea Link) in combination with onshore reinforcement between Norwich and Tilbury (East Anglia GREEN) and onshore reinforcement between Tilbury and Grain (progressed as a separate scheme due to the general geographic separation of potential effects). We presented our evaluation and our preliminary preferred solution at the 2022 non-statutory consultation, which was an opportunity for members of the public to comment (which they did).
		It would have been disingenuous for us to present an offshore option to the public for consultation feedback, knowing this did not comply with the framework requirements.
		Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.
3.15.26	Locations for Cable Sealing End (CSE) Compound sites to facilitate end point of underground section must be carefully chosen and subject to further consultation	National Grid acknowledges the requirement to carefully site the Cable Sealing End (CSE) compounds paying particular regard to the Horlock Rules and will consult on its proposals and consider any feedback provided as the Project develops.
3.15.27	Suggest that the Project are routed as far away from populated / residential areas as possible	Deciding where and how to build new high voltage electricity lines is a complex issue and National Grid is mindful of the potential effects this infrastructure may have on local communities and the concerns these may bring. National Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise and potential health impacts. It has sometimes been suggested that minimum distances between properties and overhead lines should be prescribed.
		We do not consider this appropriate since each instance must be dealt with on its merits. However, we have always sought to route new lines away from residential property on grounds of general amenity where possible.
		We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate United Kingdom (UK) standards, and mitigated where necessary. We set strict technical standards for the equipment we install on our network. These will apply to the proposed new East Anglia Connection Node (EACN) substation

Ref no.	Summary of matters raised	National Grid's response
		located in the Tendring District, and extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.
		Noise from overhead lines is predominately determined by the conductor design, voltage, and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types be used, consideration for this would be assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers, and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the Environmental Statement (ES).
		In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an assessment on both landscape character and visual amenity.
		The health and safety of the public, local communities and employees is central to everything that we do. The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. Our approach is to ensure that our network comply with those policies, which are set by Government on the advice of their independent advisors. The Project will be designed to ensure it is fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed.
		Policies for both noise and EMF are incorporated into the decision-making process for development consent as set out in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment complies fully with those policies and guidelines. The Development Consent Order (DCO) application will include assessments against these polices, including both construction and operational noise and EMF.
3.15.28	Suggestion that the Project is aligned south of the A12	The current preferred corridor is routed to the north and west of Colchester and Chelmsford. As set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) alternative corridors to the south (which would be south of the A12) were less preferred mainly due to the greater level of effects on Special Area of Conservation (SAC) and Special Protection Area (SPA) designations along the coast estuaries and other sites. Diversion of the route south of the A12 between Colchester and Chelmsford could be made locally but would be longer and less direct and less compliant with the Holford Rules (rule 2, 3 and supplementary notes) without material benefit (effects would be transferred from for example one set of residential receptors to another set and for some topics such as nature conservation would be expected to be increased).

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3.15.29	Suggestion that the Project follows the existing overhead line from Boreham to Tilbury	National Grid note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However as described in the Corridor and Preliminary Routeing and Siting Study (CPRSS), there are some locations where the combination of existing physical and environmental features (road infrastructure, commercial and residential properties and other features) present very substantial challenges to routeing and siting such that an additional overhead line may not be able to be routed. Even if this could be achieved there are constraints and features adjacent to the existing overhead line that mean that overall, we consider close paralleling would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. Several residential properties are present in close proximity to the existing 400 kV overhead line meaning that if the lines were close paralleled it would result in the properties having an overhead line close to both sides. As a result, whilst close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the lines have to converge and diverge, and those increased effects on properties with overhead lines to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.15.30	Suggest that a more direct route from Colchester to Tilbury is taken for the Project, as the loop west of Chelmsford adds miles and expense	The Corridor and Preliminary Routeing and Siting Study (CPRSS) outlined that National Grid had considered several alternative corridors achieving the change proposed. All lead to increased effects on Special Protection Area (SPA) designations and therefore do not provide a better performing alternative to the preferred corridor (subject to considering the findings of future consultation) which avoids these effects. In the absence of new evidence these previous conclusions remain valid, and we consider the proposed change to be less compliant with our duties and the relevant policy framework.
3.15.31	Suggestion that overhead lines should be an equal distance between Ingatestone and Stock to minimise impact	National Grid has reviewed the preferred corridor in this area to respond to this feedback in conjunction with feedback concerning the potential effects on listed buildings. We are proposing a more eastern alignment for the Project which, whilst marginally less direct and longer does substantially reduce effects on listed buildings by adopting a route approximately midway between Ingatestone and Stock.
3.15.32	Representation needs to be made to the Office of Gas and Electricity Markets (Ofgem) to waive the cost restrictions placed on National Grid to allow for alternative options and / or routeing	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances. However, the Government is aware that overhead lines may not be appropriate in particularly sensitive areas. The process of appraising different identified options is undertaken using guidance (National Grid's Approach to Consenting). Its aim is to ensure that decisions regarding the scheme design (route, location, or technology option) are based on a full understanding and balance of the technical, socio-economic, environmental and cost implications of each option. Once all identified options have been appraised, the option or options that best meet National Grid statutory duties and obligations are selected as the preferred option or options. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers to whom the costs are eventually passed, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape, and visual quality.

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		The consideration of cost within the decision-making process is therefore one of National Grid's statutory duties and is not something that National Grid could make representation to the Office of Gas and Energy Markets (Ofgem) to waive.
3.15.33	Suggestion that the Project should run adjacent to existing transport infrastructure	Whilst there could be potential benefits from infrastructure being concentrated geographically, i.e., by routeing the Project in close proximity to existing road and rail infrastructure, we do not consider these benefits arise for the whole route. Rail lines or roads potentially align (at least in part) with the general routeing of the Project. However, there are constraints and features that mean that we do not consider close paralleling will reduce environmental effects or improve compliance with the Holford Rules or be more consistent with the policy requirement to be economic and efficient.
		Several residential properties, as well as hamlets, villages and towns, are present in close proximity to the existing transport infrastructure necessitating multiple diversions of an overhead line. There are also some locations where the combination of existing physical and environmental features (railway and road infrastructure, commercial and residential property, woodlands and orchards) present very substantial challenges to routeing and siting. As a result, whilst close paralleling of transport infrastructure may appear beneficial in some short sections, overall, the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new route alignment.
3.15.34	Suggest that the Project is aligned east of the A12	A route east of the A12 would generally be longer and less direct and therefore at greater cost and less compliant with the Holford Rules than the current preferred corridor routeing north-west of Colchester to pass to the north of Chelmsford. It would also transfer effects to other receptors and potentially increase them by virtue of the longer route with more direction changes. For these reasons National Grid considers such a change to be less preferred.
3.15.35	Suggestion that the Project should pass further west of Chelmsford to allow a wider buffer for settlement expansion	National Grid has obtained information on development proposals within the planning system for the area potentially impacted by the Project. The nature of our response varies as in some cases proposals can be amended to be designed around our proposed infrastructure but in other cases our proposals may need to be amended at a corridor level or factored into detailed route design. Based on known information we consider our proposals are consistent with relevant policy and guidelines and routes designed such that they do not prevent proposed housing developments. It should also be noted that there are no minimum distances prescribed in UK law between overhead lines and homes. Any implications on landscape and visual receptors, residential amenity or from concerns about electric and magnetic fields (EMFs) are robustly assessed and balanced as part of the decision-making process. We will continue to review planning applications and engage with developers to back-check and update our proposals as necessary.
3.15.36	Suggest following option ET5 rather than ET1 – less damaging from landscape, visual and agricultural perspective (preference for corridor L over corridor K)	Whilst noting the respondent's preference, National Grid would restate the conclusions in the Corridor and Preliminary Routeing and Siting Study (CPRSS) noting in particular, that the presence of residential properties and other environmental features and constraints means that we cannot successfully route a connection through corridor L. The preferred corridor is therefore being taken forwards at this stage.

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3.15.37	Suggest that the Project is routed as far to the west of the proposed corridor as possible to minimise visual impacts on the Best Western Ivy Hill Hotel and Ariana Gardens/Furze Hill wedding venue	The graduated swathe within the preferred corridor is currently as far west as possible due to several constraints in this area such as the village of Handley Green.  Impacts on the landscape will be assessed within a Landscape and Visual Impact Assessment (LVIA). This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.
3.15.38	Suggest amendment to corridor Q (plan provided) in which route runs slightly north to move further from the village of Stock and avoids sharp changes in direction where corridor Q meets corridor R	too constrained for a new route and more coastal corridors are restricted by Special Protection Area (SPA) and
3.15.39	Suggest corridor M is extended south-westerly to join corridor L (plan provided) – lower lying land, avoiding Grade 2 land and coastal area affected by protected species	National Grid has considered the feedback and for the following reasons the preferred corridor has been taken forward at this stage. Corridor M would only form part of the preferred corridor by the adoption of a more easterly corridor than that consulted upon. The reasons for these alternative corridors being less preferred (being that corridor L is too restricted to be viable for a new connection and more coastal corridors are restricted by Special Protection Area (SPA) and Special Area of Conservation (SAC) designations) remain with no additional evidence provided. Modifications to corridor M would not affect the preference for the preferred corridor as it remains that the combination of corridor L and corridor M is less preferred.
3.15.40	Suggest corridor L is extended south to join corridor S (plan provided) – close paralleling	National Grid has considered the feedback and for the following reasons the preferred corridor has been taken forward at this stage. The reasons for these corridors being less preferred (L is too constrained for a new route and more coastal corridors such as S are restricted by Special Protection Area (SPA) and Special Area of Conservation (SAC) designations) remain with no additional evidence provided. Therefore, the preferred corridor is being taken forward at this stage. Additionally close paralleling the existing 400 kV overhead line in corridor S is constrained by the presence at various locations of residential properties and environmental features and other constraints leading to greater effects (e.g., pylons close to both sides of homes) or additional changes of direction or effects on oversailed environmental features such as woodland.
3.15.41	Suggest corridor Q could be set slightly east away from Margaretting and Ingatestone (plan provided)	National Grid has considered the feedback and for the following reasons the preferred corridor has been taken forward at this stage. Corridor Q would only form part of the preferred corridor by the adoption of a more easterly corridor either just east of Chelmsford or more coastal. The reasons for these being less preferred (L is too constrained for a new route and more coastal corridors are restricted by Special Protection Area (SPA) and Special Area of Conservation (SAC) designations) remain with no additional evidence provided. Modifications to corridor Q would not affect the preference for the preferred corridor as it remains that the combination of corridor L and corridor Q is less preferred.

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3.15.42	Request that the Project is routed to avoid the River Ter Site of Special Scientific Interest (SSSI), with overhead lines placed a minimum distance of 150 m from the river	The route alignment within the preferred corridor will continue to develop as the Project progresses, National Grid is currently proposing an alignment to the north and west of the preferred corridor in this location, which would enable the overhead line to be sited approximately 300 m from the River Ter Site of Special Scientific Interest (SSSI). We have taken feedback regarding pylon placement into account and in the proposals at this stage the pylons are sited at a distance greater than 150 m from the river.
3.15.43	Suggestion that the Project is routed away from specific location	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation which has resulted in several changes to the current preferred corridor. Further details on these changes can be found in the Design Development Report, published as part of the 2023 non-statutory consultation. Further changes to the preferred corridor and alignment will be considered as the Project develops.
3.15.44	Suggestion that the Project is routed away from Broads Green	Due to several constraints in this area including Sparrowhawk Wood and Broomfield Hospital, an amendment to the graduated swathe to the east of the preferred corridor, further away from Broads Green is not feasible. Therefore, the graduated swathe is proposed to the western side of the preferred corridor to avoid impacts on the woodland. The preferred corridor does not cross through Broads Green, and residential properties will be avoided through routeing and siting as the Project develops.
3.15.45	Suggestion that the Project is routed away from Hylands Estate	In response to feedback a western diversion of the preferred corridor was assessed, which would move the preferred corridor further away from Hylands Estate, however due to constraints including a gas pipeline, residential properties and Ancient Woodland, the preferred corridor, is considered to be appropriate to take forward at this stage. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.15.46	Suggestion that the Project is routed away from Ingatestone	In response to feedback and further technical appraisal we are proposing an eastwards diversion to the preferred corridor which would move the Project further away from Ingatestone, as well as heritage assets such as Ingatestone Hall and St Giles church. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary.
3.15.47	Suggestion that the Project is routed away from Chignall St James	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Chignall St James. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.15.48	Suggestion that the Project is routed away from Chignall Smeally	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Chignall Smeally. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in

Ref no.	Summary of matters raised	National Grid's response
		selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.15.49	Suggestion that the Project is routed away from Little Waltham	In response to feedback an alternative corridor through farmland to the west of Great Waltham and Little Waltham was assessed. However, this alternative would be a less direct and longer route and would transfer effects, to some degree, from one group of heritage assets and residential receptors to others. The alternative western corridor was not deemed to have significantly fewer impacts than the preferred corridor (which was not considered incompatible with the relevant policy framework) and therefore this change was not adopted.
3.15.50	Suggestion that the Project is routed away from Newney Green	In response to feedback a western diversion of the preferred corridor was assessed, which would move the preferred corridor away from Newney Green, however due to constraints including a gas pipeline, residential properties and Ancient Woodland the preferred corridor was considered to be appropriate to take forward at this stage. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary. Nonetheless National Grid has considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred or as otherwise amended corridor. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.15.51	Suggestion that the Project is routed away from Margaretting	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Margaretting. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.15.52	Suggestion that the Project is routed away from Roxwell	In response to feedback a western diversion of the preferred corridor further away from Roxwell was assessed, however due to constraints including a gas pipeline, residential properties, and Ancient Woodland the preferred corridor was considered to be appropriate to take forward. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary. Nonetheless National Grid has considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred or as otherwise amended corridor. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.15.53	Suggestion that the Project is routed away from Writtle	In response to feedback a western diversion of the preferred corridor further away from Writtle was assessed, however due to constraints including a gas pipeline, residential properties, and Ancient Woodland the preferred corridor was considered to be appropriate to take forward. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary. Nonetheless National Grid has considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred or as otherwise amended corridor. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable

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		tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.15.54	Suggestion that the Project is routed away from Hanningfield Reservoir	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Hanningfield Reservoir which is at around 5 km distance to the east. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred or as otherwise amended, therefore no change to the preferred corridor in this location is proposed at this time. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.15.55	Suggestion that the Project is routed away from Great Waltham	In response to feedback a western diversion of the preferred corridor was assessed, that would move the Project away from Great Waltham, however due to constraints including a gas pipeline, residential properties and Ancient Woodland the preferred corridor was considered to be appropriate to take forward at this stage. We will continue to reflect on the detail of any feedback and update the Project as appropriate and necessary. Nonetheless National Grid has considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred or as otherwise amended corridor. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.15.56	Suggestion that the Project is routed away from Nathan's Lane	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Nathan's Lane. We have reviewed alternative corridors as outlined in the Corridor and Preliminary Routeing and Siting Study (CPRSS) and concluded the preferred corridor should be taken forward at this time. We have also considered a number of alternative alignments to seek to take advantage of existing shallow valleys or routes created by existing infrastructure to the east closer to Edney Common but conclude that all are less preferred as a result of increased effects on either residential property occupiers or effects on Ancient Woodland. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.15.57	Suggestion that the Project is routed east of Bushey Wood as they cross Woodhall Hill	National Grid has considered this feedback and undertaken further assessment of an alternative alignment to the east of Bushey Wood. Following this further assessment, we have proposed an amendment to the graduated swathe from the west to the east of Bushey Wood to facilitate an alignment within the preferred corridor that is further away from properties on Woodhall Hill.
3.15.58	If cables must be routed as suggested in Chapter 7 then to protect the Area of Outstanding Natural Beauty (AONB) they must	National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. National

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	be buried wherever they fall within 3 miles / 5 km of the boundary of the AONB	Grid therefore adopts underground cable technology as mitigation within areas such as AONBs. Policy identifies no set distance by which such mitigation should be extended outside the AONB boundary.  National Grid identifies the requirement for mitigation (whether by additional planting, type of pylon or choice of alternative technology such as underground cable) based on consideration of the potential effects that may arise on a case-by-case basis. This considers the specific details of the designation (including special qualities, key views etc) and local circumstances including landform and existing vegetation. This approach allows consideration of the predicted effects arising from underground cable or overhead line technology and the Cable Sealing End (CSE) compounds (the transition sites between technologies) rather than applying an arbitrary distance that may be too great or too small for the specific circumstances.
Economic	c / Employment impact	
3.15.59	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.
		Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
3.15.60	Concerned about the Project being in too close proximity to new housing developments / land being considered for potential future housing development	National Grid has obtained information on development proposals within the planning system for the area potentially impacted by the Project. The nature of our response varies as in some cases proposals can be amended to be designed around our proposed infrastructure but in other cases our proposals may need to be amended at a corridor level or factored into detailed route design. Based on known information we consider our proposals are consistent with relevant policy and guidelines and routes designed such that they do not prevent proposed housing developments. It should also be noted that there are no minimum distances prescribed in UK law between overhead lines and homes. Any implications on landscape and visual receptors, residential amenity or from concerns about electric and magnetic fields (EMFs) are robustly assessed and balanced as part of the decision-making process. We will continue to review planning applications and engage with developers to back-check and update our proposals as necessary.
Environm	ental impact	
3.15.61	The Project will impact designated sites – e.g. Sites of Special Scientific Interest (SSSI), Ancient Woodland and a Royal	Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Sites of Special Scientific Interest (SSSI) and Ancient Woodland.
		The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental

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	Society for the Protection of Birds (RSPB) reserve	Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required mitigation requirements.  We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and to take their views into account as the Project continues to develop.
3.15.62	The Project will result in a negative impact on the environment generally (no details given)	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.
3.15.63	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated.  National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.  The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.
3.15.64	The Project will cause a negative impact on landscape / amenity	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
		Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
		We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.

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3.15.65	Consider the Project's effect upon environmentally sensitive areas (Flood zones, Nitrate Vulnerable Zones (NVZs), increased surface water flooding due to climate change etc)	The Environmental Statement (ES) will include consideration for potential impacts of flood risk from rivers, surface water and groundwater sources, Nitrate Vulnerable Zones (NVZs) and environmentally sensitive areas whilst taking into account of the effects of climate change over the projects design life. A Flood Risk Assessment (FRA) will also be produced to support the ES and submitted with the Development Consent Order (DCO) application, with particular focus on management of surface water drainage.
Financial	compensation	
3.15.66	The Project will devalue my property / Impact on property value in this section	National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.
		If there are any specific concerns about the devaluation of property, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>
3.15.67	Request for adequate financial compensation / Impacted individuals need to be compensated	All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.  If there are any specific concerns, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>

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Health and	d Safety	
3.15.68	The Project may result in a negative impact on mental health	National Grid recognises people may have concerns about the health effects of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.
	/ health and wellbeing of residents	We have sought to reduce potential effects on communities and residents through routeing and design. We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.
		The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns.
		We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:
		• Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)
		Email us: contact@n-t.nationalgrid.com
		<ul> <li>Write to us: FREEPOST N TO T (No stamp or further address details are required)</li> </ul>
		The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all of its equipment comply fully with those exposure limits.
		Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed overhead lines, underground cables and substation will be designed to ensure they are fully compliant with these policies and guidelines. This ensures that health concerns relating to EMFs are properly and adequately addressed.
3.15.69	Consideration needs to be given to the operation of light aircrafts at Broomfield Hospital / The siting of overhead lines presents a risk to light aircrafts in the area	Our review of airfields within 4 km of the preferred corridor identified 10 General Aviation (GA) sites, one military site (Wattisham Flying Station) and the Mid and South Essex National Health Service (NHS) Broomfield Hospital which receives helicopters from a helipad on the roof of the main hospital building.
		The airfield operators will be consulted as the design of the Project continues and we will endeavour to design a solution that safely accommodates airfield operations as far as practicable. It is noted that the Broomfield Hospital helicopter pad near Chelmsford is situated approximately 500 m from the eastern boundary of the preferred corridor. However, whilst this is relatively close, the climb and manoeuvring performance of twin engine air ambulance helicopters is such that the transmission line should have no detrimental operational impact if it were to be sited anywhere within the route corridor. Discussions will be held with the Essex and Herts Air Ambulance Trust to ensure an agreeable alignment emerges.

Ref no.	Summary of matters raised	National Grid's response
3.15.70	Concerns about structural integrity of pylons and overhead lines (i.e. potential for these to collapse / fall down)	Overhead lines are designed to remain robust and operational in the worst weather conditions in the UK. Although overhead lines are more susceptible to disruption from lightning and high winds, they are also comparatively easy and cost-effective to repair and maintain compared to underground cables. It should also be noted that the majority of the existing National Grid network is made up of overhead lines, which have been proven to be a reliable form of electricity transmission in the UK climate.
		Storms of sufficient severity to cause damage to infrastructure are very rare in the UK. Overhead lines could be subject to high wind speeds; however, pylons with overhead lines are designed to meet current safety standards. If in an extreme scenario the overhead line were to be damaged, the monitoring system would detect the fault within milliseconds and the circuit would be tripped and there would be no resulting risk of electrocution or fire. Lightning could potentially strike overhead lines; however, these have earthing protection against lightning strikes. The Project is designed to existing National Grid standards, which include consideration of high temperatures. Overhead lines are also designed to withstand temperatures to as low as -25°C with no effects to operation.  National Grid undertakes regular inspections of the overhead line using thermal imaging to assess damage to the overhead line from weather. This means damage caused by low or high temperatures or snow/ice would be identified and repaired prior to failure of the line.
3.15.71	Concerns regarding overhead lines near King Edward VI Grammar School (KEGS) playing field (e.g. risk of balls hitting the overhead lines)	There are a number of constraints within the preferred corridor and as the Project is developed through the next phase the alignment of the overhead line within the preferred corridor will be developed, taking account any obstacles and constraints.
		The design of overhead lines is carried out with strict safety clearances to the ground to account for activities being undertaken beneath the overhead line.
Heritage		
3.15.72	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. If impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.
		Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).
		We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.15.73	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking a Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify likely significant effects on archaeological sites arise. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.

Ref no.	Summary of matters raised	National Grid's response
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.15.74	Concern that the Project is very near three conservation areas around Ingatestone including: Ingatestone High Street Conservation Area; Ingatestone Station Lane Conservation Area; Fryerning Conservation Area. Concern that the Project will destroy the heritage and history built here	The Environmental Impact Assessment (EIA) will include an assessment of the effects of the Project on the historic environment, including conservation areas. The assessment will identify the potential for significant effects due to change to the setting of conservation areas and whether any mitigation is required to offset likely significant effects. National Grid is working with Historic England (formerly English Heritage) regarding the heritage implications of the proposals, including regarding appropriate mitigation and take their views into account when developing the Project.
Mitigation		
3.15.75	Visual impacts should be mitigated through planting and screening measures	Through the routeing and siting exercise, National Grid has sought to and will continue to seek to maximise the use of existing landform and vegetation to screen the Project as far as practicable as it passes through the wider landscape.  Where new infrastructure is required as part of the Project and the Environmental Impact Assessment (EIA) concludes that additional mitigation would be of benefit, screening in the form of planting would be implemented to further integrate infrastructure into the wider landscape.
Public Rig	hts of Way (PRoW).	
3.15.76	Concern around disruption of Public Rights of Way (PRoW). / Mitigation must be put in place for pedestrians / equestrians directly or indirectly impacted	Through routeing and siting, National Grid has sought to and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).
		The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. If mitigation is required, measures may include, the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.
		Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
Tourism		
3.15.77	Concerned about impact of the Project on leisure and tourism	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure.

## **Summary of matters** Ref no. **National Grid's response** raised Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users. Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP). Visual impact Cumulative effect of the Project National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to 3.15.78 alongside existing overhead lines other topic specific assessments, including the cumulative impact assessment will form part of the Environmental Impact Assessment (EIA) for the Project. For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project. 3.15.79 Concern about cumulative effect National Grid will as part of the Environmental Statement (ES) for the Project undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This, in summary, is a four on development in the area stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project. This long list will be refined into a short list based upon a range of factors including the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments. Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES. We will engage with stakeholders such as Local Planning Authorities to understand the other relevant proposed developments in the Project area that should be included in the long/short list for assessment, such as solar farms, housing developments and major roads. We will work closely with other developers where there may be a cumulative impact to ensure that we understand their proposals so that these can be considered in our own assessment.

Ref no.	Summary of matters raised	National Grid's response
3.15.80	The Project takes high ground making the pylons very visible / Consider the height of pylons	National Grid develops its proposals using the Holford Rules and must respond to the presence of existing constraints and environmental features. Whilst the use of lower lying ground is favoured, there are some instances where higher ground cannot be avoided as a result of the constraints and features present or where diversions to utilise lower ground are with undue additional changes of direction and additional effects of longer connections. Where higher ground cannot be avoided the design work has sought to reduce visibility as far as possible, utilising screening from existing woodland to filter views. The Environmental Impact Assessment (EIA) process will assess these potential effects and identify and report any additional mitigation, where considered appropriate.
3.15.81	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable Sealing End (CSE) Compounds and Substations)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.  In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.  A Landscape and Visual Impact Assessment (LVIA) will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.15.82	Cumulative effect of onshore National Grid projects within East Anglia / within this section	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.  This long list will be refined into a short list based upon a range of factors including the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.  We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.
Wildlife / E	Wildlife / Ecology impact	
3.15.83	Concern about local badger populations and impacts on them	Based on the suitability of habitats and rural location of most of the Project, it is envisaged that badgers ( <i>Meles meles</i> ) are widespread throughout the areas required for construction and operation related activities. Given the length of programme and the fact that badger setts can appear (as well as be abandoned) at any time, it is proposed that a survey as part of the Environmental Impact Assessment (EIA) will focus on main badger setts as well as

Ref no.	Summary of matters raised	National Grid's response
		existing data from local record centres. Further badger survey work relating to all other badger setts would be undertaken as part of the pre-construction works post submission of the Development Consent Order (DCO) application to ensure adherence to legislation and animal welfare.  Pre-construction surveys and sett classifications will be undertaken and, where appropriate, agreed working practices will be set out in the Code of Construction Practice (CoCP). These measures will be implemented to minimise potential impacts on badgers as far as practicable.
3.15.84	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.  The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.
		We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques, to take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.15.85	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology – including protected species	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be

Ref no.	Summary of matters raised	National Grid's response
		identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.15.86	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.

## Section 6: Basildon and Brentwood feedback

Figure 3.28- Basildon and Brentwood section map

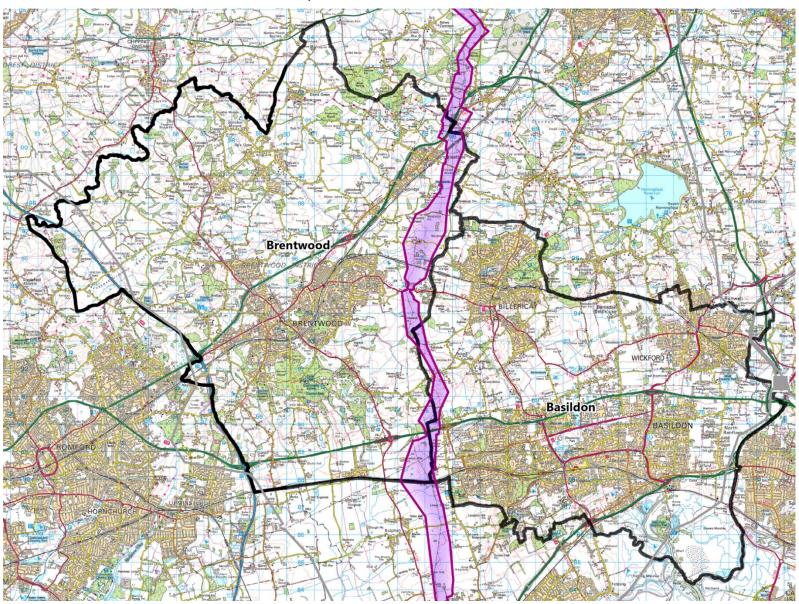


Table 3.16- Summary of consultee comments on Section 6: Basildon and Brentwood and National Grid's response

Ref no.	Summary of matters raised	National Grid's response
Agricultura	al land	
3.16.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.
Communit	ty / Social impact	
3.16.2	Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.  We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.  The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:  • Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)  • Email us: contact@n-t.nationalgrid.com  • Write to us: FREEPOST N TO T (No stamp or further address details are required)
3.16.3	Concern around the Project causing communities to become encircled by overhead lines	The preferred corridor has been routed to achieve some separation from the existing 400 kV overhead line, such that villages do not have overhead lines close to both sides. Separation is inevitably reduced in certain locations due to the presence of constraints to routeing and environmental features. Detailed assessment reported in the Environmental Impact Assessment (EIA) will identify any measures considered to be necessary to reduce potential effects which will also consider the potential for effects potentially arising from close paralleling existing 132 kV overhead line and new 400 kV overhead line infrastructure.

Ref no.	Summary of matters raised	National Grid's response
3.16.4	Concern that the Project is too near to local hospitals	In developing its proposals National Grid has sought to and will continue to seek to avoid large residential areas and important sites such as hospitals and schools. We feel that the preferred corridor and proposed East Anglia Connection Node (EACN) substation siting area have avoided these important sites with a suitable standoff area. As we continue to develop our proposals, we will continue to take account of important places such as hospitals and seek to reduce any impacts as far as practicable.
3.16.5	Concern that the Project is going to take away or impact land that could be used for housing development (e.g. proposed garden village and related services)	National Grid has obtained information on development proposals within the planning system for the area potentially impacted by the Project. The nature of our response varies as in some cases proposals can be amended to be designed around our proposed infrastructure but in other cases our proposals may need to be amended at a corridor level or factored into detailed route design. Based on known information we consider our proposals are consistent with relevant policy and guidelines and routes designed such that they do not prevent proposed housing developments. It should also be noted that there are no minimum distances prescribed in UK law between overhead lines and homes. Any implications on landscape and visual receptors, residential amenity or from concerns about Electric and Magnetic Fields (EMFs) are robustly assessed and balanced as part of the decision-making process. We will continue to review planning applications and engage with developers to back-check and update our proposals as necessary.
Construct	ion impacts	
3.16.6		National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.
3.16.7	Concerns around accessing the road network during construction	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project.  The CTMP, will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project are reduced as far as practicable.
Consultati	ion	
3.16.8	Comment supportive of proposal / engagement that has taken place – feel listened to	National Grid note the respondent's feedback.

Ref no.	Summary of matters raised	National Grid's response
3.16.9	Justification for the preferred corridor within this section needs to be provided	The Corridor and Preliminary Routeing and Siting Study (CPRSS) presented information about National Grid's decision-making to identify and justify the preferred corridor which was the subject of the 2022 non-statutory consultation. In summary alternative corridors closer to the coast interact with environmental designations, most notably Special Protection Areas (SPAs), and as such are less preferred. Over and above that the corridor is routed as directly as possible between various pinch points between extensive urban areas. We will review feedback provided about the basis for that decision-making and update the Project as needed.
3.16.10	Lack of consultation in Brentwood	Prior to commencement of the 2022 non-statutory consultation, we prepared a Consultation Strategy, setting out the details of how we proposed to consult on the Project. The Strategy was shared with the applicable Local Authorities for comment and where possible we took on board their comments to inform the consultation. Approximately 50,000 newsletters were sent to all addresses along the preferred corridor within an area of approximately 1 km either side. We held a series of face-to-face events, spread out along the preferred corridor, during the consultation period. We also held a series of webinars, one of which provided detailed information about our proposals in the Brentwood area. Information was provided to Parish and Town Councils in the area on our proposals and we set up a series of information points at local libraries where information on the Project was available. We note the feedback and will ensure that we carefully consider for the next stage how to share information in the Brentwood area.
3.16.11	The Project is bypassing the usual planning processes	In its present form the Project is a Nationally Significant Infrastructure Project (NSIP) for which the primary policy basis for any decision are National Policy Statements (NPSs) EN-1 and EN-5.
		The Development Consent Order (DCO) application will consider local planning policy through the Planning Statement and where relevant within the topic chapters in the Environmental Impact Assessment (EIA).
		Local Impact Reports submitted by each local authority will also consider local planning policy. Section 104 of the Planning Act 2008 sets out how the Secretary of State (SoS) must also have regard to any local impact reports submitted by a relevant local authority.
		Issues relating to local planning policy will be discussed with local planning authorities via ongoing engagement as the Project progresses and the Project will seek to minimise and mitigate any local impacts as far as practicable.
3.16.12	Criticism that Brentwood Local Plan has not been considered	In its present form the Project is a Nationally Significant Infrastructure Project (NSIP) for which the primary policy basis for any decision are National Policy Statements (NPSs) EN-1 and EN-5.
		The Development Consent Order (DCO) application will consider local planning policy through the Planning Statement and where relevant within the topic chapters in the Environmental Impact Assessment (EIA).
		Local Impact Reports submitted by each local authority will also consider local planning policy. Section 104 of the Planning Act 2008 sets out how the Secretary of State (SoS) must also have regard to any local impact reports submitted by a relevant local authority.
		Issues relating to local planning policy will be discussed with local planning authorities via ongoing engagement as the Project progresses and the Project will seek to minimise and mitigate any local impacts as far as practicable.

Ref no.	Summary of matters raised	National Grid's response
Design Cl	hange	
3.16.13	Existing overhead lines in this section should be removed / undergrounded	The existing electricity transmission network provides power, via the local distribution network, into the local area where it is used in homes and businesses. The need case and funding for the Project is to deliver the new network reinforcement needed, rather than to remove existing overhead lines by undergrounding them. Unless required for mitigation, undergrounding existing overhead lines on the transmission network would not be in accordance with National Policy Statement (NPS) EN-5 and would result in substantial cost to bill payers. There may also be significant environmental impacts due to the removal works on sensitive ecological and archaeological receptors as well as constraints from either existing built form of unsuitable ground conditions.
3.16.14	Underground cables should be used in this section	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality.  National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Area of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV infrastructure.  No such designations or crossing locations have been identified in this section which is therefore proposed as overhead line. We will undertake an Environmental Impact Assessment (EIA) to assess the potential impact of the Project, and this will identify any need for additional mitigation.
3.16.15	The Project should run in closer to / parallel to the existing 400 kV overhead lines	We note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, in this section there are constraints and features that mean, overall, we consider close paralleling would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. Several residential properties are present in close proximity to the existing 400 kV overhead line meaning that if the lines were close paralleled it would result in the properties having an overhead line close to both sides. There are also some locations where the combination of existing physical and environmental features (road infrastructure, commercial and residential property etc) present very substantial challenges to routeing and siting. It is also noted that further south a corridor parallel to existing overhead lines would lead to greater effects on the Special Protection Area (SPA) designation where legislation is such that alternatives that do not lead to such effects should be followed. As a result, whilst close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the overhead lines must converge and diverge, and those increased effects on properties with overhead line to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.

Ref no.	Summary of matters raised	National Grid's response
3.16.16	Suggest that the existing overhead lines in this section are reinforced / upgraded instead	The existing transmission network in the region is being upgraded to ensure the system is running at its most efficient performance. The existing networks are not able to be upgraded sufficiently to cope with the future demands expected on the network. As a result, new lines and substations will be required to accommodate the changing demands on the network.
3.16.17	Seek alternative routeing (no route specified)	National Grid considered alternative strategic proposals as well as alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published in support of the 2022 non-statutory consultation. We have updated our proposals in the light of the 2022 non-statutory consultation feedback, and we will continue to reflect on the detail of any feedback and back-check and update the Project as appropriate and necessary.
3.16.18	Suggestion that the Project follows the existing overhead line from Boreham to Tilbury	We note there is potential for the new overhead line to run in close proximity to the existing overhead line (close paralleling) to reduce the level of effects that may arise from a new overhead line. However as described in the Corridor and Preliminary Routeing and Siting Study (CPRSS), there are some locations where the combination of existing physical and environmental features (roads, commercial and residential property and other features) present very substantial challenges such that an additional overhead line is not considered to be able to be constructed. Even if this could be achieved there are constraints and features adjacent to the existing overhead line that mean that overall, in the context of the Project we consider close paralleling in this area to lead to greater effects and be less compliant with the Holford Rules (as set out in Chapter 1 of this report) or be less consistent with the policy to be economic and efficient. Several residential properties are present in close proximity to the existing 400 kV overhead line meaning that if the lines were close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the lines have to converge and diverge, and those increased effects on properties with overhead line to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Additional effects on Special Protection Area (SPA) designations can also be anticipated with the legislation set out in the Habitats Regulations such that alternatives (where they are available) that do not give rise to these effects should be adopted. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.16.19	Suggestion that the Project in this section should be located in valleys rather than along ridges / higher ground, to reduce visual impact	National Grid develops its proposals using the Holford Rules (as set out in Chapter 1 of this report) and must respond to the presence of existing constraints and environmental features. Whilst the use of lower lying ground and or valleys is favoured, there are some instances where higher ground cannot be avoided as a result of the constraints and features present or where routes that utilise lower ground and valleys require additional changes of direction and have additional effects of longer connections. For example, relatively shallow valleys to the west of Writtle have been considered and were less preferred as they have greater effects on woodland including unavoidable loss of Ancient Woodland and increase residential amenity affects. Where higher ground cannot be avoided then alignment design will aim to reduce visibility as far as possible, utilising screening from existing woodland to filter views. The Environmental Impact Assessment (EIA) process will identify and report any additional mitigation, where considered appropriate.

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3.16.20	Suggestion that overhead lines should be at an equal distance between Ingatestone and Stock to minimise impact	National Grid has reviewed the preferred corridor in this area to respond to this feedback in conjunction with other feedback concerning the potential effects on listed buildings. We are proposing amore eastern corridor which, whilst marginally less direct and longer does substantially reduce effects on listed buildings. This route enables an alignment approximately midway between Ingatestone and Stock.
3.16.21	Suggest that the Project is routed as far away from populated / residential areas as possible	Deciding where and how to build new high voltage electricity lines is a complex issue and National Grid is mindful of the potential effects this infrastructure may have on local communities and the concerns these may bring. National Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise and potential health impacts. It has sometimes been suggested that minimum distances between properties and overhead lines should be prescribed.
		We do not consider this appropriate since each instance must be dealt with on its merits. However, we have always sought to route new lines away from residential property on grounds of general amenity where possible.
		We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate UK standards, and mitigated where necessary. We set strict technical standards for the equipment we install on our network. These will apply to the proposed new East Anglia Connection Node (EACN) substation located in the Tendring District, and proposed extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.
		Noise from overhead lines is predominately determined by the conductor design, voltage, and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types be used, consideration for this would be assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers, and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the Environmental Statement (ES).
		In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an assessment on both landscape character and visual amenity.
		The health and safety of the public, local communities and employees is central to everything that we do. The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. Our approach is to ensure that our network comply with those policies, which are set by Government on the advice of their independent

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		advisors. The Project will be designed to ensure it is fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed.  Policies for both noise and EMF are incorporated into the decision-making process for development consent as set out in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment complies fully with those policies and guidelines. The Development Consent Order (DCO) application will include assessments against these polices, including both construction and operational noise and EMF.
3.16.22	Consider laying underground cables under the river networks and existing sewer ducts	Existing underground infrastructure would not be suitable to accommodate 400 kV underground cables, the installation of National Grid underground cables occupies significantly more space due to the need for cable cooling considerations. Additionally, existing assets have not been designed to house 400 kV transmission assets and therefore would be ineffective at facilitating the Project. The typical working width for a 400 kV underground cable installation is approximately 120 m in width.
		The natural routes of watercourses also tend to meander which would lead to several issues:
		<ul> <li>following the path of such watercourses, rather than a direct route would create increased circuit lengths, which would mean more cable is required;</li> </ul>
		<ul> <li>greater disturbance to the environment and local community as we excavate along these rivers;</li> </ul>
		<ul> <li>greater capacitive losses due to the length increase which would require more High Voltage (HV) plant in the form of reactive compensation (shunt reactors) to be installed along the route;</li> </ul>
		<ul> <li>watercourses would not likely be wide enough to accommodate the construction and permanent underground cable corridors required, meaning land either side of the water courses would be excavated too;</li> </ul>
		<ul> <li>watercourses tend to be high priority ecological / environmental areas for wildlife, flora and fauna and as such makes this option even less desirable. Installation of underground cables following a watercourse would require major temporary works to open excavate i.e., damming, diversions, over pumping, cofferdams etc, all of which would cause huge disturbance and risk to the natural environment, not to mention the added time and cost over the route;</li> </ul>
		<ul> <li>directional drilling could potentially be utilised, but to accommodate the many changes in direction additional drill pits would be required along the route and as such any benefits lost; and</li> </ul>
		<ul> <li>there would be a need for cable jointing pits every 1 km at which point the river would need to be temporarily diverted to allow such works to be undertaken, again this is impracticable.</li> </ul>
		The increase in route length and the associated temporary works to achieve this would be significant in comparison to overhead lines routed directly as per the Holford Rules.

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3.16.23	The Project should be located to the east of Bridleway 90 with suitable standoff distances to protect public amenity, and avoid land north of Rayleigh Road, Hutton (as Berkley hold an option agreement for this)	National Grid is aware of the option agreement over the land to the north of Rayleigh Road, to the west of Bridleway 90. The preferred corridor is to the east of Bridleway 90 and therefore it is not anticipated that the Project would impact on the proposed development.  While there are no minimum distances prescribed in UK law between overhead lines and homes, any implications on landscape and visual receptors, on residential amenity, or arising from concerns over Electric and Magnetic Fields (EMFs), will be robustly assessed and if any proposed application is granted, further dialogue will be undertaken.
3.16.24	Provided with a suggested route by which the Project is aligned close to the A12	Whilst appreciating the potential benefits of infrastructure being concentrated geographically, i.e., by routeing the Project in close proximity to the A12, we do not consider these benefits would arise in this section. Whilst the A12 aligns (at least in part) with the general proposed routeing of the Project, there are constraints and features that mean that we do not consider close paralleling would reduce environmental effects or improve compliance with the Holford Rules or be more consistent with the policy to be economic and efficient. Several residential properties (isolated as well as hamlets, villages and towns) are present in close proximity to the existing transport infrastructure which, along with diversions to avoid other features (such as woodland) would necessitate multiple diversions of an overhead line. As a result, whilst close paralleling of the A12 may appear beneficial in some short sections, overall, the increased environmental effects from multiple changes of direction are considered greater and less compliant with the Holford Rules than those that are associated with a new corridor separated from existing transport infrastructure.
3.16.25	Corridor 'R' (north of Colchester and to south of Ardleigh Reservoir) runs through local plan allocation for Dunton Hills Garden Village – suggestion that the Project is moved further to the east away from the allocation	National Grid has carefully reviewed the proposals and considers that there remains an appropriate routeing opportunity at the eastern edge within the preferred corridor. Corridors further to the east were less preferred due to the potential for effects on European designated areas (Special Area of Conservation (SAC) / Special Protection Area (SPA)) and their qualifying features. More localised eastern diversions are restricted because of other existing urban development.
3.16.26	Suggest that overhead lines are undergrounded when passing alongside Dunton	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape, and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV overhead line infrastructure. The area indicated is not subject to any landscape designation as identified in NPS EN-5. On this basis we do not consider that the higher cost of underground cables to bill-paying consumers, and the environmental implications of installing and maintaining them, are justifiable in the context of national policy

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		or our statutory duties. Nevertheless, an Environmental Impact Assessment (EIA) will assess the impact of the Project and will identify any need for additional mitigation.
3.16.27	Suggestion that the Project is routed away from specific location	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation which has resulted in several changes to the current preferred corridor. Further details on these changes can be found in the Design Development Report, published as part of the 2023 non-statutory consultation. Further changes to the preferred corridor and route alignment that has been developed within it will be considered as the Project develops.
3.16.28	Suggestion that the Project is routed away from Ingatestone	National Grid has reviewed the preferred corridor in this area to respond to this feedback in conjunction with feedback concerning the potential effects on listed buildings. We are proposing a more eastern corridor which, whilst marginally less direct and longer, does move the Project further away from Ingatestone by adopting a corridor that facilitates a potential alignment approximately midway between Ingatestone and Stock.
3.16.29	Suggestion that the Project is routed away from Haverings Grove	National Grid has considered the respondents feedback highlighting a preference for an alternative corridor moved away from Haverings Grove. We have considered the other corridors but remain of the view that the preferred corridor should be taken forward at this time. The vicinity of Haverings Grove cannot be avoided because of extensive urban areas to east and west with route alignment also influenced by the presence of a Conservation area to the east and existing gas pipeline and 132 kV overhead line infrastructure. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules (particularly Rule 2 in respect of heritage assets and Supplementary Notes in respect of residential amenity) in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.16.30	Suggestion that the Project is routed away from Ingatestone Hall and Hylands House	National Grid has reviewed the preferred corridor in this area to respond to this feedback in conjunction with feedback concerning the potential effects on listed buildings. With the preferred corridor proposed more than 1 km from Hylands house and areas of intervening woodland to screen / filter views we do not consider further deviation of the corridor to be required. In the vicinity of Ingatestone Hall we are proposing a more eastern corridor to now be preferred which, whilst marginally less direct and longer, does substantially reduce effects on listed buildings at Ingatestone Hall by supporting an alignment approximately midway between Ingatestone and Stock at over 1 km from Ingatestone Hall.
3.16.31	Suggestion that the Project is routed away from Mountnessing	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Mountnessing, noting that the preferred corridor is at around 2 km from the eastern edge of Mountnessing. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.

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3.16.32	Suggestion that the Project is routed away from Billericay	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Billericay. We have reviewed alternative corridors but remain of the view that the preferred corridor should be taken forward at this time. The preferred corridor in this general area is between extensive urban areas and influenced by other factors including listed buildings. In the vicinity of Billericay, we are proposing an alignment that has moved closer to Billericay to reduce effects on the Grade I Listed Ingatestone Hall. We considered the feedback and applied the guidance in the Holford Rules in developing the draft alignment. Whilst closer to Billericay we consider this alignment is not inconsistent with the Holford Rules. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.16.33	Suggestion that the Project is routed away from Brentwood	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Brentwood. We have reviewed alternative corridors but remain of the view that the preferred corridor should be taken forward. The preferred corridor in this general area is between extensive urban areas and influenced by other factors including listed buildings. In the vicinity of Brentwood, we are proposing an alignment that has moved (in part) further from Brentwood to reduce effects on the Grade I Listed Ingatestone Hall. In the absence of a specific basis for the change or a proposed alternative corridor, National Grid has considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.16.34	Suggestion that the Project is routed away from Crown Hill / Dunton Hill	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Crown Hill and Dunton Hill. The presence of other environmental features, residential properties and proposed housing development in combination with existing urban areas restrict routeing options and alternatives were all considered less preferable. Nonetheless, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.16.35	Suggestion that the Project is routed away from Edney Common	National Grid has considered the respondents feedback highlighting a preference for an alternative moved away from Edney Common. We have reviewed alternative corridors as outlined in the Corridor and Preliminary Routeing and Siting Study (CPRSS) and concluded the preferred corridor should be taken forward at this time. We have also considered several alternative alignments to seek to take advantage of existing shallow valleys or routes created by existing infrastructure but conclude that all are less preferred as a result of increased effects on either residential property occupiers or effects on Ancient Woodland. In the absence of a specific basis for the change or a proposed alternative corridor, we have considered this feedback by following the guidance in the Holford Rules in developing the draft alignment within the preferred corridor or as otherwise amended. Guidelines on overhead line routeing are known as the "Holford Rules" which remain a valuable tool in selecting and assessing potential overhead line route

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		options as part of the options appraisal process. A summary of the Holford Rules is provided within Chapter 1 of this report.
3.16.36	Given the significant faults the consultation run afresh including alternatives such as but not limited to a strategic offshore ring-main	Prior to commencement of the 2022 non-statutory consultation, National Grid prepared a Consultation Strategy, this document sets out the details of how we proposed to consult on the project. The Strategy was shared with Local Authorities for comment, and we took on board their comments to inform how the consultation was carried out where possible. The consultation was run in accordance with the published strategy.
		As we scope our projects, we consider numerous technology solutions. Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia and are part of our preliminary recommended solution. National Grid's appraisals, which were based on our knowledge of the network, understanding of the capacity and costs of developing subsea links as well as evaluation of the environmental and socio—economic implications, reached a preliminary conclusion that, on balance, the most appropriate solution was an offshore Direct Current (DC) link between the Sizewell area and Kent (Sea Link) in combination with onshore reinforcement between Norwich and Tilbury (East Anglia GREEN) and onshore reinforcement between Tilbury and Grain (progressed as a sperate scheme due to the general geographic separation of potential effects). We presented our evaluation and our preliminary preferred solution at the 2022 non-statutory consultation, which was an opportunity for members of the public to comment (which they did).
		It would have been disingenuous for us to present an offshore option to the public for consultation feedback, knowing this did not comply with the framework requirements.
		Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.
3.16.37	If cables must be routed as suggested in Chapter 7 then to protect the Areas of Outstanding Natural Beauty (AONBs), they must be buried wherever they fall within 3 miles / 5 km of the boundary of the AONB	National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. National Grid therefore adopts underground cable technology as mitigation within areas such as AONBs. Policy identifies no set distance by which such mitigation should be extended outside the AONB boundary.
		National Grid identifies the requirement for mitigation (whether by additional planting, type of pylon or choice of alternative technology such as underground cable) based on consideration of the potential effects that may arise on a case-by-case basis. This considers the specific details of the designation (including special qualities, key views etc) and local circumstances including landform and existing vegetation. This approach allows consideration of the predicted effects arising from underground cable or overhead line technology and the Cable Sealing End (CSE) compounds (the transition sites between technologies) rather than applying an arbitrary distance that may be too great or too small for the specific circumstances.

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3.16.38	Locations for Cable Sealing End (CSE) Compound sites to facilitate end point of underground section must be carefully chosen and subject to further consultation	National Grid acknowledges the requirement to carefully site the Cable Sealing End (CSE) compounds paying particular regard to the Horlock Rules and will consult on its proposals and consider any feedback provided as the Project develops.
Economic	/ Employment impact	
3.16.39	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.
		Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
3.16.40	Impact on other local projects (i.e., solar farms such as Crouch Solar Farm)	National Grid continues to seek to reduce as far as practicable potential impacts on existing and consented projects as the preferred alignment of the Project evolves.
		This will be undertaken by engaging with developers of such infrastructure projects to understand their development plans and to identify complementary design principles and parameters if practicable.
		In addition, we will continue to apply a range of good practice design principles during the iterative design of the Project, such as, considerate siting of infrastructure and pylons, whilst considering other factors including but not limited to; engineering feasibility, environmental impacts and land take requirements.
3.16.41	Concern about cumulative effect on development in the area	National Grid will as part of the Environmental Statement (ES) for the Project undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This, in summary, is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments. Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.

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		We will engage with stakeholders such as Local Planning Authorities to understand the other relevant proposed developments in the Project area that should be included in the long/short list for assessment, such as solar farms, housing developments and major roads. We will work closely with other developers where there may be a cumulative impact to ensure that we understand their proposals so that these can be considered in our own assessment.
Environm	ental impact	
3.16.42	The Project will impact designated sites – e.g. Sites of Special Scientific Interest (SSSI), Ancient Woodland and a Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Sites of Special Scientific Interest (SSSI) and Ancient Woodland.
		The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required mitigation requirements.
		We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.16.43	The Project will result in a negative impact on the environment generally (no details given)	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.
3.16.44	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated. National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.
		The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.
3.16.45	The Project will cause a negative impact on landscape / amenity	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
		Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
		We will be undertaking a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments form part of the EIA for the Project. This will include an assessment on both landscape character and

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		visual amenity. Where significant effects are anticipated the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.16.46	Flooding needs to be taken into account / mitigated against in this section (e.g. increased surface	National Grid has sought to and will continue to seek to reduce the impact on areas prone to flooding through the routeing and siting exercise, and we will continue to refine the potential interactions through careful siting of infrastructure and pylons outside of flood zones where practicable.
	water flooding due to climate change)	The Environmental Statement (ES) will include consideration for potential impacts of flood risk from rivers, surface water and groundwater sources, considering for the potential for both temporary and permanent impacts, taking account of the effects of climate change over the projects design life. A Flood Risk Assessment (FRA) will also be produced to support the ES and submitted with the Development Consent Order (DCO) application, with particular focus on management of surface water drainage.
3.16.47	Request that if the preferred corridor changes, Thorndon Park and Langdon Ridge Sites of Special Scientific Interest (SSSIs) are avoided	National Grid notes the respondent's feedback. We seek to avoid designated sites such as Sites of Special Scientific Interest (SSSI) when routeing and siting projects. Where sites of ecological significance cannot be avoided, we will seek to reduce potential impacts through mitigation. The Environmental Impact Assessment (EIA) will identify potential effects and mitigation, and we are working closely with the relevant statutory bodies, for example Natural England as the Project develops.
Financial	compensation	
3.16.48	The Project will devalue my property / Impact on property value in this section	National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.
		If there are any specific concerns about the devaluation of property, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>

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		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>
3.16.49	Request for adequate financial compensation / Impacted individuals need to be compensated	All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.
		If there are any specific concerns, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>
3.16.50	Request for acquisition of their house at current market value	The need to acquire a private property is unlikely, but where a need arises on a case-by-case basis, National Grid will offer to purchase the property at the market value. If there are any specific concerns, please contact the Project team:
		<ul> <li>Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.</li> </ul>
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>
Health and	d Safety	
3.16.51	The Project may result in a negative impact on mental health / health and wellbeing of residents	National Grid recognises people may have concerns about the health effects of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.  We have sought to reduce potential effects on communities and residents through routeing and design. We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and
		engaging with the people and stakeholders throughout the development of the Project.  The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns.

throughout the development of the Project:

We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email

Ref no.	Summary of matters raised	National Grid's response
		Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)
		Email us: contact@n-t.nationalgrid.com
		<ul> <li>Write to us: FREEPOST N TO T (No stamp or further address details are required)</li> </ul>
		The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all of its equipment comply fully with those exposure limits. Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed overhead lines, underground cables and substation will be designed to ensure they are fully compliant with these policies and guidelines. This ensures that health concerns relating to EMFs are properly and adequately addressed.
3.16.52	Consideration needs to be given to the Project between Braintree and Horndon and its proximity in relation to a 900 mm diameter High Pressure Gas Main and the associated Health and Safety Executive (HSE) planning zones	National Grid is aware of the presence of various utilities and will take appropriate account of them in developing the detailed alignment and infrastructure positions following consideration of feedback about the preferred corridor and graduated swathe. We will engage with such utility providers through the Project development process
Heritage		
3.16.53	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. If impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.
		Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).
		We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.16.54	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking an Historic Environment assessment as part of the Environmental Impact Assessment (EIA) process to identify likely significant effects on archaeological sites arise. To

Ref no.	Summary of matters raised	National Grid's response
		inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.
		We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
Maintenar	nce (ongoing)	
3.16.55	Power cuts are already frequent – require notice of power cuts in advance	The Project works will have no impact on your electricity supply. The work that we need to carry out is on part of the National Electricity Transmission System (NETS) and will have no direct effect on homes, businesses, schools, and other premises in the local area.
Mitigation		
3.16.56	Use planting and screening and mitigate visual impacts	A Landscape and Visual Impact Assessment (LVIA) will be undertaken, and this will identify areas for potential mitigation planting. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
Public Rig	ghts of Way (PRoW).	
3.16.57	Concern around disruption of Public Rights of Way (PRoW). / Mitigation must be put in place for pedestrians / equestrians directly or indirectly impacted	Through routeing and siting, National Grid has sought to and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).
		The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. If mitigation is required, measures may include, the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.
		Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
Tourism		
3.16.58	Concerned about impact of the Project on leisure and tourism	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure. Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by

Ref no.	Summary of matters raised	National Grid's response
		implementing measures such as, the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.
		Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
Visual imp	pact	
3.16.59	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable Sealing End (CSE)Compounds and Substations)	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.
		In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.
		A landscape and visual impact assessment will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.16.60	Cumulative effect of onshore National Grid projects within East Anglia / within this section	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including; the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.

Ref no.	Summary of matters raised	National Grid's response
3.16.1	Cumulative effect of the Project alongside existing overhead lines	National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.
		For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.
Wildlife / E	Ecology impact	
3.16.62	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.
		We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques, will take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.16.63	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology – including protected species	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.

Ref no.	Summary of matters raised	National Grid's response
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.16.64	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands, and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.
		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.16.65	Concern about local badger populations and impacts on them	Based on the suitability of habitats and rural location of most of the Project, it is envisaged that badgers (Meles meles) are widespread throughout the areas required for construction and operation related activities. Given the length of programme and the fact that badger setts can appear (as well as be abandoned) at any time, it is proposed that a survey as part of the Environmental Impact Assessment (EIA) will focus on main badger setts as well as existing data from local record centres. Further badger survey work relating to all other badger setts would be undertaken as part of the pre-construction works post submission of the Development Consent Order (DCO) application to ensure adherence to legislation and animal welfare.
		Pre-construction surveys and sett classifications will be undertaken and, where appropriate, agreed working practices will be set out in the Code of Construction Practice (CoCP). These measures will be implemented to minimise potential impacts on badgers as far as practicable.

## Section 7: Thurrock feedback

Figure 3.29- Thurrock section map

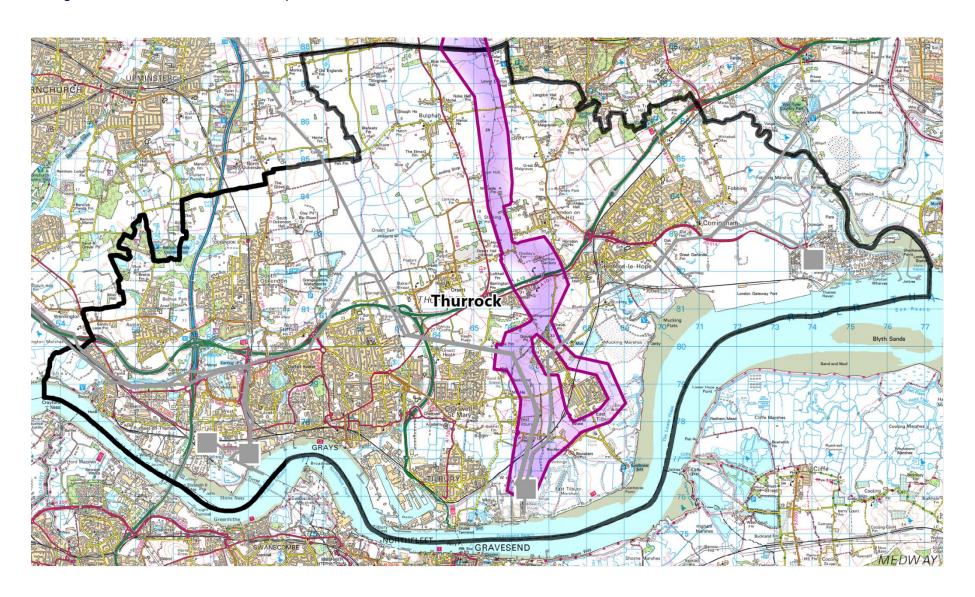


Table 3.17- Summary of consultee comments on Section 7: Thurrock and National Grid's response

Ref no.	Summary of matters raised	National Grid's response
Agricultura	al land	
3.17.1	The Project will be taking away valuable agricultural land / disrupt farming operations	National Grid recognises that there is the potential for impacts. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners including farmers who may be affected by the proposals to understand the potential impacts on their operations and to work with them as the Project is developed. We will seek to work with the farming community to limit disruption where practicable. This includes providing prior warning of works which may result in the need to move livestock. Compensation claims for disturbance are considered on a case-by-case basis. Particular agricultural matters can also be written into voluntary land agreements.
Communi	ty / Social impact	
3.17.2	Concerned about impact of the Project on children / families / residents	National Grid recognises people may have concerns about the potential impacts of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.  We have sought to reduce potential effects on communities and residents through routeing and design including ensuring compliance with UK guidance on Electric and Magnetic Fields (EMF). We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.  The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns. We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:  • Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am – 5:30pm)  • Email us: contact@n-t.nationalgrid.com  • Write to us: FREEPOST N TO T (No stamp or further address details are required)
3.17.3	Concerned about the Project being in too close proximity to recently built housing developments / land being considered for potential future development	National Grid notes the presence of applications for planning permission. It should be noted that there are no minimum distances prescribed in UK law between overhead lines and homes. Any implications on landscape and visual receptors, on residential amenity, or arising from concerns over electric and magnetic fields (EMFs), are robustly assessed and balanced as part of the decision-making process. If any proposed application is granted, further dialogue would be undertaken with the property owner in the future – subject to any planning application being made.

Ref no.	Summary of matters raised	National Grid's response	
3.17.4	Concern around the Project causing communities to become encircled by overhead lines	The preferred corridor has been routed to achieve some separation from the existing 400 kV overhead line, such that villages do not have overhead lines close to both sides. Separation is inevitably reduced in certain locations due to the presence of constraints to routeing and environmental features. Detailed assessment reported in the Environmental Impact Assessment (EIA) will identify any measures considered to be necessary to reduce potential effects which will also consider the potential for effects arising from close paralleling existing 132 kV overhead line and new 400 kV overhead line infrastructure.	
3.17.5	Cumulative effect of the Project with other projects that are not being led by National Grid within this section (mineral extraction, expanding free port, new power station, etc)	National Grid will as part of the Environmental Statement (ES) for the Project undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This, in summary, is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.  This long list will be refined into a short list based upon a range of factors including the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments. Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.  We will engage with stakeholders such as Local Planning Authorities to understand the other relevant proposed developments in the Project area (if any) that should be included in the long/short list for assessment, such as solar farms, housing developments and major roads. We will work closely with other developers where there may be a cumulative impact to ensure that we understand their proposals so that these can be considered in our own assessment.	
Construct	ion impacts		
3.17.6	Adverse impact on traffic levels in local are a caused by construction works (e.g. construction traffic travelling along local roads, road closures, etc)	National Grid will work closely with the relevant authorities and their highways teams to understand and gain information on the local road network. This information will be used to inform and guide the drafting of the Construction Traffic Management Plan (CTMP) for the Project. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable.	
Consultati	Consultation		
3.17.7	Comment supportive of proposal / engagement that has taken place – feel listened to	National Grid note the respondent's feedback.	
3.17.8	Residents of East Tilbury village were unable to partake in the	Prior to commencement of the 2022 non-statutory consultation, we prepared a Consultation Strategy, setting out the details of how we proposed to consult on the Project. The Strategy was shared with Local Authorities for comment	

Ref no.	Summary of matters raised	National Grid's response
	online consultation, due to lack of internet and phone access	and where possible we took on board their comments to inform the consultation. Approximately 50,000 newsletters were sent to all addresses along the preferred corridor within an area of approximately 1 km either side. We also published a series of newspaper advertisement setting out information on the consultation. We held a series of face-to-face events, spread out along the preferred corridor. We note the feedback and will ensure that we carefully consider for the next stage how to share information in the East Tilbury area.
Design Ch	nange	
3.17.9	Underground cables should be used in this section	National Grid has carefully considered the feedback received during the 2022 non-statutory consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape, and visual quality. National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations which includes nationally designated areas such as Areas of Outstanding Natural Beauty (AONBs), potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy. We may also adopt underground cables in other circumstances such as to cross existing 400 kV infrastructure.
		Our current proposals are to install underground cable for approximately 4.6 km from the north of the Lower Thames Crossing (LTC) through to Tilbury Substation for technical and efficiency reasons.
		We will undertake an Environmental Impact Assessment (EIA) to assess the potential impact of the Project, and this will identify any need for additional mitigation.
3.17.10	Existing overhead lines in this section should be removed / undergrounded	The existing electricity transmission network provides power, via the local distribution network, into the local area where it is used in homes and businesses. The need case and funding for the Project is to deliver the new network reinforcement needed, rather than to remove existing overhead lines by undergrounding them. Unless required for mitigation, undergrounding existing overhead lines on the transmission network would not be in accordance with National Policy Statement (NPS) EN-5 and would result in substantial cost to bill payers. There may also be significant environmental impacts due to the removal works on sensitive ecological and archaeological receptors as well as constraints from either existing built form of unsuitable ground conditions.
3.17.11	The Project should run in closer to / parallel to the existing 400 kV overhead lines	We note the potential for close paralleling to reduce the level of effects that may arise from a new overhead line. However, in this section there are constraints and features that mean, overall, we consider close paralleling would lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. Several residential properties are present in close proximity to the existing 400 kV overhead line meaning that if the lines were close paralleled it would result in the properties having an overhead line close to both sides. There are also some locations where the combination of existing physical and environmental features (road infrastructure, commercial and residential properties etc) present very substantial challenges to routeing and siting. As a result, whilst close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the lines have to converge and diverge, and those increased effects on properties with

Ref no.	Summary of matters raised	National Grid's response
		overhead line to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.17.12	Suggest that the existing overhead lines in this section are reinforced / upgraded instead	The existing transmission network in the region is being upgraded to ensure the system is running at its most efficient performance. The existing networks are not able to be upgraded sufficiently to cope with the future demands expected on the network. As a result, new lines and substations will be required to accommodate the changing demands on the network.
3.17.13	Seek alternative routeing (no route specified)	National Grid considered alternative strategic proposals as well as alternative corridors as set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published in support of the 2022 non-statutory consultation. We have updated our proposals in the light of the 2022 non-statutory consultation feedback, and we will continue to reflect on the detail of any feedback and back-check and update the Project as appropriate and necessary.
3.17.14	Suggestion that the Project follows the existing overhead line from Boreham to Tilbury	We note there is potential for the new overhead line to run in close proximity to the existing overhead line (close paralleling) to reduce the level of effects that may arise from a new overhead line. However as described in the Corridor and Preliminary Routeing and Siting Study (CPRSS), there are some locations where the combination of existing physical and environmental features (roads, commercial and residential properties and other features) present very substantial challenges such that an additional overhead line is not considered to be able to be constructed. Even if this could be achieved there are constraints and features adjacent to the existing overhead line that mean that overall, in the context of the Project we consider close paralleling in this area to lead to greater effects and be less compliant with the Holford Rules (as set out in Chapter 1 of this report) or be less consistent with the policy to be economic and efficient. Several residential properties are present in close proximity to the existing 400 kV overhead line meaning that close paralleling would result in the properties having overhead lines close to both sides. As a result, whilst close paralleling may appear beneficial in some sections, overall, the increased environmental effects where the overhead lines have to converge and diverge, and those increased effects on properties with overhead line to both sides are considered greater than those introduced by a new corridor separated from existing 400 kV overhead lines. Additional effects on Special Protection Area (SPA) designations can also be anticipated with the legislation set out in the Habitats Regulations such that alternatives (where they are available) that do not give rise to these effects should be adopted. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.17.15	The new pylons will be taller than the existing overhead line at Thurrock Airfield, therefore they will need to be set further from the runway threshold than the current ones, at or beyond the	National Grid has taken this into account in developing its draft alignment to the eastern edge of the preferred corridor and by keeping pylon heights as low as practicable. On this basis we do not consider airfield activities would be compromised.

Ref no.	Summary of matters raised	National Grid's response
	eastern edge of the graduated swathe as currently proposed	
3.17.16	A short section of underground cables could be used at Thurrock Airfield, as is already done for the lower voltage distribution cables running on 'telegraph poles' immediately east of the A128 at the runway threshold.	National Grid has taken the airfield into account in developing its draft alignment to the eastern edge of the preferred corridor and by keeping pylon heights as low as practicable. On this basis we do not consider airfield activities will be compromised by an overhead line and therefore do not consider the additional effects arising from the two Cable Sealing End (CSE) compounds nor additional cost of undergrounding to be consistent with our duties and relevant policy framework. We will consult with the airfield operators as the Project development progresses to establish a solution that achieves the Project and maintains airfield activities.
3.17.17	Suggest that the Project are routed as far away from populated / residential areas as possible	Deciding where and how to build new high voltage electricity lines is a complex issue and National Grid is mindful of the potential effects this infrastructure may have on local communities and the concerns these may bring. National Grid recognises that people living near its transmission infrastructure, including high voltage overhead lines, may have concerns about audible noise and potential health impacts. It has sometimes been suggested that minimum distances between properties and overhead lines should be prescribed.
		We do not consider this appropriate since each instance must be dealt with on its merits. However, we have always sought to route new lines away from residential property on grounds of general amenity where possible.
		We will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive areas, such as hospitals and schools are carefully considered during planning, assessed according to the appropriate UK standards, and mitigated where necessary. We set strict technical standards for the equipment we install on our network. These will apply to the proposed new East Anglia Connection Node (EACN) substation located in the Tendring District, and proposed extensions required to the existing Norwich Main, Bramford, and Tilbury Substations. These standards include requirements to ensure the occurrence of audible noise is eliminated or reduced as far as practicable. Therefore, significant adverse effects from noise are not expected.
		Noise from overhead lines is predominately determined by the conductor design, voltage, and weather conditions. The overhead line will be designed using a relatively quiet conductor that meets the design specification required, and operational noise is not likely to be significant at nearby sensitive receptors under any weather conditions. Should the iterative design process result in alternative conductor types be used, consideration for this would be assessed within the EIA. Pylon fittings, such as insulators, dampers, spacers and clamps, are also designed and procured in accordance with a series of National Grid Technical Specifications to reduce the potential for audible noise and tones to occur from all types of fittings. Where noise does occur, it is likely to be localised and of short duration. If this is due to a fault, action can be taken to rectify it. A technical note would be submitted as part of the application for development consent to support scoping out noise associated with overhead lines from the Environmental Statement (ES).
		In addition, we will be undertaking a Landscape and Visual Impact Assessment (LVIA) for the Project. This will include an assessment on both landscape character and visual amenity.

Ref no.	Summary of matters raised	National Grid's response
		The health and safety of the public, local communities and employees is central to everything that we do. The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. Our approach is to ensure that our network comply with those policies, which are set by Government on the advice of their independent advisors. The Project will be designed to ensure it is fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed.  Policies for both noise and EMF are incorporated into the decision-making process for development consent as set out in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all its equipment complies fully with those policies and guidelines. The Development Consent Order (DCO) application will include assessments against these polices, including both construction and operational noise and EMF.
3.17.18	Suggestion that at Horndon on the Hill the Project should follow the existing overhead line	We do note the potential for close paralleling an existing 132 kV overhead line to reduce the level of effects that may arise from a new overhead line. However, at Horndon on the Hill there are constraints and features that mean that overall, we consider close paralleling the existing overhead line will lead to greater effects and be less compliant with the Holford Rules or be less consistent with the policy to be economic and efficient. Several residential properties are present in close proximity to the existing 400 kV overhead line meaning that close paralleling would result in the properties having overhead lines close to both sides. There are also some locations where the combination of existing physical and environmental features (road infrastructure, commercial and residential properties, rivers, conservation areas and woodlands) present very substantial challenges to routeing and siting. As a result, whilst close paralleling may appear beneficial, overall, the increased environmental effects where the lines must converge and diverge, and those increased effects on properties with overhead line to both sides are considered greater than those introduced by a new route alignment separated from existing 400 kV overhead lines. Whilst crossings and use of underground cable technology may be able to address the various constrained locations, we consider the costs and environmental effects arising from the additional infrastructure to be less compliant with our duties and relevant policies.
3.17.19	Can you avoid splitting right when reaching Linford? The area to the left seems to be mostly fields and not residential, it also seems like a shorter/straighter route to Tilbury.	Following further assessment, the preferred corridor is not proposed to split right (east) when reaching Linford, it is currently proposed to the west of Linford towards Tilbury.
3.17.20	Avoid major pipeline exclusion zone	Noted, the Project is aware of major pipelines, these have been considered when routeing and siting the Project as it develops a draft alignment within the preferred corridor.

Ref no.	Summary of matters raised	National Grid's response
3.17.21	Account for the new garden community north and east of Chadwell St Mary	National Grid is aware of this proposed development and has taken it into consideration when routeing and siting the Project as it develops a draft alignment within the preferred corridor.
3.17.22	Account for the emerging Thurrock Local Plan and proposed Lower Thames Crossing (LTC)	National Grid considers relevant information on development proposals such as new housing and infrastructure. In this area we consider that our proposals to install underground cable from the north of the Lower Thames Crossing (LTC) through to Tilbury Substation can be achieved without detriment to the LTC proposals and without preventing housing proposals.
3.17.23	Request that the Project is routed west of Linford to avoid areas of (current and anticipated future) high ecological quality to the east of Linford	Following further assessment, the preferred corridor is not proposed to split right when reaching Linford, it is currently proposed to the west of Linford towards Tilbury.
3.17.24	Suggest that the Project should follow the intended alignment of the new Lower Thames Crossing (LTC)	There are several constraints in this area that we must navigate around when carrying out the next phase of our design for the draft alignment of the Project. All of these constraints will be taken into account when deciding what the optimum solution in this area will be.
3.17.25	Provided a possible alignment for the Project that would be contained within the published corridor and have the least negative impact on the new Southfields development / community	The location of these proposals (not yet in the planning system) results in various constraints to route alignment including existing residential development, former uses of adjacent areas as landfill and current adjacent activity including golf courses, gravel workings, gas pipelines and transport infrastructure as well as proposed SSSI designation. Alternatives could route through the centre of the proposed development but would require multiple changes of direction to respond to constraints or could be broadly in line with the proposed route (albeit additional separation to existing adjacent properties would be introduced). The draft alignment replaces several smaller angle changes with one larger angle change and substantially avoids the proposed Southfields development without unduly compromising the interests of other receptors. On this basis the requested change is likely to be substantially accommodated.
3.17.26	Suggestion that the Project is routed away from specific location	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation which has resulted in several changes to the current preferred corridor. Further details on these changes can be found in the Design Development Report, published as part of the 2023 non-statutory consultation. Further changes to the preferred corridor and draft alignment will be considered as the Project develops.
3.17.27	Suggestion that the Project is routed away from Linford	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation. Following further assessment, the current preferred corridor is not proposed to split to the east when reaching Linford and is currently proposed to the west of Linford towards Tilbury.

Ref no.	Summary of matters raised	National Grid's response
3.17.28	Suggestion that the Project is routed away from East Tilbury	Further assessment and technical appraisal has been undertaken following feedback received from the 2022 non-statutory consultation. The current preferred corridor is not proposed to split to the east when reaching Linford, it is currently proposed to the west of Linford and East Tilbury and would also be undergrounded when crossing the proposed Lower Thames Crossing (LTC) through to Tilbury Substation.
3.17.29	Given the significant faults the consultation run afresh including alternatives such as but not limited to a strategic offshore ring-main	Prior to commencement of the 2022 non-statutory consultation, National Grid prepared a Consultation Strategy, this document sets out the details of how we proposed to consult on the project. The Strategy was shared with Local Authorities for comment, and we took on board their comments to inform how the consultation was carried out where possible. The consultation was run in accordance with the published strategy.
		As we scope our projects, we consider numerous technology solutions. Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia and are part of our preliminary recommended solution. National Grid's appraisals, which were based on our knowledge of the network, understanding of the capacity and costs of developing subsea links as well as evaluation of the environmental and socio—economic implications, reached a preliminary conclusion that, on balance, the most appropriate solution was an offshore Direct Current (DC) link between the Sizewell area and Kent (Sea Link) in combination with onshore reinforcement between Norwich and Tilbury (East Anglia GREEN) and onshore reinforcement between Tilbury and Grain (progressed as a sperate scheme due to the general geographic separation of potential effects). We presented our evaluation and our preliminary preferred solution at the 2022 non-statutory consultation, which was an opportunity for members of the public to comment (which they did).
		It would have been disingenuous for us to present an offshore option to the public for consultation feedback, knowing this did not comply with the framework requirements.
		Decisions made will be reconsidered and backchecked throughout the process, having regard to consultation responses and other relevant information (policy and regulation), none of the conclusions should be seen as final. Further opportunities to provide feedback will be available as the Project develops.
3.17.30	Locations for Cable Sealing End (CSE) Compound sites to facilitate end point of underground section must be carefully chosen and subject to further consultation	National Grid acknowledges the requirement to carefully site the Cable Sealing End (CSE) compounds paying particular regard to the Horlock Rules and will consult on its proposals and consider any feedback provided as the Project develops.
Economic	/ Employment impact	
3.17.31	Negative impact on businesses in the area	Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable potential impacts to businesses. To reduce potential impacts, we are identifying businesses and enterprises as well as those that are likely to generate tourism such as private gardens and parks. These have been and will continue to be considered during the iterative design process.  Where impacts on businesses, leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As

Ref no.	Summary of matters raised	National Grid's response
		part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to businesses and their users. These could include traffic management, signage and routeing measures. These measures will be identified within the EIA and the Construction Traffic Management Plan (CTMP).
3.17.32	Concerned about the Project being in too close proximity to new housing developments / land being considered for potential future housing development	National Grid has obtained information on development proposals within the planning system for the area potentially impacted by the Project. The nature of our response varies as in some cases proposals can be amended to be designed around our proposed infrastructure but in other cases our proposals may need to be amended at a corridor level or factored into detailed route design. Based on known information we consider our proposals are consistent with relevant policy and guidelines and routes designed such that they do not prevent proposed housing developments. It should also be noted that there are no minimum distances prescribed in UK law between overhead lines and homes. Any implications on landscape and visual receptors, residential amenity or from concerns about electric and magnetic fields (EMFs) are robustly assessed and balanced as part of the decision-making process. We will continue to review planning applications and engage with developers to back-check and update our proposals as necessary.
Environme	ental impact	
3.17.33	The Project will impact designated sites - e.g. Sites of Special Scientific Interest (SSSI), Ancient Woodland and a Royal Society for the Protection of Birds (RSPB) reserve	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and in particular designated sites of ecological value, such as Sites of Special Scientific Interest (SSSI) and Ancient Woodland.  The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes receptors such as SSSIs, Ancient Woodland) and where required mitigation requirements.  We will continue to engage with Natural England, the Royal Society for the Protection of Birds (RSPB) and other relevant stakeholders on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.17.34	The Project will result in a negative impact on the environment generally (no details given)	National Grid is undertaking an Environmental Impact Assessment (EIA), this considers the likely significant effects on sensitive environmental receptors that have the potential to be impacted by the Project. Should significant likely effects be identified, appropriate mitigation would be considered. The scope of the EIA is included in the Scoping Report which was submitted to the Planning Inspectorate in November 2022.
3.17.35	Negative impact of the Project on green space / Green Belt	Due to the potential scale and nature of the Project, impacts on green space and Green Belt are anticipated. National Grid has sought to and will continue to seek to minimise these impacts as far as practicable through the routeing and siting process and will continue to refine land take and infrastructure within the Green Belt and green space as the Project design develops. We will also review Local and Neighbourhood Plans for green space designations.  The Environmental Impact Assessment (EIA) for the Project will assess its landscape and visual impacts and the Planning Statement will assess the impacts on Green Belt land designations.

Ref no.	Summary of matters raised	National Grid's response
3.17.36	The Project will cause a negative impact on landscape / amenity	National Grid through the routeing and siting exercise has sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
		Measures to reduce such effects can include the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), sympathetic siting of infrastructure and pylons, and where necessary a range of planting for the purpose of screening.
		We will be undertaking a LVIA that will, in addition to other topic specific assessments form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape character and visual amenity. Where significant effects are anticipated the Landscape and Visual Impact Assessment (LVIA) will consider and identify areas for potential mitigation as part of an iterative design and assessment process.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
Financial	compensation	
3.17.37	The Project will devalue my property / Impact on property value in this section	National Grid acknowledges that its proposals may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review). If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.
		If there are any specific concerns about the devaluation of property, please contact the Project team:
		Norwich-Tilbury@fishergerman.co.uk or by calling us on Freephone 0808 175 3314.  Attack the state of the
		<ul> <li>Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.</li> </ul>
3.17.38	Request for adequate financial compensation / Impacted individuals need to be compensated	All affected landowners will be compensated for any temporary/permanent losses, and this will be dealt with on a case-by-case basis. National Grid recognises that any proposed new work may cause concern to landowners. Diminishment of property value known as 'injurious affection' and any other appropriate heads of claim will be considered on an individual basis in accordance with current legislation. We will pursue a voluntary agreement with affected landowners, acquiring rights in accordance with our Land Rights Strategy (the strategy is subject to review).

# Ref no. Summary of matters raised

### **National Grid's response**

If a voluntary agreement cannot be reached, then the Compulsory Purchase Code allows for a claim of compensation for the loss that property owners may have suffered as a direct result of the retained part of your property ownership being worth less as a direct result of the works.

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- Alternatively, you can write to Norwich to Tilbury Lands Team at Fisher German, The Estate Office, Norman Court, Ivanhoe Business Park, Ashby de la Zouch, LE65 2UZ.

### Health and Safety

3.17.39 The Project may result in a negative impact on mental health / health and wellbeing of residents

National Grid recognises people may have concerns about the health effects of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety.

We have sought to reduce potential effects on communities and residents through routeing and design. We have also sought to reduce concern or uncertainty about the proposals through making timely design decisions and engaging with the people and stakeholders throughout the development of the Project.

The Project team will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns.

We urge anyone with concerns to get in touch through the Norwich to Tilbury Freephone number, address or email throughout the development of the Project:

- Call our Community Helpline: 0800 151 0992 (Lines are open Monday to Friday 9:00am 5:30pm)
- Email us: contact@n-t.nationalgrid.com
- Write to us: FREEPOST N TO T (No stamp or further address details are required)

The UK has a carefully thought-out set of policies for protecting us all against Electric and Magnetic Fields (EMFs), the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in National Policy Statement (NPS) EN-5. It is National Grid's policy to ensure that all of its equipment comply fully with those exposure limits.

Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed overhead lines, underground cables and substation will be designed to ensure they are fully compliant with these policies and guidelines. This ensures that health concerns relating to EMFs are properly and adequately addressed.

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3.17.40	Consideration needs to be given to the operation aircrafts from Thurrock airfield and Barnards Farm airstrip / The current routeing of overhead lines presents a risk to aircrafts in the area	Our review of airfields within 4 km of the preferred corridor identified 10 General Aviation (GA) sites, one military site (Wattisham Flying Station) and the Mid and South Essex National Health Service (NHS) Broomfield Hospital which receives helicopters from a helipad on the roof of the main hospital building.  National Grid has taken activity at these airfields into account in developing its current draft alignment to the eastern edge of the preferred corridor and by keeping pylon heights as low as practicable. On this basis we do not consider airfield activities would be compromised. It is noted that there is currently a 132 kV double circuit overhead line running north-south in the middle of the preferred corridor.  The airfield operators will be consulted as the design of the Project continues and we will endeavour to design a solution that safely accommodates airfield operations as far as practicable.
Heritage		
3.17.41	Negative impact on heritage buildings / listed buildings / historical site	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment, such as listed buildings and known heritage assets. If impacts on the historic environment occur, we will explore a range of mitigation measures such as careful siting of pylons and screening (both new and existing) to reduce impacts where possible.  Where impacts on the historic environment are identified these will be presented within a Historic Environment assessment which is undertaken as part of the Environmental Impact Assessment (EIA).  We will continue to engage with Historic England and local authorities on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
3.17.42	Concerns regarding archaeological impacts (including sites of significance)	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on the historic environment. We will be undertaking a Historic Environment assessment as part of the Environmental Impact Assessment (EIA)process to identify likely significant effects on archaeological sites arise. To inform this assessment, we will be undertaking a suite of archaeological surveys to help understand the baseline historic environment and refine the Project design further.  We will continue to engage with Historic England on aspects relating to heritage, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
Mitigation		
3.17.43	Visual impacts should be mitigated through planting and screening measures	Through the routeing and siting exercise, National Grid has sought to and will continue to seek to maximise the existing landform and vegetation to screen the Project as far as practicable as it passes through the wider landscape.
		Where new infrastructure is required as part of the Project and the Environmental Impact Assessment (EIA) concludes that additional mitigation would be of benefit, screening in the form of planting would be implemented to further integrate infrastructure into the wider landscape.

Ref no.	Summary of matters raised	National Grid's response
Public Rig	hts of Way (PRoW).	
3.17.44	Concern around disruption of Public Rights of Way (PRoW). / Mitigation must be put in place for pedestrians / equestrians directly or indirectly impacted	Through routeing and siting, National Grid has sought to and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW).
		The iterative process of route design has identified the existing PRoW network and their wider connectivity and sought where practicable to reduce and where possible remove impacts to PRoW. If mitigation is required, measures may include the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network.
		Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
Technolog	gy / Operations	
3.17.45	When designing the Tilbury Substation, consider honouring the old coal fired power station by including art containing two chimneys and a winding gear rig	National Grid notes the request and will explore and consider opportunities to utilise existing infrastructure and assets as far as practicable within the design of the Project.
Tourism		
3.17.46	Concerned about impact of the Project on leisure and tourism	National Grid has a duty under the Electricity Act 1989 to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate the associated effects of new infrastructure. Through routeing and siting we have sought to avoid, as far as practicable, locations important for leisure and tourism. We will continue to consider these locations as we develop our proposals and seek to reduce effects, by implementing measures such as, the use of underground cables in the areas of highest amenity value (Dedham Vale Area of Outstanding Natural Beauty (AONB)), and appropriately control construction related traffic movements during the construction phase to minimise disruption to local road users.
		Where impacts on leisure and tourism are identified these will be presented within a Socio-Economics, Recreation and Tourism assessment which is undertaken as part of the Environmental Impact Assessment (EIA). As part of this assessment, a range of measures will be considered throughout the construction phase of the Project to minimise disruption on leisure and tourism. These will include traffic management, signage and routeing measures. These will be identified within the EIA and the Construction Traffic Management Plant (CTMP).
Visual imp	pact	
3.17.47	Overhead lines and related infrastructure are unsightly / visually intrusive (including Cable	The relevant National Policy Statement (NPS) is EN-5 which makes it clear that the Government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that that there may be, at

Ref no.	Summary of matters raised	National Grid's response
	Sealing End (CSE) Compounds and Substations)	particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it inconsistent with our duties and relevant planning policy.
		In such cases the use of 400 kV underground cable would be adopted between carefully sited Cable Sealing End (CSE) compounds noting that such structures themselves may give rise to visual effects. The proposed East Anglia Connection Node (EACN) substation siting has also considered the potential for landscape and visual effects and whether particular sites provide greater screening or potential for screening to reduce effects.
		A landscape and visual impact assessment will be undertaken as part of the Environmental Impact Assessment (EIA). This will assess the impact of the Project and will identify any need for additional mitigation.
3.17.48	Cumulative effect of onshore National Grid projects within East Anglia / within this section	National Grid will, as part of the Environmental Statement (ES) for the Project, undertake a cumulative impact assessment in accordance with the Planning Inspectorate's Advice Note Seventeen. This in summary is a four stepped process and involves the production of a long list (Stage 1) generated from existing/ and or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed within the Environmental Impact Assessment (EIA) of the Project.
		This long list will be refined into a short list based upon a range of factors including the potential for interactions between the projects to occur, the level of environmental information/ assessment already undertaken by that development that is within the public domain and the certainty (i.e. planning status) of that development occurring (Stage 2 to 3). Upon completion of the short list a cumulative impact assessment (Stage 4) will be undertaken of the Project and those short-listed developments (of which some, we may be the proponents of, such as the Bramford to Twinstead Reinforcement). Identified effects and any subsequent mitigation measures (if necessary) will be presented within the ES.
		We will also engage with developers of infrastructure projects to understand their development plans and to identify complementary design principles and parameters where available and if practicable.
3.17.49	Cumulative effect of the Project alongside existing overhead lines	National Grid will be undertaking a Landscape and Visual Impact Assessment (LVIA). This assessment in addition to other topic specific assessments, including the cumulative assessment will form part of the Environmental Impact Assessment (EIA) for the Project.
		For the LVIA information will be gathered on the existing applicable environment / receptors and presented as the baseline. Any existing infrastructure (such as existing transmission lines and associated wirescapes) will form part of the baseline environment for the Project to be assessed against to identify if significant landscape and / or visual effects arise. In the event significant effects are predicted, where possible, mitigation measures will be proposed to reduce the effect as far as practicable. The findings and conclusions of the LVIA and other topics assessments will then be considered within the cumulative impact assessment for the Project.
Wildlife / E	Ecology impact	
3.17.50	The Project will result in a negative impact on wildlife (no details given)	Through routeing and siting, National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity and wildlife. The process of route design takes account of existing biodiversity the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.

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		The Environmental Impact Assessment (EIA) for the Project will assess the impact and subsequent effects on biodiversity and if necessary, the mitigation requirements, such as habitat creation.
		We will continue to engage with Natural England on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop. The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.17.51	Concerned about potential negative impact of the Project on wildlife, habitats and river ecology - including protected species	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including wildlife habitats and river ecology. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity such as habitats and river ecology, through avoidance or mitigation. The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity and where required appropriate mitigation measures.
		We will continue to engage with Natural England and Local Planning Authorities on aspects relating to biodiversity and the natural environment, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.17.52	The Project will result in a negative impact on plants / woodlands / hedgerows	Through routeing and siting National Grid has sought to and will continue to reduce as far as practicable potential impacts on biodiversity including plants, woodlands, and hedgerows. The process of route design takes account of existing biodiversity, the natural environment and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation.
		The Environmental Impact Assessment (EIA) for the Project will assess the effects on biodiversity (which includes plants / woodland and hedgerows) and where required appropriate mitigation measures.

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		As part of the EIA process for the Project, a suite of ecological surveys have been and will continue to be undertaken. The findings of which will inform the design and approach to mitigation.
		We are working closely with the relevant statutory bodies, including Natural England.
		The Environment Act 2021 introduces a mandatory requirement for 10% Biodiversity Net Gain (BNG) for new developments (which is not yet in force). National Grid has committed to deliver Net Gain of at least 10% or greater in environmental value (including BNG) on all construction projects. The Net Gain target for the Project is currently voluntary and aligned with our corporate sustainability commitment.
		As well as seeking to avoid and minimise our impacts to nature, the Project will consider the land required for mitigation, compensation and enhancement that can deliver BNG and wider environmental benefits, which will be identified as the Project design develops. This may require delivery of offsite Biodiversity Units via habitat creation or enhancement actions in strategic areas, and we will consider all options that are available to us.
3.17.53	Concern about local badger populations and impacts on them	Based on the suitability of habitats and rural location of most of the Project, it is envisaged that badgers ( <i>Meles meles</i> ) are widespread throughout the areas required for construction and operation related activities. Given the length of programme and the fact that badger setts can appear (as well as be abandoned) at any time, it is proposed that a survey as part of the Environmental Impact Assessment (EIA) will focus on main badger setts as well as existing data from local record centres. Further badger survey work relating to all other badger setts would be undertaken as part of the pre-construction works post submission of the Development Consent Order (DCO) application to ensure adherence to legislation and animal welfare.
		Pre-construction surveys and sett classifications will be undertaken and, where appropriate, agreed working practices will be set out in the Code of Construction Practice (CoCP). These measures will be implemented to minimise potential impacts on badgers as far as practicable.

### 3.8 How feedback has influenced design

- Following the close of the non-statutory consultation period in June 2022, a number of design changes have been incorporated into the proposals. Proposed design changes were carefully considered in the context of environmental and socio-economic constraints and opportunities, engineering feasibility and cost, and planning policy considerations.
- The process of considering design changes comprised of an initial filter for benefit and feasibility, an assessment incorporating inputs from relevant technical experts, and further stages of additional study if required. This was assessed in conjunction with the results of the closed questions which sought to gauge respondents' views on consultation and Project development processes.
- The outcome of the consideration of potential design changes was either that a change was included in the Project design, or that the change was not made following balanced and informed consideration.
- Respondents made several requests for changes to the initial Project proposals in their responses to consultation, some of which have been adopted by National Grid and taken into consideration in the development of the Project.
- Accordingly, a summary of the key changes identified in response to non-statutory consultation and development of the Project design and further technical assessment are summarised below:

### Changes outside the preferred corridor

- alternative corridor diverting from the crossing of the A1066 to pass to the east of Wortham Ling, re-joining the preferred corridor to the south-east of Diss at the crossing of the A143 to reduce effects on heritage assets, business activity and woodland;
- alternative corridor diverting to the east at the south of Offton, then paralleling the
  existing 132 kV overhead line route to the east of Flowton and connecting into
  Bramford Substation to reduce potential impacts on heritage assets, residential
  amenity and cumulative effects;
- alternative corridor to connect the underground cable route through the AONB to the
  proposed CSE compound to the south of Notley Enterprise Park, pass to the west
  and north of Notley Enterprise Park to then continue east towards Bramford
  Substation re-joining the preferred corridor south-east of Wenham Grange. The CSE
  siting and corridor changes reduce potential impacts on heritage assets, residential
  amenity and the Dedham Vale AONB;
- the preferred draft alignment has been straightened slightly west of Writtle and would deviate outside the 2022 consultation corridor (by up to approximately 110 m for a distance of approximately 400 m). This change is referred to as West of Writtle. This change has been made to avoid a historic landfill site south-east of Newney Green and to avoid positioning pylons on unsuitable ground. Straightening the alignment is also consistent with the Holford Rules and would reduce the need for large angle pylons in this area; and
- alternative corridor further east of Ingatestone diverting from the crossing of the A12 to the east of Stock Lane, continuing south passing to the east of the treatment

works, re-joining the preferred corridor north of the crossing of Rayleigh Road to reduce potential impacts on heritage assets.

### Changes within the preferred corridor

- proposal to amend the graduated swathe to the northern half of the preferred corridor broadly parallel with the existing 132 kV overhead line to the north-west of Barking and Barking Tye to reduce potential impacts on residential amenity and Wattisham Flying Station flight activities;
- proposal to amend the graduated swathe to the south of Bramford Substation to facilitate an alignment to the east of the preferred corridor to reduce potential impacts on residential amenity in Burstall;
- proposal to continue the underground cable through the AONB to the EACN substation. This also allows adjustment of the overhead line (EACN substation to Tilbury) near Ardleigh to increase the separation of the overhead line from the village;
- proposal to adopt underground cable technology in the vicinity of Great Horkesley for a distance of approximately 5.3 km from a CSE compound in the east between Horkesley Plantation and Harrow Wood and in the west on land to the west of Crabtree Lane and north of the B1508 to reduce potential impacts on the Dedham Vale AONB;
- proposal to amend the graduated swathe to the south-east of the preferred corridor at Aldham to avoid the potential oversail of properties and gardens to the north;
- proposal to amend the graduated swathe to facilitate an alignment to the north of Fairstead to reduce impacts on residential properties and heritage assets with a section of underground cable between CSE compounds under the existing 400 kV overhead line:
- proposal to amend the graduated swathe to pass to the east of Bushey Wood to increase distance from properties on Woodhall Hill; proposal to restrict the graduated swathe and alignment to the eastern edge of the preferred corridor to reduce interaction with the Dunton Garden Village development proposal; and
- proposal to adopt underground cable technology from the north of the LTC proposals into Tilbury Substation to facilitate construction of LTC and the Project as efficiently as possible and respond to extent of flood storage areas. This change of technology also favoured routeing to the east of both existing overhead lines beneficially reducing the potential for interaction with the proposed development to the east of Chadwell St Mary.
- Further details on the changes proposed above can be found in the Design Development Report (DDR), published as part of this consultation. The DDR also outlines other instances where feedback has influenced the development of the proposed route alignment within the preferred corridor and graduated swathe including to reduce potential effects.

## 3.9 Responses received post consultation close

Late responses received after the 16 July 2022 until the 1 January 2023 have been excluded from the analysis in Sections 3.4 to 3.8, however we did consider and have regard to every matter raised. Key themes are briefly summarised in Table 3.18.

Feedback received after 16 July 2022 until the 1 January 2023 did not result in any design changes of the proposals as matters raised had already previously been analysed and considered in Sections 3.6 and 3.7 of this report. Tables 3.10 to 3.17 contain National Grid's response to feedback and matters raised.

Table 3.18 - Summary of themes raised after 16 July 2022

<b>Key Theme</b>	Matters Raised
	South Norfolk
Agricultural land	Feedback concerning loss of agricultural land / disruption of farming operations
Community / social impact	Feedback concerning impact on children / families / residents
Design change	Feedback concerning impact on renewable energy developments and suggestions including: undergrounding in this section, routeing overhead lines parallel to existing 400 kV overhead lines, routeing overhead lines away from the Waveney Valley, and consideration of an offshore ring main
Environmental impact	Feedback concerning negative impact on landscape / amenity / designated sites
Health and safety	Feedback concerning negative impact on mental health / health and wellbeing of residents, and regarding the risk to light aircrafts in the area
Heritage	Feedback concerning impact on heritage buildings / listed buildings / historical sites
Public Rights of Way (PRoW)	Feedback concerning disruption of Public Rights of Way (PRoW) / need for mitigation to be put in place for pedestrians / equestrians
Tourism	Feedback concerning the effects on steam railway
Visual impact	Feedback concerning visual impact of the Project
Wildlife / ecology impact	Feedback concerning negative impact on the environment and on wildlife (including habitats and protected species)
	Mid-Suffolk
Agricultural land	Feedback concerning loss of agricultural land / disruption of farming operations
Community / social impact	Feedback concerning impact on children / families / residents
Design change	Feedback concerning over development of the area, and suggestion that the Project is routed away from Wortham
Environmental impact	Feedback concerning negative impact on landscape / amenity / designated sites
Heritage	Feedback concerning negative impact on heritage buildings / listed buildings / historical sites and archaeological sites
Tourism	Feedback concerning impact on leisure and tourism
Wildlife / ecology impact	Feedback concerning negative impact on the environment and on wildlife (including habitats and protected species)

Key Theme	Matters Raised		
Baberg	Babergh, Tendring and Colchester		
Agricultural land	Feedback concerning loss of agricultural land / disruption of farming operations		
Area of Outstanding Natural Beauty (AONB)	Query regarding mitigation in the Area of Outstanding Natural Beauty (AONB)		
Community / social impact	Feedback concerning impact of the Project on children / families / residents, and concern of over development of the area		
Construction impacts	Feedback concerning damage to landscape resulting from installation of underground cables, and concerning potential impact of the Project on existing gas pipelines		
Design change	Feedback concerning the impact of the Project on views to and from the Dedham Vale Area of Outstanding Natural Beauty (AONB), and suggestions including; undergrounding of the Project, alternative routeing avoiding Dedham Vale AONB, routeing the Project away from given locations, the cumulative effect of the Project alongside existing overhead lines, and consideration of an offshore main ring		
Design question	Query regarding ground stability		
Environmental impact	Feedback concerning negative environmental impact of the Project on the Area of Outstanding Natural Beauty (AONB) and other areas within this section, including damage resulting from undergrounding, disruption of groundwater resources, and impact on designated sites		
Financial compensation	Feedback concerning loss of / impact on property value		
Health and safety	Feedback concerning impact on mental health / health and wellbeing of residents		
Heritage	Feedback concerning negative impact on heritage buildings / listed buildings / historical sites and archaeological sites		
Mitigation	Suggestion that impacts of the Project should be mitigated, including mitigation of any environmental damage and areas should be returned to their previous state following construction		
Public Rights of Way (PRoW)	Feedback concerning disruption of Public Rights of Way (PRoW) / need for mitigation to be put in place for pedestrians / equestrians		
Substation location	Suggestion that the East Anglia Connection Node (EACN) substation is located away from Ardleigh		
Tourism	Feedback concerning impact on leisure, tourism and businesses in the area		
Visual impact	Feedback concerning the visual impact of the Project in this section (including on the Area of Outstanding Natural Beauty (AONB)), the cumulative effect of onshore National Grid projects, and the siting of Cable Sealing End (CSE) compounds and the East Anglia Connection Node (EACN) substation		
Wildlife / ecology impact	Feedback concerning impact on the environment, on wildlife (including habitats and protected species), and on plants / woodlands / hedgerows		

Key Theme	Matters Raised
	Chelmsford
Agricultural land	Feedback concerning loss of agricultural land / disruption of farming operations
Community / social impact	Feedback concerning impact of the Project on children / families / residents, and on green space / the Green Belt
Design change	Feedback concerning the Project crossing reclaimed land and siting of Cable Sealing End (CSE) compounds, and suggestions including; undergrounding of the Project, alternative routeing, routeing the Project away from given locations, and consideration of an offshore ring main
Economic / employment impact	Feedback concerning impact on land allocated / being considered for potential future housing development
Environmental impact	Feedback concerning negative impact on landscape / amenity / designated sites
Health and safety	Feedback concerning negative impact on mental health / health and wellbeing of residents, and regarding the risk to light aircrafts in the area
Heritage	Feedback concerning impact on heritage buildings / listed buildings / historical sites
Mitigation	Suggestion that planting and screening is used to mitigate visual impacts
Visual impact	Feedback concerning the visual impact of the Project
Wildlife / ecology impact	Feedback concerning impact on the environment, on wildlife (including habitats and protected species), and on plants / woodlands / hedgerows
В	rentwood and Basildon
Design change	Suggestion that the Project should be underground in this section
	Thurrock
Design change	Suggestion that the Project should avoid the proposed development of a new garden community at Chadwell St Mary
Environmental impact	Feedback concerning negative impact on landscape / amenity / designated sites, and concerning flooding (including impact on the Tilbury Flood Storage Area)
	No Location
Agricultural land	Feedback concerning disruption to valuable agricultural land / farming operations
Community / social impact	Feedback concerning the impact of the Project on children / families / residents and on green space / Green Belt, and suggestions that local labour should be used for the Project and benefits should be contributed to communities that are impacted by the Project
Construction impacts	Feedback concerning cumulative impact of development projects in East Anglia and disruption in general
Construction noise	Feedback concerning noise and other disturbances resulting from construction

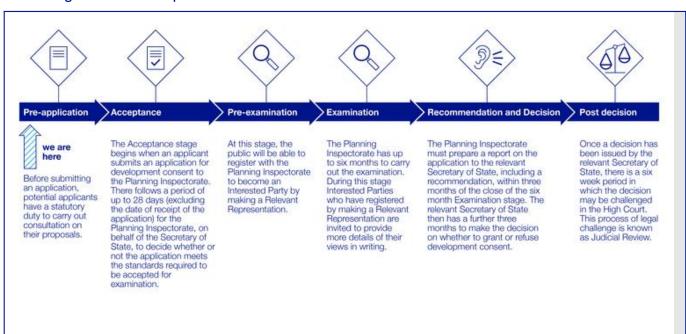
Key Theme	Matters Raised
Construction traffic	Suggestion that the impacts of construction should be mitigated, and disruption should be minimised
Consultation	Feedback relating to consultation on the Project, including comments relating to the Project process, Gunning Principles, and stakeholder engagement
Design change	Suggestions including; undergrounding of the Project, consideration of an offshore ring main, use of alternative technologies (including T-pylons), alternative routeing of the Project, and routeing the Project away from given locations
Design question	Query regarding notional cost and weighting against financial cost
Economic / employment impact	Feedback concerning negative impact on property values and on businesses, and suggestions that an independent review of the financial costs of the Project options should be undertaken and that local job / employment opportunities should be included as part of the Proposals
Environmental impact	Feedback concerning carbon footprint of the Project, flood risk and negative impact on landscape / amenity and the environment, and suggestions that other areas (aside from the Area of Outstanding Natural Beauty (AONB)) should be protected and the longer-term environmental impacts of the Project should be considered against initial cost
Financial compensation	Suggestions that financial compensation should be provided, and that an assessment of private financial loss to affected landowners should be undertaken
Health and safety	Feedback concerning impact of the Project on health and safety (including on wellbeing and mental health), relating to health risks associated with pylons / power lines and risks to the operation of light aircraft
Heritage	Feedback concerning negative impact on heritage buildings / listed buildings / historical sites and archaeological sites
Maintenance (ongoing)	Feedback concerning susceptibility of pylons and overhead lines to weather events and vulnerability to terrorism / warfare / sabotage
Mitigation	Feedback concerning adequacy of mitigation, suggestions that planting and screening should be provided to mitigate the visual impact of the Project, and request to be involved in mitigation
Needs case	Feedback concerning the economic priorities of the Project, suggestions that need for the Project should be demonstrated and that the Project should be rethought / changed, and criticism that the local communities impacted will not receive the benefits of the Project
Public Rights of Way (PRoW)	Feedback concerning disruption of Public Rights of Way (PRoW) / Suggestions that mitigation should be put in place for pedestrians / equestrians directly or indirectly impacted
Technology / operations	Feedback concerning the use of technology (including noise and disruption), and suggestion that the Project should provide sufficient capacity to meet future needs

Key Theme	Matters Raised
Tourism	Feedback concerning negative impact on tourism / visitor economy / leisure-landscapes popular with visitors for recreation
Visual impact	Feedback concerning the visual impact of the Project and the cumulative effect of onshore National Grid projects within East Anglia, and regarding the application of the 'Holford Rules'
Wildlife / ecology impact	Feedback concerning impacts on wildlife (including habitats and protected species), on plants / woodlands / hedgerows, and on available land for grazing animals and horses, and suggestions relating to mitigation and ecological enhancements

# 4. Next steps

- The information presented at the 2022 non-statutory consultation is published on the Project's website and is available in the online document library.
- This report shows feedback received from the 2022 non-statutory consultation and how this has informed and shaped the proposals to be presented at a non-statutory consultation, which is to commence on 27 June 2023 (see Figure 1.2).
- 4.1.3 If progressed with significant elements of overhead line, then it is likely the Project would be classified as a Nationally Significant Infrastructure Project (NSIP), and we would need to obtain 'development consent' under statutory procedures set by Government. In these circumstances, a statutory consultation stage is required. The Planning Act 2008 (PA2008) requires statutory consultation for NSIPs which provides all those with an interest in a project including local authorities, statutory consultees, land interest parties and the local community the opportunity to input into the design of the developing project.
- The feedback from the non-statutory and statutory consultations (as applicable) will be used to inform the final designs that will be put forward in the application for development consent. National Grid expects to submit an application for consent for the Project in 2025. The feedback from the non-statutory and statutory consultations will be used to inform the final designs that will be put forward in the application for development consent. National Grid expects to submit the application in 2025.
- Ahead of all rounds of consultation, National Grid will continue to hold dialogue with landowners and people with an interest in land which interacts with the Project.
- The Project team will be required to carry out formal Environmental Impact Assessment (EIA) work and undertake surveys along the route. In November 2022, a Scoping Report was submitted to accompany a request for a Scoping Opinion from the Planning Inspectorate. The Scoping Opinion (received December 2022) will inform the scope of these formal assessments for the Project. The initial findings of the formal assessments will be presented in a *Preliminary Environmental Information Report* (PEIR) at the statutory consultation.
- 4.1.7 The path through the Development Consent Order (DCO) process is shown in Figure 4.1. The Department for Energy Security and Net Zero will make the final decision on the application following a public examination managed by an independent panel of inspectors. This process can take up to 18 months. For more information, visit the Planning Inspectorate's website.

Figure 4.1- DCO process



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