Issue number: BT-WSP-020631-560-0001

Bramford to Twinstead Reinforcement

APAINST

4.2 Non Statutory Consultation Report January 2022





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Executive summary

National Grid Electricity Transmission (hereon referred to as National Grid) is developing proposals to add much needed capability to the electricity transmission network between Bramford substation in Suffolk, and Twinstead Tee in Essex.

Between 2009 and 2013 work was undertaken to develop proposals to add this network capability, including several rounds of public consultation. Changes to when the planned new generation would come online in East Anglia meant that work was put on hold at the end of 2013. Multiple offshore wind developments are now moving forwards, backed by Government targets and legislation, along with additional nuclear and interconnector capacity. In this context, the network capability is needed by the end of the decade, and in 2020 work on the project was resumed.

In Spring 2021, a non-statutory consultation was held for a period of six weeks, between 25 March 2021 and 6 May 2021. This consultation re-introduced the project, explained how National Grid had reviewed the previous proposals, and sought the views of the public and stakeholders.

The feedback received during the non-statutory consultation has been carefully reviewed and considered, alongside ongoing technical work on the engineering design and the environmental impact assessment process. This report 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, key design changes since the non-statutory consultation include:

- confirming undergrounding in two sections of the route within the Dedham Vale Area of Outstanding Natural Beauty (AONB) and parts of the Stour Valley
- proposing a greater length of underground cables overall
- changing the draft alignment and configuration of existing and proposed pylons around Bramford Substation
- considering a potential draft alignment option for the overhead line through Hintlesham and woods
- proposing a modified draft alignment for the underground section to the east of the Dedham Vale AONB
- proposing a modified draft alignment for the underground section in the Stour Valley project area
- proposing new locations or designs for three Cable Sealing End compounds
- proposing to remove more of the existing 400kV overhead line south of Twinstead Tee
- proposing to build full tension gantries at three of the Cable Sealing End compounds, to reduce the overall number of terminal pylons along the draft alignment.

The current statutory consultation, to run between 25 January 2022 and 21 March 2022, provides the opportunity for the public and stakeholders to see how the project has evolved

since the non-statutory consultation, and to review and comment on more detailed engineering design and environmental assessment work. A further consultation report will be produced following the statutory consultation which will accompany the application for development consent.

This report provides information on how National Grid has had regard to feedback received at the non-statutory consultation stage in Spring 2021 and makes clear where feedback received from either members of the public, or other stakeholders, has influenced the ways in which the project design has evolved.

1. Introduction

1.1 Background

- 1.1.1 National Grid is in the process of bringing forward proposals to add much needed capability to the electricity transmission network between Bramford substation in Suffolk, and Twinstead Tee in Essex.
- 1.1.2 The energy we all use is increasingly coming from renewable and low carbon sources. The Government is committed to reaching net zero greenhouse gas emissions by 2050 and has set out its ambition to connect 40 gigawatts (GW) of offshore wind by 2030. Reflecting this ambition, a large number of offshore wind projects are being developed by different companies around the UK coastline, 60 per cent of which are looking to come ashore up and down the East Coast. The existing electricity network in East Anglia does not have the capability to reliably and securely transport all of the energy that will be generated and connected to the National electricity transmission system by 2030 while operating to the required standards.
- 1.1.3 Part of this capacity shortfall arises due to limits on the amount of power that can be carried westward on the network from Bramford Substation. This is because there are currently three electricity transmission lines carrying power into the substation from the north and east and only one line taking power out to the wider network, creating a bottleneck.
- 1.1.4 While additional network reinforcement will be needed elsewhere in East Anglia to carry the energy that is coming in the next decade on to homes and businesses, it is essential that this constraint on the network between Bramford and Twinstead Tee is addressed, to provide the vital capacity needed. Other reinforcements will not take away the need to add capacity to this part of the network.
- 1.1.5 National Grid previously consulted on these proposals between 2009 and 2013, before changes to when planned new generation was due to come online led to this work being put on hold. Now that the offshore wind developments have moved forward, backed by Government targets and legislation, there is a clear need to progress with this network reinforcement, and to deliver the additional capacity by 2028. Work on the project has been restarted in order to achieve this.
- 1.1.6 The UK has also made great leaps in moving towards cleaner, greener energy consumption. The Government has set ambitious targets to achieve net zero by 2050.
- 1.1.7 These ambitions, coupled with increased demand for interconnection and new nuclear power, mean that generation in East Anglia is set to significantly increase. Network studies show that we will need the reinforcement to be in place before the end of the decade.

The Project

1.1.8 National Grid is proposing to reinforce the transmission network between the existing Bramford Substation in Suffolk, and Twinstead Tee in Essex. This would be achieved by the construction and operation of a new 400kV electricity transmission line.

- 1.1.9 The project is classified as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008. NSIPs are projects of certain types, over a certain size, which are considered by the Government to be so nationally important that permission to build them needs to be given at a national level, by the Secretary of State. 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).
- 1.1.10 The project was shaped by consultation feedback; detailed design (including engineering and environmental surveys); feedback from 18 months of community forums, and thematic group meetings between 2009 and 2013 when the project was paused.
- 1.1.11 At recommencement of the project in 2020, National Grid carried out a back check and review of the project development and the decisions taken up to the point of project pause in 2013. This concluded that the project and its design evolution remained largely appropriate and suitable for progressing. Further details can be found in the Project Development Options Report (National Grid, 2022) which will be presented as part of the Statutory Consultation material in early 2022.
- 1.1.12 Following the back check, and at the point of the non-statutory consultation, the project comprised the following key components:
 - constructing approximately 27km of 400kV electricity transmission line between Bramford substation in Suffolk and Twinstead Tee in Essex, comprising of c.19km of overhead line and c.8km of underground cable (c.4km through the Dedham Vale Area of Outstanding Natural Beauty (AONB) and c.4km in the Stour Valley)
 - constructing four cable sealing end compounds at the transition points where the transmission technology changed between overhead lines and underground cables
 - the realignment of the existing 400kV overhead line to the north and west of Hintlesham and Ramsey Woods, to facilitate the use of the existing 400kV overhead line swathe through the woodland by the new 400kV line
 - removing around 25km of existing 132kV overhead line operated by UK Power Networks (UKPN), between Burstall Bridge (2.5km south of Bramford Substation) and the diamond crossing
 - constructing a new Grid Supply Point (GSP) substation at Butler's Wood to enable the removal of the above mentioned UKPN 132kV overhead line. A new GSP substation is needed to maintain the electricity supply to local homes and businesses; and
 - removing around 1km of the existing Bramford to Braintree to Rayleigh 400kV overhead line south of Twinstead Tee.

1.2 Purpose of the Consultation

- 1.2.1 National Grid undertook a non-statutory consultation for a six-week period between 25 March 2021 and 6 May 2021. The non-statutory consultation sought to gather fresh feedback to inform the ongoing design of the project, and invited views on the proposals as a whole, where further work may be needed, and whether anything further should be considered beyond that already presented on the emerging design.
- 1.2.2 This consultation material explained why additional capability is needed on this part of the network and outlined the options appraisal work that had been undertaken prior to the project pause in 2013. The consultation presented the Indicative Alignment, which was the culmination of the previous option appraisal work. Further details can be found

in the Project Development Options Report (National Grid, 2022) which will be presented as part of the Statutory Consultation material in early 2022.

1.3 Purpose of this Report

- 1.3.1 The purpose of this report is to summarise the responses received during the consultation, and to demonstrate how National Grid has had regard to that feedback.
- 1.3.2 The report also provides information on how the non-statutory consultation was undertaken including good practice measures adopted during Covid-19. 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:
- 1.3.3 "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."
- 1.3.4 The Department for Communities and Local Government was renamed in 2018 and again in September 2021 and is now known as the Department for Levelling Up, Housing and Communities (DLUHC).
- 1.3.5 Feedback received from s.42(1)(a) and s.42(1)(b) (of the Act) consultees is provided in Appendices G and H respectively. National Grid's response to that feedback is also set out within each of those Appendices. Feedback received from members of the public, organisations and other stakeholders is set out in Tables 3.1 – 3.8 alongside National Grid's response in each case.

1.4 Structure of this Report

- 1.4.1 This report is structured as follows:
 - Chapter 2: Methodology

This chapter presents a summary of the consultation exercise, including the various methods used and the approach to the analysis of feedback.

• Chapter 3: Analysis of and Response to Feedback

This chapter presents and discusses the feedback received during the non-statutory consultation. It addresses feedback and demonstrates how National Grid has considered and had regard to the responses, including on project design in a '**You Said, We Did**' format. This Chapter is closely linked to Appendix G and H which provides feedback from, and National Grid responses to s.42(1)(a) and s.42(1)(b) (of the Act) consultees.

A table format is used for legibility, alongside cross-references to further appended information where relevant.

• Chapter 4: Next Steps

This chapter summarises the next steps in the DCO process.

2. Methodology

2.1 Consultation process

- 2.1.1 The consultation ran between 25 March 2021 and 6 May 2021. As a result of the coronavirus (Covid 19) pandemic, digital methods for consultation were used to enable the public consultation to be held in line with government advice on maintaining social distancing and avoiding face-to-face meetings.
- 2.1.2 To make the public consultation as accessible as possible, National Grid used a blend of digital and traditional engagement channels to present information on the project and gather feedback on the proposals. National Grid's consultation activities included:
 - setting up a project specific website, email, and dedicated telephone information line
 - mailing a consultation pack directly to over 3000 properties in the primary consultation zone within 1km of the indicative alignment
 - producing materials to support consultation
 - holding online events including webinars, live chat and telephone surgeries
 - making information and materials available at three deposit locations in close proximity to the proposals
 - media and social media promotional activity
 - other engagement activities.
- 2.1.3 Further information on each of these activities is provided below with supporting information available in the relevant appendices.

Project website, email, and information line

- 2.1.4 National Grid set up a website to publish information on the project along with consultation materials as well as historical project information, <u>www.nationalgrid.com/bramford-twinstead</u>.
- 2.1.5 The website included links to additional resources along with project videos, infographics and animations. Project documents were laid out in a simple, visual and interactive format, with pointers and instructions throughout to aid easy navigation.
- 2.1.6 During the consultation period, the project website received **5,499** sessions from **4,564** users. The website received a total of **7,919 page** views.
- 2.1.7 A dedicated email and telephone information line were set up via <u>contact@bramford-</u> <u>twinstead.nationalgrid.com</u> and 0808 196 1515 respectively.

Direct mailing to the primary consultation zone

2.1.8 A consultation pack and project information were sent to all properties within the primary consultation zone (1km of the indicative alignment) along with details of how to access paper copies of other project documents and provide feedback by post. The pack included:

- a summary newsletter
- details of the project website and how to access the consultation portal
- information about upcoming consultation event dates, inviting stakeholders to live chat sessions and video webinars; also, to telephone surgeries and call back appointments
- consultation response form with details of how to provide feedback
- postage-paid envelopes.

Materials produced to support consultation

- 2.1.9 Additional materials supporting the consultation included:
 - consultation summary report (Appendix A)
 - consultation response form (Appendix B)
 - consultation summary newsletter (Appendix C)
 - consultation flyers (A4 and A5) (Appendix D)
 - project background document (Appendix I).

Online activities

Webinars

- 2.1.10 As Government guidance relating to the coronavirus pandemic meant that it was not possible to hold face-to-face public exhibitions, a series of online webinars were arranged. The purpose of these sessions was to complement information available in printed documentation and via the project website and provide an opportunity for stakeholders to ask questions.
- 2.1.11 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 of how to join the webinar via a desktop, tablet or mobile device.
- 2.1.12 During the webinar, members of the project team explained the background to the proposals and details related to the non-statutory consultation. Following this, a moderated question and answer (question and answer) session 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.
- 2.1.13 A total of eight webinars were held during the consultation period. Five presented a general overview of the proposals, whilst three area-specific webinars were held to focus on specific parts of the indicative alignment. Webinars were held over a variety of times, to provide morning, afternoon and evening sessions throughout the consultation period. Recordings of the webinars were available on request.

A total of 82 stakeholders and members of the public attended the webinars. The attendance at each is set out in Table 2.1.

Table 2.1 - Schedule of webinars

Webinar	Date	Registered	Attended
1: Overview of the proposals	Wednesday 31 March, 4pm-5pm	8	4
2: Overview of the proposals	Tuesday 6 April, 7pm-8pm	14	12
3: Overview of the proposals*	Thursday 8 April, 11am-12pm*	7	6
4: Sections AB (Bramford to Hintlesham) and C (Brett Valley)	Tuesday 13 April, 7pm-8pm	7	6
5: Sections D (Polstead) and E (Dedham Vale AONB)	Wednesday 14 April, 7pm-8pm	25	17
6: Sections F (Leavenheath and Assington) and G (Stour Valley)	Thursday 15 April, 7pm-8pm	39	33
7: Overview of the proposals	Thursday 22 April 4pm-5pm	5	3
8: Overview of the proposals	Wednesday 28 April 4pm-5pm	5	1

*A British Sign Language interpreter was in attendance at this webinar, for those who required this service.

Telephone surgeries

- 2.1.14 Throughout the consultation period, stakeholders and residents were invited to book in telephone surgery/team call back appointments with members of the project team.
- 2.1.15 Those who wished to take up the offer of a surgery appointment were asked when booking to advise on when best would suit them for an appointment. Based on this, a slot was then allocated.
- 2.1.16 These appointments were available as online meetings via Microsoft Teams or as traditional phone calls, to accommodate those who were uncomfortable with online technology or without access to the internet.
- 2.1.17 In total, three telephone surgeries were scheduled across the following dates:
 - Monday 5 May 2021
 - Wednesday 7 May 2021; and
 - Friday 23 April 2021.

Live chats

- 2.1.18 National Grid held two live chat sessions during the consultation period when members of the public and other interested stakeholders were able to use message boxes on the website at advertised times to converse with the project team in real time.
- 2.1.19 These live chat sessions aimed to replicate the opportunity visitors have to speak to members of the project team at a traditional face to face exhibition event.

Deposit locations

- 2.1.20 Documents were available to view at the following locations from the 13 April 2021 until the end of consultation.
 - Braintree Library
 - Halstead Library
 - Sible Hedingham Library
 - Sudbury Library.

Media and social media - promotional activity

- 2.1.21 The consultation was promoted via press and social media advertising. The advertisements helped to ensure that stakeholders without access to the internet were made aware of the project consultation.
- 2.1.22 Newspaper adverts (Appendix E) were placed in The East Anglian Daily Times, Ipswich Star, West Suffolk Mercury, Colchester Gazette, and Essex County Standard with a combined circulation of more than 87,235. In addition, notices were placed in community news publications including LookOut Parish Magazine and Box River News to further advertise the consultation.
- 2.1.23 The adverts were placed in print publications where possible, and also placed on the websites of the publications listed in Table 2.2.

Publication	Paper copy/ online	Date(s)
East Anglian Daily Times	Paper copy	Monday 29 March 2021
East Anglian Daily Times	Paper copy	Monday 12 April 2021
East Anglian Daily Times	Online	Sunday 28 March to Wednesday 28 April 2021 (inclusive)
Ipswich Star	Paper copy	Monday 29 March 2021
Ipswich Star	Online	Sunday 28 March to Wednesday 28 April 2021 (inclusive)
West Suffolk Mercury	Paper copy	Monday 5 April 2021
West Suffolk Mercury	Online	Sunday 28 March to Wednesday 28 April 2021 (inclusive)
Colchester Gazette	Online	Monday 29 March to Sunday 11 April 2021 (inclusive)
Essex County Standard	Online	Monday 29 March to Sunday 11 April 2021 (inclusive)
LookOut Parish Magazine	Paper copy	Thursday 1 April 2021
Leavenheath Village Magazine	Paper copy	Thursday 1 April 2021
Box River News	Paper copy	Saturday 20 March 2021

Table 2.2 - Newspaper adverts schedule

- 2.1.24 The advertisements contained the following information:
 - an introduction to the consultation with guidance on how to participate
 - a list of upcoming webinar dates
 - contact details for the project team; and
 - invitation to request hard copies of the project material.
- 2.1.25 Advertisements were generally half page prints. A copy of the newspaper adverts can be found in Appendix E.
- 2.1.26 Digital promotion of the consultation was conducted through digital marketing campaigns hosted by online news providers and via Facebook, Twitter, Instagram and Spotify. Online adverts were placed in Essex Live, The East Anglian Daily Times, Ipswich Star, West Suffolk Mercury, Colchester Gazette, and Essex County Standard, delivering a total of 134,000 impressions. (Appendix E and Appendix F).
- 2.1.27 Across Facebook, Twitter and Instagram, ad campaigns ran from 1 April to 6 May 2021. The separate Spotify campaign ran between 25 March and 22 April 2021. Each ad directed users to visit the project website and engage with the consultation, with ads targeted at users living close to the indicative alignment of the reinforcement and nearby communities. The traffic generated from these campaigns is set out in Table 2.3.

Platform	Campaign dates	Total impressions	Ad clicks
Facebook	1 April – 6 May 2021	624,165	3,224
Twitter	1 April – 6 May 2021	71,521	184
Instagram	1 April – 6 May 2021	297,257	392
Spotify	25 March – 22 April 2021	156,935	322
		1,149,878	4,122

Table 2.3 - Social media campaign

Additional engagement activities undertaken

- 2.1.28 National Grid undertook a number of engagement activities leading up to and throughout the consultation period.
- 2.1.29 Presentations were given to five councils, 13 parish councils and two Members of Parliament with constituencies within the vicinity of the project. These presentations were given to explain the proposals, support stakeholder relationships and promote the nonstatutory consultation. A list of the meetings held and when are presented in
- 2.1.30 Table 2.4.

Date	Attendees
22 February 2021	Suffolk County Council (elected members)
2 March 2021	Essex County Council and Braintree District Council (elected members)
3 March 2021	Essex County Council (elected member)
4 March 2021	Braintree District Council (elected member)
11 March 2021	Essex County Council (elected member)
11 March 2021	MP for South Suffolk, MP for Central Suffolk
15 March 2021	Layham Parish Council, Polstead Parish Council
16 March 2021	Raydon Parish Council, Higham Parish Council
16 March 2021	Mid Suffolk District Council, Babergh District Council
17 March 2021	Sproughton Parish Council
17 March 2021	Little Cornard Parish Council
23 March 2021	Boxford Parish Council
29 March 2021	Bulmer Parish Council
29 March 2021	The Hennys, Middleton and Twinstead Parish Council
30 March 2021	Burstall Parish Council, Hintlesham and Chattisham Parish Council
7 April 2021	Leavenheath Parish Council
22 April 2021	Polstead Parish Council
30 April 2021	Stoke by Nayland Parish Council

Table 2.4 - Parish council meetings

2.2 **Response methods**

- 2.2.1 Consultees could respond to the consultation by completing the consultation response form (online and paper copy available), through email to the project email address or by sending a response directly to the project's postal address:
 - Email via contact@bramford-twinstead.nationalgrid.com
 - Dedicated telephone information line 0808 196 1515
 - Postal FREEPOST B TO T REINFORCEMENT

2.3 Response rate

2.3.1 A total of 537 feedback submissions were received during the consultation period from community stakeholders and consultees, along with members of the local community. This comprised of 243 paper response forms, 141 online response forms, 139 emails sent to the project inbox and 14 letters see Table 2.. Some responses, although received

after the close of consultation, were taken into consideration in the reporting of feedback received.

2.3.2 An additional 24 response forms that were not compliant with the General Data Protection Regulation (GDPR) were also received as there was no evidence to confirm that the respondents were over 13 years of age. In accordance with the Data Protection Act 2018, the data contained in these was not processed.

Table 2.5 - Breakdown of feedback by channel

Response Method	Response Rate
Online response form	141
Paper response form (via post)	243
Free text response (letter)	14
Free text response (email)	139

2.3.3 There were 27 responses received from statutory organisations and local authorities (Appendix G and H).

2.4 Consultation Response Form

- 2.4.1 The response form consisted of six main sections:
 - **Policy context** Question Q1 a, b, c and Q2 a, b (closed questions)
 - Routeing options Q3 (closed) and Q4 (open question)
 - Sections of the indicative alignment:
 - Section AB Bramford to Hintlesham Q5 and Q6 (closed) Q7 (open)
 - Section C Brett Valley Q8 and Q9 (closed) Q10 (open)
 - Section D Polstead Q11 and Q12 (closed) Q13 (open)
 - Section E Dedham Vale AONB Q14 (closed) Q15 (open)
 - Section F Leavenheath and Assington Q16 and Q17 (closed) Q18 (open)
 - Section G Stour Valley Q19 and Q20 (closed) Q21 (open)
 - Offsetting Impacts Q22 (open)
 - How are we doing Q23, Q24, Q25, Q26 and Q27 (closed)
 - Inclusion and Diversity Q28, Q29 and Q30 (closed)
- 2.4.2 Information on the proposed GSP substation at Butler's Wood was presented in a separate section of the non-statutory consultation leaflet. This report also contains a specific section relating to the proposed GSP substation.
- 2.4.3 The closed (quantitative) questions are further detailed in section 3.2, while comments received during the open (qualitative) questions are detailed in section 3.3.

3. Analysis of feedback

3.1 Introduction

- 3.1.1 Following the close of the consultation, National Grid reviewed all the responses received.
- 3.1.2 The responses to the **closed questions** were analysed to help the project team understand the proportion of respondents that chose each option and to see if there was a majority response. The outcome of this analysis is set out below. With regard to the percentages on the graphs in the sections below, 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%.
- 3.1.3 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. 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 included letters, emails and the free text sections on the response form.
- 3.1.4 Classification categories were created based on the scope of the non-statutory consultation and issues raised at previous consultation events. In addition, new classifications were added on an ad-hoc basis as feedback was received allowing for further breakdown of themes.
- 3.1.5 Each category was broken down into further sub-sections. This included the sentiment of the comment (positive, negative, neutral) and whether the comment can be considered a suggestion. A number of categories (such as visual impact) were also split into the sections of the indicative alignment being used at this consultation, so that comments could be coded as being specific to a certain area of the project.
- 3.1.6 All GDPR compliant responses, regardless of their origin, were analysed by the project team and assigned codes based upon the content of the response(s) provided.

3.2 Responses to closed questions

3.2.1 This section presents and discusses the feedback gathered via the closed questions on the feedback form.

Policy context - Question 1

3.2.2 In response to Q1a, which sought to gauge perceptions towards climate change/global warming and the impact of this on respondents' lives, the vast majority of respondents (81%) stated that they were either 'Concerned' or 'Very concerned'. Meanwhile, only 5.7% of respondents stated that they were either 'Not at all concerned' or 'Little concerned', with the remaining 13.3% of respondents remaining neutral.



Figure 3.1 - How concerned are you about the effect of climate change/global warming on your life?

3.2.3 In response to Q1b, when asked about respondents' level of concern regarding the impact of climate/change global warming on the lives of future generations, once again, the majority of respondents were either 'Concerned' or 'Very concerned', with 87.4% of respondents selecting one of these options. The proportion of respondents who were either 'Not at all concerned' or 'Little concerned' was very low, equating to 4.2%, while a lower number of 8.4% remained neutral.



Figure 3.2 - How concerned are you about the effect of climate change/global warming on the lives of future generations?

3.2.4 In response to Q1c, with regard to concern regarding the UK meeting its target of net zero carbon emissions by 2050, 74.2% of respondents were either 'Concerned' or 'Very concerned', while a larger proportion (nearly 20% of respondents) were neutral on this issue. The remaining 6.2% were either 'Not at all concerned' or 'Little concerned'.



Figure 3.3 - How concerned are you about the UK meeting its target of net zero carbon emissions by 2050?

Policy context - Question 2

3.2.5 Q2a asked respondents to what extent they agree or disagree that with the growth of renewable energy connecting in East Anglia by the end of this decade, more power will be generated than the existing electricity network is capable of transporting. Here, the majority, equating to 59.4%, either agreed or strongly agreed, while 9.1% either disagreed or strongly disagreed. The remaining 31.5% neither agreed not disagreed with this statement.



Figure 3.4 - To what extent do you agree or disagree with the statement? – With the growth of renewable energy connecting in East Anglia, by the end of this decade, more power will be generated than the existing electricity network is capable of transporting.

3.2.6 In response to Q2b, which asked to what extent respondents agree or disagree with the importance of reinforcing the network between Bramford and Twinstead to accommodate the level of generation and demand in electricity, 43.2% either agreed or strongly agreed. A lesser proportion, equating to 28.9% of respondents, either disagreed or strongly disagreed with the importance, while 27.8% neither agreed nor disagreed.



Figure 3.5 - To what extent do you agree or disagree with the statement? – It is important to reinforce the network between Bramford and Twinstead to accommodate the level of generation and demand in electricity.

Routeing options - Question 3

3.2.7 Answers to Q3 revealed that 30.6% of respondents supported the indicative alignment, whilst 50% indicated they either opposed or strongly opposed the proposals. Meanwhile, a notable 19.4% of respondents were neutral to the proposals.



Figure 3.6 - To what extent do you support our proposed route?

Routeing options - Question 4

3.2.8 In Q4 which was an open question, respondents were asked whether there were any matters regarding the Bramford to Twinstead reinforcement which they wished to raise. The graph below outlines the top ten subject categories which were raised in response to this question, following the coding of qualitative responses. The most commonly raised subject category by a long way was overhead lines, which was raised by 121

respondents. This was followed by visual impact (raised by 62 respondents) and environmental impact (raised by 31 respondents).

3.2.9 Responses to the points raised through open written feedback have been summarised in section 3.3.



Figure 3.7 - Are there any other matters regarding the Bramford to Twinstead reinforcement that you wish to raise?

Section A-B Bramford to Hintlesham – Question 5

3.2.10 In response to Q5, which asked if respondents agreed with the indicative alignment for Section AB Bramford to Hintlesham, the largest proportion (41.3%) of answers indicated they neither agreed nor disagreed. Over a quarter of responses (25.3%) expressed they agreed or strongly agreed with the chosen route, whilst the remaining respondents disagreed (7.8%) or strongly disagreed (25.6%) with the chosen route.



3.2.11



Section A-B Bramford to Hintlesham – Question 6

3.2.12 When asked to what extent respondents agreed that the proposals in Section AB struck the right balance between the visual impact of overhead lines and the high cost of underground cables, the majority expressed they neither agreed nor disagreed (34.3%). A significant proportion of respondents (32.7%) strongly disagreed, whilst 15.6% disagreed. Meanwhile only 12.1% agreed and 5.3% strongly agreed that the balance was right.



Figure 3.9 - To what extent do you agree that our proposals in this location strike the right balance between the visual impact of overhead lines and the high cost of underground cables?

Section A-B Bramford to Hintlesham – Question 7

- 3.2.13 Of the responses provided to this freeform question, a significant number stated their desire to see the proposed overhead line technology for Section AB changed to underground cabling. Linked to this, a significant proportion of the responses to this question expressed their concern at the potential visual impact of the proposals, whilst others also provided feedback on the precise location of the elements of the indicative alignment contained within this section.
- 3.2.14 Responses to the points raised through open written feedback have been summarised in section 3.3.



Figure 3.10 - Are there particular features or considerations in this location that you would like us to take into account as we develop our proposals further?

Section C Brett Valley - Question 8

3.2.15 When asked about the indicative alignment chosen for Section C Brett Valley, the majority of respondents neither agreed nor disagreed with the chosen route, with 36.1% selecting this option. 91 respondents (29.4%) strongly disagreed with the chosen route, while 64 respondents (20.6%) stated that they agreed with the choice. The remaining respondents, either strongly agreed (7.4%) or disagreed (6.5%%) with the choice of route for Section C Brett Valley.



Figure 3.11 - Do you agree with the route chosen in this section?

Section C Brett Valley - Question 9

3.2.16 In response to Q9, where respondents were asked how much they agreed that the proposals for Section C struck the right balance between the visual impact of overhead lines and the high cost of underground cables, 17.1% agreed whilst 5.8% strongly agreed. The majority of respondents strongly disagreed (38.7%) and 12.6% disagreed. Meanwhile over a quarter of respondents (25.8%) neither agreed nor disagreed.



Figure 3.12 - To what extent do you agree that our proposals in this location strike the right balance between the visual impact of overhead lines and the high cost of underground cables?

Section C Brett Valley – Question 10

- 3.2.17 As with most of the freeform questions, the majority of the feedback provided by respondents was a preference for Section C to be fully undergrounded, as opposed to using overhead line technology. Negative visual impacts of the proposed overhead line were also a significant topic, alongside concerns around the potential for environmental impacts on the local area.
- 3.2.18 Responses to the points raised through open written feedback have been summarised in section 3.3.



Figure 3.13 - Are there particular features or considerations in this location that you would like us to take into account as we develop our proposals further?

Section D Polstead – Question 11

3.2.19 When asked about respondents' acceptance of the indicative alignment chosen for Section D Polstead, the majority of respondents neither agreed nor disagreed with the chosen route, with 33.8% selecting this option. 72 respondents which equals to 23.2% agreed with the chosen route whilst 86 respondents which equals to 27.7% strongly disagreed with the route. The remaining respondents either disagreed (9%) or strongly agreed (6.4%) with the chosen route.



Figure 3.14 - Do you agree with the route chosen in this section?

Section D Polstead – Question 12

3.2.20 In response to Q12 regarding the extent to which National Grid's proposals in Section D strike the right balance between the visual impact of overhead lines and the high cost of underground cables, the majority of respondents strongly disagreed (35.1%) whilst a

much smaller 13.1% disagreed. Meanwhile 26.2% indicated they either strongly agreed or agreed, and 25.6% neither agreed nor disagreed that the proposals struck the right balance.



Figure 3.15 - To what extent do you agree that our proposals in this location strike the right balance between the visual impact of overhead lines and the high cost of underground cables?

Section D Polstead – Question 13

- 3.2.21 Beyond the overarching theme of a preference for underground cables, the feedback received in relation to Section D centered around the location of the route, with some responses illustrating their preference in relation to the two proposed routing options for the proposed underground cable section of the route in this location. Others took this opportunity to comment on both the consultation itself and the potential environmental impacts of the proposals.
- 3.2.22 Responses to the points raised through open written feedback have been summarised in section 3.3.



Figure 3.16 - Are there particular features or considerations in this location that you would like us to take into account as we develop our proposals further?

Section E Dedham Vale AONB - Question 14

3.2.23 In response to Question 14 regarding the extent to which National Grid's proposals in Section E strike the right balance between the visual impact of overhead lines and the high cost of underground cables, 95 respondents (30%) neither agreed nor disagreed that the proposals struck the right balance. A lesser proportion of respondents, 29% strongly disagreed with the statement and 20.8% agreed with the statement. Whilst 10.4% of respondents disagreed with the statement and the remainder 9.8% of respondents strongly agreed.



Figure 3.17 - To what extent do you agree that our proposals in this location strike the right balance between the visual impact of overhead lines and the high cost of underground cables?

Section E Dedham Vale AONB - Question 15

- 3.2.24 A significant number of individuals did not recognise that underground cabling was proposed to cross the Dedham Vale AONB, instead of using overhead lines. Accordingly, many respondents requested that the line be undergrounded and criticised the visual and environmental impacts of overhead lines on this protected landscape.
- 3.2.25 Responses to the points raised through open written feedback have been summarised in section 3.3.



Figure 3.18 - Are there particular features or considerations in this location that you would like us to take into account as we develop our proposals further?

Section F Leavenheath and Assington- Question 16

3.2.26 In response to Q16, in which respondents were asked if they agreed with the route chosen for Section F, the majority neither agreed nor disagreed (34.6%). 29.9% of respondents strongly disagreed with the chosen route, whilst a similar proportion agreed (22.6%). The remaining respondents either strongly agreed (7%) or disagreed with the proposals (6%).



Figure 3.19 - Do you agree with the route chosen in this section?

Section F Leavenheath and Assington- Question 17

3.2.27 In response to Q17, where respondents were asked if they agreed that the proposals in Section F struck the right balance between the visual impact of overhead lines and the high cost of underground cables, the majority (37.5%) strongly disagreed. The next largest proportion (28.7%) of respondents neither agreed nor disagreed. 17.4% agreed and 4.7% strongly agreed that the balance had been struck, whilst the remaining 11.7% disagreed.



Figure 3.20 - To what extent do you agree that our proposals in this location strike the right balance between the visual impact of overhead lines and the high cost of underground cables?

Section F Leavenheath and Assington- Question 18

- 3.2.28 The location of the proposed overhead line and cable sealing end compound in Section F were the main subject of feedback, in addition to requests for the overhead lines in this section to be undergrounded. As in relation to other sections, respondents raised concerns about the visual and environmental impacts of the proposals in their current form.
- 3.2.29 Responses to the points raised through open written feedback have been summarised in section 3.3.



Figure 3.21 - Are there particular features or considerations in this location that you would like us to take into account as we develop our proposals further?

Section G Stour Valley - Question 19

3.2.30 Responses to Q19, which asked whether respondents agreed with the chosen route for Section G revealed that the majority (35.8%) neither agreed nor disagreed. Nearly a quarter (24.4%) agreed with the chosen route whilst a similar amount strongly disagreed (23.8%). The remaining respondents either strongly agreed (10.7%) or disagreed (5.2%).



Figure 3.22 - Do you agree with the route chosen in this section?

Section G Stour Valley - Question 20

3.2.31 In response to Q20, where respondents were asked if they agreed that the proposals in Section G struck the right balance between the visual impact of overhead lines and the high cost of underground cables, the majority (29.2%) expressed they neither agreed nor disagreed. A similar proportion, 28.8%, indicated they strongly disagreed. 32.2% of respondents either agreed or strongly agreed that the proposals had struck the right balance, whilst 9.7% disagreed.



Figure 3.23 - To what extent do you agree that our proposals in this location strike the right balance between the visual impact of overhead lines and the high cost of underground cables?

Section G Stour Valley - Question 21

3.2.32 The consultation-wide themes of support for underground cables, opposition to overhead lines and concern at environmental and visual impacts were the main answers provided in relation to Section G. Less frequently raised opinions included comments on the location of the proposals within the section, alongside general opposition to the entire project route and suggestions that National Grid should consider an offshore solution to increasing transmission capacity in the region, instead of constructing a second overhead line.



Figure 3.24 - Are there particular features or considerations in this location that you would like us to take into account as we develop our proposals further?

Offsetting impacts - Question 22

3.2.33 The most frequent response was that the largest benefit to local communities would be the alteration of the technology used from overhead lines to underground cables.

- 3.2.34 Following this, many respondents noted that they did not believe the project would bring any benefits to the local area, whilst some suggested funds could be used to improve community infrastructure (such as play areas and community facilities); grant funding for charities to bid for; and installation of local electric vehicle charging points.
- 3.2.35 Other prominent themes raised also focused on the overall proposals, including opposition to the visual and environmental impact, and there was criticism that the consultation failed to provide information on the cumulative impacts of National Grid's other proposed reinforcements in the region, including the proposed reinforcements in north and south East Anglia identified in the 2021 Network Options Report (NOA, refs: ATNC and AENC)¹.
- 3.2.36 Responses to the points raised through open written feedback have been summarised in section 3.53.



Figure 3.25 - Alongside developing our proposals, we are considering how we could reduce the impacts of construction and operation on the local community, and to ensure that local communities benefit from the projects development. Do you have any ideas regarding how the Bramford to Twinstead reinforcement can deliver benefits and offset impacts for residents?

How are we doing – Question 23

3.2.37 The majority of respondents heard about our consultation through letters or emails sent by the National Grid project team. A number of respondents also received consultation information via social media and local authority representatives.

¹ Currently being progressed as 'East Anglia GREEN'



Figure 3.26 - Please let us know your views on the quality of our consultation materials, the accessibility of our online consultation and webinars, how we have notified people about our proposals, and anything else related to this consultation. How did you hear about our consultation?

How are we doing – Question 24

3.2.38 Almost 50% of respondents rated the information provided as part of the consultation as 'good' or 'very good', with almost 25% of people stating the material and clarity of presentation was 'average'. Just under a quarter of respondents felt that the consultation material was 'poor' or 'very poor'.



Figure 3.27 - Please rate the information included as part of this consultation in terms of how clearly it was presented and how easy it was to understand.

How are we doing – Question 25

3.2.39 When asked which consultation documents they had viewed during the consultation process, 39.4% of the respondents had viewed the Project Background Document and Project Development Options Report. A total of 24.8% of respondents stated that they had seen other documents and 24.5% said that they used the Project Background Document. The Project Development Options Report was viewed the least with 11.3% of respondents using it.



Figure 3.28 - Which consultation documents have you viewed during the consultation process? Please tick all that apply.

How are we doing – Question 26

3.2.40 Question 26 asked the respondents in what capacity they were responding to the consultation. The large majority of respondents were local residents (85.3%). 8.1% of respondents were affected landowners or occupiers. There were only 2.5% respondents responding to the consultation as a business and 2.3% responding as a community representative. Finally, there was only 1% of respondents responding as part of a local organisation. *Respondents were able to tick more than one box on the response form.



Figure 3.29 - In what capacity are you responding this the consultation?

How are we doing – Question 27

3.2.41 Q27 was a duplicate of Q24, the results of which are in paragraph 3.2.38. Any information provided to Q27 has been incorporated and reported within Q24.

Inclusion and diversity – Questions 28, 29 and 30

- 3.2.42 Q28 asked respondents about gender. From the responses, 64.3% of responses were from males, compared to 29.4% from females and a further 6.3% who did not wish to provide their gender.
- 3.2.43 Males made up the majority of respondents and were over-represented in comparison to the gender makeup of the local population.
- 3.2.44 Q29 asked if the respondents considered themself a person with a disability. 88.6% of people said that they did not. 6.3% of respondents said that they would prefer not to say if they considered themselves a person with a disability and a small number of people, 5.1% stated that they did.
- 3.2.45 Q30 asked about ethnic background. 97.5% of respondents described themselves as white whilst the remaining 2.5% of respondents stated that they were 'other'.

About you

- 3.2.46 The consultation response form also asked 'About you' and captured age data. Feedback was received from respondents ranging from the 18-24 years category to the 85+ category.
- 3.2.47 The highest number of responses were received from those in the 65-74 age group (25.3%) and the 55-64 age group (24.3%). The next most represented age group was 45-54, which accounted for 17.4% of respondents. 13.8% of respondents were 35-44 years old and 11.7% were 75-84. At the lower end, 4.2% of respondents were within the 25-34 age groups, 2.3% were from the 85+ age group, and just 1.1% were from the 18-24 age group.
- 3.2.48 This sample of respondents is representative of the wider community when looking at data from the 2011 census, (updated in 2019) regarding the age makeup of parishes along the Bramford to Twinstead route. This data shows that in 9 of the 10 parishes along the route, the number of residents over the age of 65 is higher than the national average, with it being over both the national and Suffolk average in 8 of the 10 parishes.

3.3 Responses to open questions

- 3.3.1 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).
- 3.3.2 This section begins by identifying 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.

Key themes

- 3.3.3 There were a number of clear themes emerging from the responses. **Among responses that were of any sentiment (i.e. positive / neutral or negative)**, overhead lines were the biggest area of concern. Closely linked to this, visual impact and environmental impact were the next two most-mentioned categories. Underground cables were the next biggest category, followed by comments about the nature and format of the non-statutory consultation itself.
- 3.3.4 After this, the next most-mentioned category related to the Dedham Vale AONB, followed by comments about a potential alternative offshore ring main (an offshore system connecting all the wind farms in a certain area to shore via one connection point), the benefits of the proposals and the general location of the proposed reinforcement. Heritage was also a frequently mentioned category.
- 3.3.5 Within the same dataset, **of those responses with a negative sentiment only**, the use of overhead lines is mentioned more frequently than any other issue, with 235 communications including a suggestion related to the use of overhead line technology. Of these, 156 communications include negative comments about the use of overhead lines. The next most-mentioned sub-topic is negative comments about the general visual impact of the proposals. There were also a high number of suggestions from respondents about the proposed use of overhead lines as opposed to undergrounding.
- 3.3.6 Another frequent topic was negative comments about the consultation, as respondents called for the consultation to either be extended or suspended.

- 3.3.7 Negative comments about the environmental impacts of the proposals were followed by suggestions related to the use of underground cables and negative comments about the project's relationship with the Dedham Vales' AONBs.
- 3.3.8 **Among those responses with a negative sentiment only**, the only section-specific subtopic to feature were negative comments about the environmental impact of the proposals on Section G (Stour Valley).

Prescribed consultees feedback

3.3.9 Appendices G and H detail the feedback provided by those key stakeholder organisations and groups (together with National Grid's response) which are given particular significance by s42(1)(a) and s42(1)(b) of the Planning Act 2008. This is to make clear the views of these key respondents, whose feedback is often of a technical or specific nature, to ensure that the breadth of feedback is fully presented and understood given the interest in the project and the complexity of the issues being discussed. National Grid did not receive responses from all of the prescribed consultees contacted and continues to proactively engage with each of these bodies.

Public / organisation (non-prescribed consultee) feedback

3.3.10 Section 3.4 (below) present a summary breakdown of the general feedback received to open format questions. For clarity and for the benefit of the reader, this is presented alongside National Grid's responses, which make clear how the matters raised have been considered. This is set out in Tables 3.1 – 3.8. Note that responses have been considered in the context of the section against which they were made, unless it is clear that they in fact relate to a different section. Any informal wording has been retained in order to avoid inadvertent misinterpretation.

You Said, We Did'

3.3.11 Finally, section 3.5 goes on to specifically address how feedback received has helped to shape the approach to, and design of, the proposals and makes clear how regard has been had to feedback during the process of design evolution. This is set out in Tables 3.9-3.14 in a 'You Said, We Did' format.

3.4 National Grid's response to comments received

3.4.1 Tables 3.1 to 3.8 contain the feedback received to this consultation from the public / organisations and National Grid's response to that feedback. Table 3.1 - Table 3.7 relate directly to the sections as identified in the consultation response form and the GSP substation. Table 3.8 contains a summary of comments on all other general matters raised.

Matters raised regarding Section AB Bramford to Hintlesham

Table 3.1 - Summary of consultee comments on Section AB Bramford to Hintlesham and National Grid's response.

Ref no.	Summary of matters raised	National Grid's response
AB1	The cables should be underground in the Bramford to Hintlesham area.	As part of its option appraisal process, National Grid has considered whether the use of underground cables, rather than overhead lines, is an appropriate approach in the context of national policy and National Grid's various statutory duties. The project proposes underground cable within the Dedham Vale AONB and in an area of the Stour Valley. Elsewhere along the draft alignemnt, the higher cost of cables to bill-paying consumers, and the environmental implications of installing underground cables and maintaining them, are not considered to be justifiable in the context of national policy or National Grid's statutory duties, which include the need to be economic and efficient. Further information is available in Section 3.4 of the Project Development Options Report 2022 which is provided as part of the statutory consultation.
AB2	Do not want more overhead pylons.	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. There is a need to reinforce the region's electricity network to address this, including between Bramford and Twinstead. The network needs to be strengthened here to increase the network capability in the region to carry the electricity generation proposed in East Anglia.
		The relevant national planning policy ² makes clear that pylons are often the appropriate means of delivering high voltage transmission infrastructure, except in particularly sensitive landscapes where mitigation, e.g. underground cables, may be used instead. In Section AB Bramford to Hintlesham, underground cables are not considered to be the appropriate transmission technology, as the removal of the existing 132kV overhead line and using its alignment to parallel the new 400kV line with the existing one will reduce the scale of change in the landscape.
AB3	Only put the new cable underground in areas which do not currently have pylons.	The extent of undergrounding, within the Dedham Vale AONB and parts of the Stour Valley, is proposed following careful consideration of environmental surveys, the feedback received during earlier consultations, the alternatives available and other factors such as the relevant National Policy Statements (NPS) and National Grid's duties.
		The relevant national planning policy ² makes clear that pylons are often the appropriate means of delivering high voltage transmission infrastructure, except in particularly sensitive landscapes where mitigation, e.g. underground cables, may be used instead. Furthermore, amongst National Grid's duties is the need to have regard to preserving amenity, as well as a statutory responsibility to conserve and enhance the AONB. In this context and balanced against other duties including the need to be economic and efficient, undergrounding in the Dedham Vale AONB and parts of the Stour Valley is deemed to be appropriate, despite the existence of other overhead line infrastructure in these areas.

² National Policy Statement for Electricity Networks Infrastructure (EN-5) – Department of Energy & Climate Change – July 2011

AB4	The existing 132kV cable has a negative impact on	As part of the proposals 27.5km of the existing overhead line would be removed.
	migrating birds, good that it is being removed.	Where the new line is being constructed as underground cables in the Dedham Vale AONB and parts of the Stour Valley, this will result in a reduction in the number of overhead lines in the landscape. Elsewhere along the route, the existing 132kV line is being replaced by a new 400kV line generally parallel to the existing 400kV overhead line. In Section AB Bramford to Hintlesham, the existing 132kV overhead line from Burstall Bridge does not converge with the existing 400kV until southwest of Hintlesham Woods, meaning that this stretch of 132kV line will be removed with no new overhead line directly replacing it. The application for development consent will be supported by an environmental impact assessment (EIA), which considers effects of the reinforcement on ecological receptors (including birds) and will identify if further mitigation is required.
AB5	Why can't proposed line follow the route of the existing powerline?	In Section AB Bramford to Hintlesham, the existing 132kV overhead line from Burstall Bridge does not converge with the existing 400kV until southwest of Hintlesham Woods.
	powermie.	Prior to project pause, National Grid considered a number of options around Hintlesham. This included a corridor which split into two options around Hintlesham village (Corridor 2A to the south of Hintlesham and Corridor 2B to the north of Hintlesham) and an underground cable option. An appraisal of Corridor 2A and Corridor 2B was presented within the Connections Options Report (National Grid, 2012a). Following feedback on the Connections Options Report, it was concluded that Corridor 2B (to the north of Hintlesham village) was preferred, as this would allow a greater paralleling of the new 400kV overhead line will the existing 400kV overhead line westwards out of Bramford Substation, resulting in a lower magnitude of change on landscape and visual receptors than a new line to the south of Hintlesham village (see the Project Development Options Report 2022).
		As 25km of the existing 132kV overhead line would be removed as part of the proposals, this means that a stretch of existing 132kV line will be removed with no new overhead line directly replacing it.
AB6	Concern about the impact of power lines on health.	National Grid's equipment is designed to comply with the Government Guidelines and policies for Electromagnetic Fields (EMF). National Grid relies on authoritative and independent scientific organisations such as the World Health Organization (WHO) and the UK Health Protection Agency (HPA) to review the worldwide body of scientific evidence on EMFs and health. National Grid's network complies with all appropriate independent safety standards, i.e. the exposure limits advised by the HPA and adopted by Government. A certificate of compliance will be submitted with the application for development consent.
AB7	Consider alternatives such as putting cables underground.	National Grid has carefully considered the feedback received during earlier consultations, the alternatives available, and other factors including National Grid's 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.
		As part of its project development process, National Grid carefully considers whether the use of underground cables, rather than overhead lines, is an appropriate approach in the context of national policy and National Grid's various statutory duties. National Grid proposes underground cable within the Dedham Vale AONB and an area of the Stour Valley. Elsewhere along the route, including in Section AB Bramford to Hintlesham, 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.
AB8	Why is there no underground line?	EN-5 ³ makes clear that pylons are often the appropriate means of delivering high voltage transmission infrastructure, except in particularly sensitive landscapes where mitigation, e.g. underground cables, may be used instead. In Section AB Bramford to Hintlesham, underground cables are not considered to be the appropriate technology, with mitigation instead coming in the form of the removal of the existing 132kV line and paralleling the new 400kV line with the existing one, to reduce the scale of change of the landscape. Elsewhere along the route, specifically within the Dedham Vale AONB and an area of the Stour Valley, underground cables are indeed proposed.
AB9	The existing power lines should be underground too.	The need case and funding for the Bramford to Twinstead project is to deliver the new network reinforcement needed, rather than to work on existing overhead lines (other than where this is required to facilitate the Bramford to Twinstead project). Therefore, while two stretches of underground cable are proposed through the Dedham Vale AONB and part of the Stour Valley, no stretches of existing 400kV line will be put underground (although approx. 25km of existing 132kV line and 2.5km of existing 400kV line will be removed). This is because undergrounding existing lines is not required to mitigate the impacts of the proposed new line, and therefore the substantial cost to bill payers, as well as the environmental impacts of construction, would not be justified.
		Although National Grid has a Visual Impact Provision (VIP) project, which makes use of Ofgem funding to reduce the impact of existing transmission lines in AONBs and National Parks in England and Wales, this is a separate initiative and does not apply to the Bramford to Twinstead project.
AB10	Plant as many trees as possible to reduce impact.	A landscape and visual impact assessment will be undertaken, and this will identify areas for potential mitigation planting. In addition, National Grid has set itself a target of delivering 10% 'net gain' in environmental value on all construction projects.
AB11	The visual impact of diverting around Ramsey Wood is massive for the affected properties.	Following feedback on the landscape and visual impact of the proposed alignment to the north of Hintlesham Woods, National Grid has undertaken a back check and review of previously discounted options in this area. Hintlesham Woods is designated as a Site of Special Scientific Interest (SSSI), ancient woodland and is also an RSPB reserve. This review has identified an additional option which will be the subject of consultation. These are presented as Hintlesham Woods Option 1 and Hintlesham Woods Option 2 in consultation material (the Project Development Options Report and the Preliminary Environmental Information Report). Further details on each of the options is provided in Section 4.3 of the Preliminary Environmental Information Report:

³ National Policy Statement for Electricity Networks Infrastructure (EN-5) – Department of Energy & Climate Change – July 2011

		 Option 1 (as consulted on during the non-statutory consultation) the proposed 400kV overhead would use the existing alignment and pylons of the exiting 400kV overhead line through the woods, and the existing 400kV overhead line would be re-routed around to the north and west of the woods on newly constructed pylons. Option 2 (being explored due to feedback received during and following non-statutory consultation) the proposed 400kV overhead line would parallel the existing 400kV overhead line to the south, with pylons located outside of the woodland and the conductors oversailing the woods. Option 2 would remove the need for a transposition and the diversion of the existing line around the woodland to the north. It would also involve fewer pylons being needed close to the woodland (and no temporary pylons or line diversions), a shorter construction period which (due to the timing of outages), would avoid works in the bird breeding season, and could have landscape and visual benefits compared to introducing a new alignment around the periphery of the woods. National Grid is seeking feedback on both options as part of its statutory consultation, with a view to identifying the most appropriate solution which strikes the right balance bearing in mind all of its statutory duties. An Environmental Impact Assessment is being undertaken which will identify potential effects on Hintlesham Woods and any required mitigation.
AB12	Not convinced that power lines need to be underground here as impact of new line is lessened by existing cable running parallel.	Underground cables are not proposed in Section AB Bramford to Hintlesham, with an overhead line being proposed instead.
AB13	Proposals will be waste of time and money and not needed in the area.	A new route is needed between Bramford and Twinstead because, with substantial new sources of energy connecting in the region by the end of the decade, the existing overhead line carrying circuits west from Bramford to Pelham and from Bramford to Braintree/Rayleigh/Tilbury would be overloaded. Installing a new line (two circuits) between Bramford and Twinstead, allows the network to be reconfigured to create two separate double circuit routes that will avoid overloading the existing circuits and will provide flexibility and agility in the way the network interacts. The proposed network reinforcement is an important step in facilitating the delivery of 40GW of offshore wind energy by 2030, a key Government commitment and a vital step towards the move towards cleaner, greener energy.
AB14	Short term win rather than a long-term gain if cost is the driving force for this plan.	Under the Electricity Act 1989, National Grid has a statutory duty to develop and maintain an efficient, co-ordinated and economical system of electricity transmission, and to facilitate competition in the supply and generation of electricity. In formulating proposals for new lines, National Grid is obligated to have regard to the desirability of preserving amenity, and to do what it reasonably can to mitigate effects. Options to deliver additional network capability and the options National Grid take forward are evaluated against these statutory duties.
		In this context, reinforcing the network between Bramford and Twinstead is identified as a necessary and appropriate proposal.
		The proposals have been developed following careful consideration of feedback received from previous public consultations and the robust consideration of available alternatives, and other factors including National Grid's duties and obligations. Alongside other factors such as environmental effects and engineering, cost is one of the issues considered, insofar as being economic and efficient and delivering best value for electricity consumers are part of National Grid's duties.
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AB15	Concerned about visual impact of lines, including running two lines through Hintlesham and past Hintlesham Hall.	National Grid is in the process of agreeing a mitigation strategy for Hintlesham Hall including additional planting proposals and seeking to position the new pylons in locations that reduce the effects on the setting from key views.
AB16	Can unused power lines be removed?	The Bramford to Twinstead project would remove approx.25 km of existing 132kV line and 2.5 km of existing 400kV line. In Section AB Bramford to Hintlesham, this includes the existing 132kV line from Burstall Bridge.
AB17	Concern of visual impact of substation and supporting infrastructure.	The DCO proposals are being subject to an EIA, which will consider the effects on landscape and visual impact, including cumulatively with other future proposals that are being progressed in the area of Bramford Substation. The EIA will assess the impact arising from the project, identifying the potential for mitigation and ultimately feeding into the decision-making process.
AB18	Is the existing 400KV line to remain once the new 400kv line is put into service?	Yes, both routes are required to be in service.
AB19	How close is this to people's homes?	As a general principle, National Grid seeks to avoid routing overhead lines close to residential areas as far as possible, in accordance with the 'Holford Rules'. Due to their linear nature however, and the other technical and environmental factors which influence the design process, overhead lines do need to pass by residential properties in some instances. There are however 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 electromagnetic fields, are robustly assessed and balanced as part of the decision-making process.
AB20	Suggest running the cables under the sea.	Offshore high-voltage direct current (HVDC) projects are typically very costly and unlikely to deliver the same level of network capability when compared with equivalent onshore projects, so the benefits and costs of these types of projects needs to be weighed up against the impacts of onshore construction. More generally, the Government is currently conducting an Offshore Transmission Network Review (OTNR), examining how power from offshore generation and interconnectors can come onshore in a more coordinated way.
		A large number of potential strategic options were considered for the project, including offshore HVDC cables. The conclusion was that the use of offshore cables for this reinforcement would not fully address the needs case, namely the

capacity constraints between Bramford and Twinstead, or comply with the relevant safety and quality of supply standards. This means the project is required regardless of offshore coordination.

AB21 Reroute to avoid Aldham. The proposed route does not pass through the Aldham Parish, although it does pass close to its southern boundary.

Matters raised regarding Section C Brett Valley

Table 3.2 - Summary of consultee comments on Section C Brett Valley and National Grid's response.

Ref no	Summary of matters raised to feedback received	National Grid's response
C1	The cables / power line should be underground in this area and would like to understand the alternatives including undergrounding.	National Grid has carefully considered the feedback received during earlier consultations, the alternatives available, and other factors including National Grid's 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. As part of its project development process, National Grid carefully considers whether the use of underground cables, rather than overhead lines, is an appropriate approach in the context of national policy and National Grid's various statutory duties. National Grid proposes underground cable within the Dedham Vale AONB and an area of the Stour Valley.
		Elsewhere along the route, the higher cost of 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. In Section C Brett Valley, the existing 132kV overhead line would be removed (embedded measure) and the new 400kV overhead line would parallel the existing 400kV overhead line, to reduce the scale of change to the landscape.
C2	The switch from overhead to undergrounding, and the associated industrialisation, lighting, security and vehicle movements etc, should be positioned at Layham Quarry.	Following feedback from the 2021 non-statutory consultation, National Grid reviewed the location of Dedham Vale East CSE compound to see whether this can be moved to Layham Quarry. This was considered in the context of National Grid's statutory duties. It was not taken forward, due to the costs associated with the additional c.2km of underground cable required. However, during this exercise, an alternative location for this CSE compound has been identified at Millfield Wood, approximately 1km from the AONB boundary, where the existing woodland will provide visual screening for the CSE compound.
C3	Opposed to any construction or excavation that could possibly have an adverse	The proposed location of the Dedham Vale East CSE compound has been moved further away from Dollops Wood, to a new position between two existing blocks of woodland at Millfield Wood. This new proposed location was identified

	impact on the woodland or the valley adjoining the wood situated to the east of Sprott's Farm.	following a review of a number of potential options, taking account of consultation feedback in the context of National Grid's various statutory duties. The existing woodland will be retained and will provide visual screening for the CSE compound.
C4	Concerned about impact on wildlife, especially protected species.	Amongst National Grid's duties is to have regard to the desirability of (amongst other things) conserving flora and fauna, and to do what it reasonably can to mitigate any effects. The process of route design takes account of ecology and, where practicable, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. An 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.
C5	Is a floodplain suitable for this proposed route?	The CSE compounds and GSP substation are located in Flood Zone 3 (areas with the lowest risk of flooding). The project would also seek to locate the pylons outside of the floodplain where practicable. A flood risk assessment will be submitted with the application for development consent, which will set out how the project has avoided areas of the highest flood risk and any additional measures to avoid increasing flood risk and to reduce vulnerability of the project to flood risk.
C6	Is the proposal closer to Layham?	The Indicative Alignment, consulted on during the Spring 2021 non-statutory consultation, is the same as the 2013 alignment presented in the Connection Options Report at Layham. The current Draft Alignment, while showing more detail, has not changed in this area either. What has changed since the non-statutory consultation is the proposed location of the Dedham Vale East CSE compound, which is now closer to the boundary of Layham Parish, at Millfield Wood.
C7	Is it not possible to build an 800kv line and remove the others altogether?	Uprating the existing 400kV lines to operate at 800kV was considered at the Strategic Options stage. However, the UK does not currently have equipment approved for use to operate at this voltage. This would also require new pylons, substations and other equipment designed to operate at the higher voltage. As a result, the option of building an 800kV line was discounted and is not being taken forward.
C8	Concern about impact of proposal on property price.	National Grid acknowledges that any proposed new work may cause concern to landowners. Diminution in 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. 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.
C9	The visual screening for the proposal is aimed to deceive as the landscape does not allow this.	Planting is likely to be most effective in mitigating the visual impacts of proposed CSE compounds and the new GSP substation. Overhead lines are tall structures (pylons are approx. 50m in height for 400kV circuits) and cannot be fully screened by planting. However, the Draft Alignment is largely parallel to the existing 400kV line, and would replace the existing 132kV line. These measures reduce the visual effects of the new line within the existing landscape.

C10	Plant lots of trees to mitigate the impact.	A landscape and visual impact assessment will be undertaken, and this will identify areas for potential mitigation planting. In addition, National Grid has set itself a target of delivering 10% net gain in environmental value on all construction projects. The project will deliver this through the creation of planting and habitat along the route to the extent that a 10% uplift in biodiversity will be achieved compared to today.
C11	The amount of energy lost from overhead cables is ridiculous when compared with underground.	National Grid's 'Undergrounding high voltage electricity transmission lines' report provides useful information, and includes reference to an independent report by the Institute of Engineering and Technology. This IET report concluded 'that, excluding build costs, the cost of operation, maintenance and energy losses over the life of the connection was broadly the same for undergrounding and overhead lines.
C12	Cost of burying power lines (and also removing the old pylons) should be covered by those consuming the energy - i.e. consumers elsewhere.	National Grid is funded by a price control mechanism which is agreed with and set by 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. The cost of developing projects including the Bramford to Twinstead reinforcement project is therefore ultimately passed to the bill-paying consumers of electricity.
		Amongst National Grid's duties and obligations is the requirement to be economic and efficient, keeping costs down in the interests of consumers. Therefore, while the costs of projects are passed on to consumers, National Grid must strike the right balance and ensure that the costs to consumers are managed. National Grid is regulated by Ofgem, a non-ministerial government department and an independent National Regulatory Authority, whose role is to protect consumers through delivering a greener, fairer, energy system.
C13	Concern about visual impacts and do not want more pylons in Layham.	The route corridor was chosen because it would represent the least scale of change to the existing environment, as it allows the Draft Alignment to largely parallel the existing 400kV line, and to replace the existing 132kV line which is to be removed. These measures reduce the visual effects of the new line within the existing landscape. In the Layham area, the number of overhead lines will remain the same, albeit the smaller 132kV line is to be replaced with a larger 400kV line.
		A landscape and visual impact assessment will be undertaken as part of the EIA. This will assess the impact of the project and will identify the need for additional mitigation.
C14	Negative visual impact (incl. two lines close together through Hintlesham).	The option appraisal work for Section AB Bramford / Hintlesham identified a preferred corridor to the north of Hintlesham where the new 400kV overhead line would run parallel to the existing 400kV overhead line. This would reduce the magnitude of change and would result in lower landscape and visual impacts, when compared to a new line to the east and south of Hintlesham, part of which currently does not have an existing overhead line.
		National Grid is in the process of agreeing a mitigation strategy for Hintlesham Hall including additional planting proposals and seeking to position the new pylons in locations that reduce the effects on the setting from key views.

C16	Important that route closely follows existing lines so that impact is kept to minimum.	The new 400kV overhead line generally follows the route of the existing 132kV overhead line for the majority of the route and consideration has also been given to paralleling the existing 400kV overhead line where practicable. This would reduce the magnitude of change and would result in lower landscape and visual impacts.
C17	Line runs close to Hadleigh - potentially spoiling the local skyline with pylons skirting the town.	The new 400kV overhead line generally follows the alignment of the existing 132kV overhead line for the majority of the route and consideration has also been given to paralleling the existing 400kV overhead line where practicable. The new overhead line would parallel the existing 400kV overhead line and follow immediately south of the existing 132kV line past Hadleigh. This reduces the magnitude of change and would result in lower landscape and visual impacts
C18	Make the lines parallel and use the same design as the existing larger pylons otherwise they will look like a complete mess visually.	In Section C the new 400kV overhead line broadly follows the route of the existing 132kV overhead line so that (once removed) the 400kV can use the existing 132kV alignment. This would reduce the magnitude of change in the landscape although pylons will be taller than the existing. The proposed new pylons will be of a similar design as those on the existing 400kV overhead line. Paralleling of the existing 400kV overhead line in this area is constrained by the location of residential properties adjacent to the B1070.
C19	Visual impact of cable sealing end near Dollops Wood.	The proposed location of the Dedham Vale East CSE compound has been moved further away from Dollops Wood, to a new position between two existing blocks of woodland at Millfield Wood. This new proposed location was identified following a review of a number of potential options, taking account of consultation feedback in the context of National Grid's various statutory duties. The existing woodland will be retained and will provide visual screening for the CSE compound. A landscape and visual assessment will be undertaken, to identify the likely significant effects on receptors and will identify areas for potential mitigation planting.
C20	Underground cables would not cause blight in this beautiful area, yet over ground cables would cause blight.	National Grid has carefully considered the feedback received during earlier consultations, the alternatives available, and other factors including National Grid's 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.
		EN-5 ⁴ makes clear that pylons are often the appropriate means of delivering high voltage transmission infrastructure, except in particularly sensitive landscapes where mitigation, e.g. underground cables, may be used instead. In Section C Brett Valley, underground cables are not considered to be the appropriate technology. Existing measures include removal of the existing 132kV line and paralleling the new 400kV line with the existing one, which will reduce the scale of change of the landscape.
		In terms of statutory blight in the legal sense, this occurs when the value of a property is reduced due to works, and the owners are unable to sell it at market value. The diminution in value is assessed on a case-by-case basis, with the responsibility falling with the claimant to submit a valid blight notice. Blight applies to land if the compulsory acquisition of

⁴ National Policy Statement for Electricity Networks Infrastructure (EN-5) – Department of Energy & Climate Change – July 2011

		the land is authorised by a DCO, and the land falls within the limits of deviation within which powers of compulsory acquisition conferred by a DCO are exercisable.
C21	Existing power cable should be placed underground.	The need case and funding for the project is to deliver the network reinforcement needed, rather than to work on existing overhead lines (other than where this is required to facilitate the project). Therefore, while two stretches of underground cable are proposed through the Dedham Vale AONB and part of the Stour Valley as part of the new reinforcement, no stretches of existing line will be put underground (although approx.25 km of existing 132kV line and 2.5km of existing 400kV line will be removed). This is because undergrounding existing lines is not required to mitigate the impacts of the proposed new line, and therefore the substantial cost to bill payers, as well as the environmental impacts of construction, would not be justified.
		Although National Grid has a Visual Impact Provision (VIP) project, which makes use of Ofgem funding to reduce the impact of existing transmission lines in AONBs and National Parks in England and Wales, this is a separate initiative and does not apply to the Bramford to Twinstead project.
C15	Concerned about the overhead lines moving closer to playing fields.	At National Grid, all equipment is designed to comply with the Government Guidelines and policies for EMF. National Grid fully recognises people's concerns and takes this issue very seriously. National Grid relies on authoritative and independent scientific organisations such as the WHO and the UK HPA to review the worldwide body of scientific evidence on EMFs and health. National Grid has a responsibility to ensure the safety of the proposed overhead line. As far as EMFs are concerned, National Grid discharge that responsibility by ensuring that our network complies with any appropriate independent safety standards, i.e., the exposure limits advised by the HPA and adopted by Government. For further information visit www.emfs.info

Matters raised regarding Section D Polstead

Table 3.3 - Summary of consultee comments on Section D Polstead and National Grid's response.

Ref no	Summary of matters raised to feedback received	National Grid's response
D1	Impact of installation on Heath Road, Polstead. It is a single lane with passing places,	To make sure disruption to the local community is limited, a Construction Traffic Management Plan (CTMP) will be developed in consultation with the Relevant Highway Authorities. During construction, National Grid will provide clear signage to make sure construction traffic uses the agreed route and stays within the speed limit for construction traffic.

which is already suffering from National Grid emphasises to its employees and contractors the special care that they need to take when driving to and from the areas we are working in.

D2	As there is an existing line in- between, it seems hard to justify the cost of putting the new line underground (short distance and less visual impact).	The proposals do not include undergrounding in Section D Polstead, other than where it encompasses the easternmost part of the Section E Dedham Vale cable section to the west. The extent of undergrounding, within the Dedham Vale AONB and an area of the Stour Valley, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available and other factors which need to be taken into account, including National Grid's duties and obligations.
D3	The cost of undergrounding the cables is only described as "high" because old technology is proposed.	The costs of underground cables have reduced in recent years, but it remains significantly more expensive to build underground cables than overhead lines. These costs would be passed on to the consumer and need to be balanced against National Grids statutory obligations. For example, there is an additional cost of undergrounding in the Stour Valley and Dedham Vale sections compared to using overhead lines. To use overhead lines throughout the route would cost less, compared to the cost of a fully undergrounded scheme.
D4	The understanding is that alternatives are very expensive without state support.	The cost of placing cables underground is considerably higher than building overhead lines and National Grid would need to justify this additional spend to Ofgem. National Grid's statutory duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers. Furthermore, the relevant NPS ⁵ makes clear that pylons are often the appropriate means of delivering high voltage transmission infrastructure, except in particularly sensitive landscapes where mitigation, e.g. underground cables, may be used instead.
		National Grid proposes underground cable within the Dedham Vale AONB and an area of the Stour Valley. Elsewhere along the route, the higher cost of 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. National Grid already invests part of its profits in maintaining and upgrading the electricity network. Over the coming years, however, National Grid has a huge amount of work to do, connecting new power sources and upgrading our ageing network and this will need extra funding from electricity bill-payers. Electricity consumers pay it back in their bills over some 30 years.
D5	The existing power cable should be placed underground.	The need case and funding for the project is to deliver the new network reinforcement needed, rather than to work on existing overhead lines other than where this is required to facilitate the proposed works. Therefore, while two stretches of underground cable are proposed through the Dedham Vale AONB and part of the Stour Valley as part of the new reinforcement, no stretches of existing line will be put underground (although approx.25 km of existing 132kV line and 2.5km of existing 400kV line will be removed). This is because undergrounding existing lines is not required to mitigate the

⁵ National Policy Statement for Electricity Networks Infrastructure (EN-5) – Department of Energy & Climate Change – July 2011

		impacts of the proposed new line, and therefore the substantial cost to bill payers, as well as the environmental impacts of construction, would not be justified.
		Although National Grid has a VIP project, which makes use of Ofgem funding to reduce the impact of existing transmission lines in AONBs and National Parks in England and Wales, this is a separate initiative and does not apply to the Bramford to Twinstead project.
D6	To only bury the cables in this area is odd as it will only benefit the visual outlook very few people.	The proposals do not include undergrounding in this stretch of the route, other than where it encompasses the easternmost part of Section E Dedham Vale to the west. The extent of undergrounding, within the Dedham Vale AONB and an area of the Stour Valley, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available and other factors which need to be taken into account, including National Grid's duties and obligations. In Section D Polstead, embedded measures include removal of the existing 132kV line and paralleling the new 400kV line with the existing one, which will reduce the scale of change in the landscape.
D7	The CSE compound for the transition from pylons to underground cables will be visible for a considerable distance.	The proposed location of the Dedham Vale East CSE compound has been moved further away from Dollops Wood, to a new position between two existing blocks of woodland at Millfield Wood. This new location was identified taking account of consultation feedback in the context of National Grid's various statutory duties. The existing woodland will be retained and will provide visual screening for the CSE compound. A landscape and visual assessment will be undertaken, to identify the likely significant effects on receptors and will identify areas for potential mitigation planting.
D8	The cables / power line should be underground in this area.	National Grid has carefully considered the feedback we received during earlier consultations, available alternatives, and other factors including National Grid's duties and obligations. These duties include balancing the need to be economic and efficient, for example by keeping costs down in the interests of consumers, plus meeting our duty to have regard to preserving amenity, including elements such as the natural environment, cultural heritage, landscape and visual quality. As part of its project development process, National Grid carefully considers whether the use of underground cables, rather than overhead lines, is appropriate in the context of national policy and National Grid's various statutory duties. National Grid proposes to use underground cable within the Dedham Vale AONB and an area of the Stour Valley. 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 Section D Polstead, measures include removal of the existing 132kV line and paralleling the new 400kV line with the existing one, which will reduce the scale of change in the landscape.
D9	Pylons are a blot on the landscape and they should be visible only when	The relevant NPS ⁶ makes clear that pylons are often the appropriate means of delivering high voltage transmission infrastructure, except in particularly sensitive landscapes where mitigation, e.g. underground cables, may be used instead. As part of its project development process, National Grid carefully considers whether the use of underground cables, rather than overhead lines, is an appropriate approach in the context of national policy and National Grid's various duties and

⁶ National Policy Statement for Electricity Networks Infrastructure (EN-5) – Department of Energy & Climate Change – July 2011

	undergrounding cannot be achieved.	obligations. These 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 current proposals are considered to strike the right balance.
D10	Information provided to identify an alternative location for the sealing end compound.	The location identified adjacent to Heath Road was considered, although was not taken forward. Instead, an alternative location for this CSE compound has been identified in a new position between two existing blocks of woodland at Millfield Wood. The existing woodland will be retained and will provide visual screening for the CSE compound.
D11	Underground through the Special Landscape Area (SLA) and AONB.	National Grid is proposing to underground through Section E: Dedham Vale AONB. There are a number of SLA within the study area and these have been considered during the Route Corridor Study and Connection Options Report. The relevant NPS ⁷ makes clear that pylons are often the appropriate means of delivering high voltage transmission infrastructure, except in particularly sensitive landscapes where mitigation, e.g. underground cables, may be used instead. Elsewhere along the route, the higher cost of 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 duties and obligations. In Section D Polstead, embedded measures include removal of the existing 132kV line and paralleling the new 400kV line with the existing one, which will reduce the scale of change in the landscape.
D12	Not convinced that power lines need to be underground here as impact of new line is lessened by existing cable running parallel.	The proposals do not include undergrounding in Section D Polstead, other than where it encompasses the easternmost part of Section E Dedham Vale to the west. The new 400kV overhead line generally follows the route of the existing 132kV overhead line for the majority of the route and consideration has also been given to paralleling the existing 400kV overhead line where practicable. This would reduce the magnitude of change and would result in lower landscape and visual impacts.

Matters raised regarding Section E Dedham Vale AONB

Table 3.4 - Summary of consultee comments on Section E Dedham Vale AONB and National Grid's response.

Ref	Summary of matters	National Grid's response
no	raised to feedback	
	received	

⁷ National Policy Statement for Electricity Networks Infrastructure (EN-5) – Department of Energy & Climate Change – July 2011

E1	These cables must be underground in this area.	National Grid is proposing underground cables though Section E Dedham Vale AONB. After considering feedback from the non-statutory consultation, National Grid intends to pursue the route to the north of Dollops Wood, which will avoid impacts on Dollops Wood.
E2	Pylons are unsightly, blighting the landscape and are a hazard to wildlife.	National Grid is proposing underground cables though Section E Dedham Vale AONB, along with the removal of the existing 132kV overhead line. This would result in one less line through Section E Elsewhere along the route, measures include removal of the existing 132kV line and paralleling the new 400kV line with the existing one, which will reduce the scale of change in the landscape. The EIA will include consideration of ecology and landscape and visual impacts.
E3	The section of route should not be going through the AONB.	The Project Development Options Report (National Grid, 2022) summarises the work undertaken during the Route Corridor Study, which considered alternative corridors for the project, including ones fully outside of the AONB. This work concluded that alternative corridors outside of the AONB would introduce overhead lines into areas where there is currently no transmission infrastructure, resulting in a greater scale of change. This view was supported by consultees at the time in the feedback on the Route Corridor Study.
		Following feedback during the 2021 non-statutory consultation, National Grid has back checked and reviewed the previous work and decisions regarding the route corridor selection, to see whether there were options to avoid Dedham Vale AONB. This work concluded that the decisions made during the previous consideration of route corridor, are robust and that the justification remains valid.
E4	Need to consider impact on the woodland area.	After considering feedback from the non-statutory consultation, National Grid intends to pursue the route to the north of Dollops Wood, which will avoid impacts on Dollops Wood.
E5	Need to consider impact on the wildlife.	Amongst National Grid's duties is to have regard to the desirability of (amongst other things) conserving flora and fauna, and to do what it reasonably can to mitigate any effects. Indeed, the ongoing process of route design takes account of ecology and, where possible, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. An 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.
E6	Preserve the integrity of the AONB in Dedham Vale and any potential extensions to the AONB.	National Grid proposes underground cable within the Dedham Vale AONB and parts of the Stour Valley. This reflects National Grid's duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality, and the relevant NPS ⁸ , which recognises that at particularly sensitive locations, undergrounding may be preferred to overhead lines.
		While National Grid has a duty to have regard to preserving amenity, at the time of assessment the Stour Valley is not designated as part of an AONB and cannot currently be a material consideration in our proposals. The decision to underground in the Dedham Vale AONB and part of the Stour Valley is also a result of ongoing EIA including landscape

⁸ National Policy Statement for Electricity Networks Infrastructure (EN-5) – Department of Energy & Climate Change – July 2011

		and visual assessment, extensive consultation and engagement, and dialogue with key stakeholders including Natural England and the AONB Partnership.
E7	Need to take the opportunity to eliminate the detrimental effects on the AONB of the existing grid line. This is simply done by widening the trenching for the undergrounding of the proposed second grid line. NG's official estimate for the life of pylons is 60 years. The current 400kV pylons were erected 60 years ago so they are due for renewal. Even more appropriate that existing cables should be undergrounded along with the new ones. The pre-war 132kV cables are being removed so the valley would be pristine.	The need case and funding for the project is to deliver the new network reinforcement needed, rather than to work on existing overhead lines other than where this is required to facilitate the proposed works. Therefore, while two stretches of underground cable are proposed through the Dedham Vale AONB and part of the Stour Valley as part of the new reinforcement, no stretches of existing line will be put underground (although approx. 25 km of existing 132kV line and 2.5km of existing 400kV line will be removed). This is because undergrounding existing lines is not required to mitigate the impacts of the proposed new line, and therefore the substantial cost to bill payers, as well as the environmental impacts of construction, would not be justified. Although National Grid has a VIP project, which makes use of Ofgem funding to reduce the impact of existing transmission lines in AONBs and National Parks in England and Wales, this is a separate initiative and does not apply to the Bramford to Twinstead project.
E8	The matter of AONB status for our proposed extension is now crucial.	a potential designation at this time, as it is too early in the process. Natural England also stated that any potential future designation would be their responsibility to determine.
		Natural England has advised the project that decisions should be based on the effects on the existing Dedham Vale AONB and its setting as currently designated (in line with the current NPS). Natural England also advised that it recognises that parts of the Stour Valley will have a role as part of the setting of the AONB.
		As the status of the request to extend the AONB remains undecided and based on discussions with Natural England, National Grid is not proposing to treat any area outside of the existing Dedham Vale AONB boundary as designated within its application for development consent but will be considering the setting of the AONB, including the contribution that the Stour Valley makes to this.
E9	The CSE compound for the transition from pylons to underground cables will be	National Grid has reviewed the locations of the CSE compounds against potential impacts on the setting of the AONB. This review took account of consultation feedback in the context of National Grid's various statutory duties. This study has

	visible for a considerable distance.	concluded that the proposed location of the CSE compounds are in locations that offer existing screening. Further details can be found in the Project Development Options Report (National Grid, 2022).
E10	Main problem is the crackling of the pylons in dreary weather rather than the visual impact. Can this be mitigated at all?	The proposed overhead line would be of the same design and configuration, and would operate in the same way, as the existing 400kV overhead line. 'Triple Araucaria' is the quietest conductor system that National Grid can use and it is not expected that there would be significant effects due to noise from the operation of the new overhead line. All fixtures and fittings associated with the overhead line would be sourced according to National Grid technical specifications which include requirements to ensure any noise due to the effect of the wind and any noise due to corona discharge is minimised through good design. This is ensured through testing before these are registered for use on the transmission system. Any noise from the existing overhead line would not change as a result of the project.
E11	Why Dedham Vale?	The Project Development Options Report (National Grid, 2022) summarises the work undertaken during the Route Corridor Study, which considered alternative corridors for the project, including ones fully outside of the AONB. This work concluded that alternative corridors outside of the AONB would introduce overhead lines into areas where there is currently no transmission infrastructure, resulting in a greater scale of change. This view was supported by consultees at the time in the feedback on the Route Corridor Study.
		Following feedback during the 2021 non-statutory consultation, National Grid has back checked and reviewed the previous work and decisions regarding the route corridor selection, to see whether there were options to avoid Dedham Vale AONB. This work concluded that the decisions made during the previous consideration of route corridor, are robust and that the justification remains valid.
E12	Hard to justify the cost of putting the new line underground for short distance and less visual impact.	The extent of undergrounding, within the Dedham Vale AONB and parts of the Stour Valley, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available and other factors which need to be taken into account, including National Grid's duties and obligations. That includes balancing the need to be economic and efficient and keep costs down, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality, as well as a statutory responsibility to conserve and enhance the AONB.
E13	Existing power cables through the area should be buried underground.	The need case and funding for the project is to deliver the new network reinforcement needed, rather than to work on existing overhead lines other than where this is required to facilitate the proposed works. Therefore, while two stretches of underground cable are proposed through the Dedham Vale AONB and part of the Stour Valley as part of the new reinforcement, no stretches of existing line will be put underground (although approx. 25 km of existing 132kV line and 2.5km of existing 400kV line will be removed). This is because undergrounding existing lines is not required to mitigate the impacts of the proposed new line, and therefore the substantial cost to bill payers, as well as the environmental impacts of construction, would not be justified.
		Although National Grid has a VIP project, which makes use of Ofgem funding to reduce the impact of existing transmission lines in AONBs and National Parks in England and Wales, this is a separate initiative and does not apply to the Bramford to Twinstead project.

E14	It would be nice if the route avoided intersectioning with Bushy Park Wood and maybe Crab's Garden too.	The underground cables at Dedham Vale AONB would run to the north of Bushy Park Wood (a County Wildlife Site). The draft Order Limits lie adjacent to Bushy Park Wood as this is an area that has been identified for potential habitat enhancement and net gain. The draft Order Limits lie to the north of Crabs Garden, which will not be affected by the project.
E15	Consider using alternatives to lattice pylons.	National Grid had previously looked at alternative designs for the pylons, and the decision not to take them forward for the Bramford to Twinstead project has been reviewed. Alternative designs include the new mono-pole 'T-pylon' which is being used on the Hinkley Connection Project, and lower-height lattice towers, which are bulkier versions of the regular lattice designs. As the new pylons would run alongside the existing 400 kV overhead line, using a similar styled would be preferable to introducing a new design into the landscape.
E16	Undergrounding the section between the two proposed underground sections (thereby saving the considerable cost of two CSE compounds) and extending the undergrounding eastwards, at least to take advantage of the quarry at Layham to hide the CSE compound. These changes would almost entirely eliminate the detrimental effects on the AONB of the proposed second grid line.	The extent of undergrounding, within the Dedham Vale AONB and parts of the Stour Valley, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available and other factors which need to be taken into account, including National Grid's duties and obligations. That includes balancing the need to be economic and efficient and keep costs down, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. The additional cost of undergrounding the section between the Dedham Vale AONB and the Stour Valley, including the cost saving from not building the two CSE compounds, is not justifiable in the context of National Grid's duties and obligations, and the current proposals are considered to strike the right balance.
E17	Keep roads clear of mud during construction.	A CTMP will be developed in consultation with the relevant Highway Authorities. This will identify good practice measures for contractors to reduce the impacts of construction vehicles on the local roads, such as through the provision of wheel washing facilities.
E18	Directional drilling to be used more widely.	Horizontal directional drilling (HDD) has distance limitations and as depth of installation increases, the cables need to be spaced wider apart to allow heat to dissipate. At Dollops Wood, where it was previously considered, topography and geology made HDD very challenging, and is part of the reason why the alternative underground cable route north around Dollops Wood is being taken forward. 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.

E19 Issue has been going on for too long, cost too much money, just get on with it. A project of this type, scale and importance is considered a NSIP which requires a Development Consent Order. As National Grid develop its proposals, it is right that local people have the opportunity to provide their views. The Planning Act requires NSIPs to undertake consultation in advance of making an application for development consent. National Grid will be consulting as part of the statutory consultation on the project and is anticipating submitting the application in winter 2022/23.

Matters raised regarding Section F Leavenheath and Assington

Table 3.5 - Summary of consultee comments on Section F Leavenheath and Assington and National Grid's response.

Ref no	Summary of matters raised to feedback received	National Grid's response
F1	Why is no underground power line proposed for this section and the section of route should be located underground?	Following feedback received at the non-statutory consultation, National grid has undertaken a back check and review of extending the undergrounding through Section F Leavenheath / Assington. Section F is not designated and therefore there is no policy justification for undergrounding in this section. In addition, there is the existing 400kV overhead line which the proposed 400kV overhead line would parallel through this section and the existing 132kV overhead line would be removed. This would result in a low magnitude of change from the baseline in this section. The additional cost of undergrounding Section F, includes the cost saving from not building the two CSE compounds. This is not considered to be justifiable in the context of National Grids duties and obligations, and the current proposals are considered to strike the right balance. National Grid has concluded than when taking into account all of their duties and the baseline environment in this section, that overhead lines should remain the preferred approach in Section F Leavenheath / Assington.
F2	Between Dorking Tye and Leavenheath, the new 400kV pylons must run along the exact route of the current 132 kV pylons.	Although the Draft Alignment follows the route of the existing 132kV overhead line very closely, various environmental, engineering and construction constraints may mean following the route exactly is not possible.
F3	Any overhead line must be no more than the existing eyesore / consider visual impact of pylons.	The existing 132kV overhead line comprises pylons of approx. 28m in height, whereas the new 400kV reinforcement will comprise pylons of approximately 50m in height, which is the same as the existing 400kV overhead line. An EIA is being undertaken, which includes a landscape and visual impact assessment. The assessment will inform the design and will identify the need for mitigation where possible.
F4	Replacement 400kv line, pylons and cables will be significantly larger and	The existing 132kV overhead line comprises steel lattice pylons of approximately 28 metres in height, whereas the new 400kv reinforcement will comprise steel lattice pylons of approximately 50 metres in height, which is the same as the existing 400kV overhead line. Although the 400kV pylons will be larger than the 132kV pylons, they will have similarities in

	greater mass than existing line which is removed.	terms of their steel lattice structure which is visually permeable as opposed to being a solid mass; this helps to reduce the perceptibility of the structures in views when seen against a backdrop of landform or vegetation and also when seen against the skyline.
F5	Why replace with underground when the impact of two lines is already there.	Section F Leavenheath/ Assington consists of an overhead line, which will replace the existing 132kV overhead line. The extent of undergrounding, within the Dedham Vale AONB and parts of the Stour Valley, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available and other factors which need to be taken into account, including National Grid's duties and obligations. That includes balancing the need to be economic and efficient and keep costs down, with a duty to have regard to preserving amenity, as well as a statutory responsibility to conserve and enhance the AONB.
F6	Keep roads clear of mud during construction.	A CTMP will be developed in consultation with the relevant Highway Authorities. This will identify good practice measures for contractors to reduce the impacts of construction vehicles on the local roads, such as through the provision of wheel washing facilities.
F7	More details are needed about this section.	Full details of the latest proposals, including draft Order Limits and a large degree of construction-phase, engineering, and environmental information is being made available as part of the statutory consultation.
F8	Proposal is inappropriate on the edge of an AONB.	The new 400kV overhead line generally follows the route of the existing 132kV overhead line for the majority of the route and consideration has also been given to paralleling the existing 400kV overhead line where practicable. This would reduce the magnitude of change and would result in lower landscape and visual impacts. Alternative routes would mean lines being introduced into areas where there is currently no transmission infrastructure, resulting in a greater scale of change.
F9	Take into consideration the proximity of wildlife corridor from Arger Fen thro' Assington Mill & Assington.	Designated sites are considered as part of the EIA, which will assess the effects on both designated and non-designated sites, such as Arger Fen SSSI and Assington Thicks County Wildlife Site. These sites were both avoided during the option appraisal and lie outside of the draft Order Limits. However, the EIA will also consider the general habitats and connectivity between sites. This section of the route would be overhead line, which can span across habitat features such as the woodland to the north of Mill Farm. The ES will present the results of the assessment and any mitigation required to offset likely significant effects.
F10	In its current form, the proposal would have a significant and material effect on the people and landscape of the village of Assington.	The EIA includes a landscape and visual assessment which will consider the effects of the project on people and the landscape of the study area, including Assington. The assessment will inform design and will identify the need for additional mitigation to reduce any likely significant effects.

F11	Extremely concerned about the proposed development and its potential impact on property / garden.	National Grid acknowledges that any proposed new work may cause concern to landowners. Diminution in 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. The Compulsory Purchase Code allows for a claim of compensation for the loss that you 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.
F12	No details of costs provided for underground vs overhead.	There is an additional cost of undergrounding in the Stour Valley compared to using overhead lines, and the same is true for undergrounding the Dedham Vale. To use overhead lines throughout the route would cost less than the cost of a fully undergrounded scheme. The additional cost of undergrounding the section between the Dedham Vale AONB and the Stour Valley (including a cost saving from not building the two cable sealing end compounds) is not considered to be justifiable in the context of National Grids duties and obligations. The current proposals are considered to strike the right balance.
F13	More details of CSE compound would be helpful size, height and any proposed natural shielding.	The height of any gantries will be around 16m. The land area for the CSE compound is expected to be around 85m x 50m and surrounded by security fencing. The locations of the CSE compounds have been informed by an understanding of topography and the potential for natural screening. The proposals will include embedded planting around the CSE compounds. In addition, the EIA includes assessment of landscape and visual impacts which will identify the need for any additional mitigation. Further details of the latest proposals, including the CSE compounds is being made available as part of the future statutory consultation.
F14	Questionable need for a large visually intrusive sealing-end station at Dorking Tye.	A number of potential locations were considered for the CSE compound. This location was chosen partly as it benefits from existing screening through the existing topography and the woodland to the south. In addition embedded planting is proposed around the CSE compound to further screen the site from surrounding receptors. The EIA will include a landscape and visual assessment which will assess the effects of the project, including the CSE compound, to see whether any additional mitigation is required.

Matters raised regarding Section G Stour Valley

Table 3.6 - Summary of consultee comments on Section G Stour Valley and National Grid's response.

Ref no	Summary of matters raised to feedback received	National Grid's response
G1	Concerned about the impact of overhead powerlines on	Through the majority of the Stour Valley, underground cable is proposed rather than overhead line, although whether overhead line or underground cable is proposed, amongst National Grid's duties is to have regard to the desirability of (amongst other things) conserving flora and fauna, and to do what it reasonably can to mitigate any effects. Indeed, the ongoing process of route design takes account of ecology and, where possible, seeks to reduce impacts on areas of

	wildlife and on flora and fauna in the Stour Valley.	ecological sensitivity, through avoidance or mitigation. An 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.
G2	Cables should be underground.	Underground cable is proposed in Section G between the Stour Valley East CSE compound to the east of St Edmunds Hill, and the Stour Valley West CSE compound off Henny Back Road. The extent of undergrounding, including in the area of the Stour Valley, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available, and other factors which need to be taken into account, including the role of parts of the Stour valley as part of the setting of the Dedham Vale AONB, the relevant NPS, and National Grid's duties. This includes National Grid's duties and obligations, such as balancing the need to be economic and efficient and keeping costs down, while also having regard to preserving amenity.
G3	Concerned about undergrounding works affecting well water supply.	The project will not affect water supply. The designs are progressed in the context of any other existing utilities. The Preliminary Environmental Information (PEI) Report includes a summary of the assessment on the water environment, and concludes that there would be no significant effects on water resources.
G4	Land immediately around Pylon 004 has numerous varieties of grasses as well as wildlife such as bees, hares and birds.	Amongst National Grid's duties is to have regard to the desirability of (amongst other things) conserving flora and fauna, and to do what it reasonably can to mitigate any effects. A suite of ecological surveys is currently being undertaken, feeding into the ongoing process of EIA to understand the sensitivity of the existing environment. The EIA will identify effects and mitigation, and National Grid is working closely with the relevant statutory bodies, for example Natural England.
G5	It is obvious that the present 132kV line to the south of Daws Hall is far less overbearing than would be an overground 400kV line. Further, it seems inevitable to us that a 400kV line would be constructed to the south of the present 132kV route. The proposal involves much bigger pylons and cables, significantly closer to the church.	Underground cable is proposed in Section G between the Stour Valley East CSE compound to the east of St Edmunds Hill, and the Stour Valley West CSE compound off Henny Back Road. Accordingly, the proposals comprise the net loss of one overhead line past the Holy Innocents Church. The EIA will include a landscape and visual assessment which will assess the effects of the project, including on the listed church, to see whether any additional mitigation is required.
G6	The present proposals, on which NG are consulting, include two lengths of undergrounding: one through the existing AONB in the parish of Polstead; the second through the Stour	At this time, Dedham Vale AONB has not been extended and there is no defined boundary of what any future extension (if determined) would look like. Natural England will not comment on any potential future designation or the boundary of such a potential designation at this time, as it is too early in the process. Natural England also stated that any potential future designation would be their responsibility to determine.

valley, in recognition of the proposal to extend the AONB westward. While these are the proposals on which NG is consulting, the NG representatives have been dropping hints that the second length is in jeopardy, on the grounds that the AONB extension is not certain.	Natural England has advised the project that decisions should be based on the effects on the existing Dedham Vale AONB and its setting as currently designated (in line with the current NPS). Natural England also advised that it recognises that parts of the Stour Valley will have a role as part of the setting of the AONB. As the status of the request to extend the AONB remains undecided and based on discussions with Natural England, National Grid is not proposing to treat any area outside of the existing Dedham Vale AONB boundary as designated within its application for development consent but will be considering the setting of the AONB, including the contribution that the Stour Valley makes to this.
Siting of the CSE compound out of visual contact with Henny Back Road in the sandpit sounds like a good idea.	Following feedback received during the non-statutory consultation, the proposed location of the Stour Valley West CSE compound has been moved further south, to the southern side of Henny Back Road.
National Grid is obliged to have regard to the effect of a proposal on areas that provide a complementary setting to an AONB. That plainly applies to the part of the Stour Valley presently being considered as an AONB extension.	National Grid has considered the setting of Dedham Vale AONB as part of the considerations for which sections to underground on the project. This has been a factor in the decision to underground part of Section G Stour Valley, which although undesignated, is considered to form part of the setting of the AONB. The extent of undergrounding, including an area of the Stour Valley and the Dedham Vale AONB, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available, and other factors which need to be taken into account, including planning policy and National Grid's duties and obligations. That includes balancing the need to be economic and efficient and keep costs down, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality.
A far more extensive, single section of undergrounding should be delivered. The proposed simplistic approach of undergrounding short divorced sections fails to take into account the impact of the scheme on the wider landscape in addition to the setting and views from and towards the AONB.	Following feedback received at the non-statutory consultation, National grid has undertaken a back check and review of extending the undergrounding through Section F Leavenheath / Assington. Section F is not designated and therefore there is no policy justification for undergrounding in this section. In addition, there is the existing 400kV overhead line which the proposed 400kV overhead line would parallel through this section and the existing 132kV overhead line would be removed. An EIA will be undertaken to understand the effects of the overhead line on the setting of the AONB bearing in mind both the introduction of the 400kV overhead line into the landscape and removal of the existing 132kV overhead line. The additional cost of undergrounding Section F (including the cost saving from not building the two CSE compounds) is not considered to be justifiable in the context of National Grids duties and obligations. The current proposals are considered to strike the right balance. National Grid has concluded than when taking into account all of their duties and the baseline environment in this section, that overhead lines should remain the preferred approach in Section F Leavenheath / Assington.
	 proposal to extend the AONB westward. While these are the proposals on which NG is consulting, the NG representatives have been dropping hints that the second length is in jeopardy, on the grounds that the AONB extension is not certain. Siting of the CSE compound out of visual contact with Henny Back Road in the sandpit sounds like a good idea. National Grid is obliged to have regard to the effect of a proposal on areas that provide a complementary setting to an AONB. That plainly applies to the part of the Stour Valley presently being considered as an AONB extension. A far more extensive, single section of undergrounding should be delivered. The proposed simplistic approach of undergrounding short divorced sections fails to take into account the impact of the scheme on the wider landscape in addition to the setting and views from

G10	The Stour Valley has a big open vista giving views over long distances, so to reduce the overhead lines is a good thing!	Comment noted.
G11	Area is valuable - even underground cabling will cause considerable harm and disturbance.	An EIA is being undertaken, which includes assessment of impacts during construction of the underground cables. This will identify the likely effects of the project on the existing environment and the need for any additional mitigation.
G12	Complete the reconductoring before starting the new work (e.g. Twinstead to Pelham).	Some of the wider National Grid works in the area, for example proposed uprating of existing circuits, is due to be completed in the next few years. However, the other sections will be updated during the Bramford to Twinstead construction programme, using the same outage season(s). This will shorten the duration that National Grid is working in the area.
G13	Pylons with conductors in fours on one side and threes on the other, with different insulators, look very scruffy.	The route will use lattice pylon towers of a very similar design to those used in the existing 400kV overhead line that will run parallel, to provide consistency.
G14	Lamarsh, Alphamstone and the Hennys have over 70 listed buildings within sight of pylons. Additional large pylons, some very close to those listed buildings will damage the historic value, scenic views and serenity.	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 EIA includes an assessment of the effects of the project on the historic environment, including listed buildings. The assessment will identify the potential for significant effects on the setting of listed buildings and whether any additional mitigation is required to offset likely significant effects.
G15	No evidence that National Grid has considered the impact of overhead pylons and lines on the views of the valley floor and church from the valley escarpment on the western side of the church.	The Grade I Listed church at Lamarsh has and is being considered as part of the consideration of the proposals (and is marked on the plans that accompanied the non-statutory consultation in spring 2021). The PEI Report includes a preliminary assessment of the likely effects on heritage and the setting of listed buildings and further details will be provided in the full assessment accompanying the application for development consent.
G16	The consultation form is	Given how long it has been since National Grid previously presented its proposals, and as the proposals will be new to

misleading as suggest there some, views were invited throughout the spring 2021 consultation on whether the right balance is being struck in the

	is a settled proposal for undergrounding through the Stour Valley, somewhere between the church and Daws Hall. However, in the separate Project Development Options Report (not copied to residents) it is made clear that undergrounding is an open question, depending on responses see paragraph 6.2.5.	context of National Grid's various duties. Views were invited on this for the entirety of the proposals along the whole route of the reinforcement, including on the extent of proposed undergrounding. Following on from the feedback received during the non-statutory consultation, National Grid can confirm that it intends to pursue an underground cable option through the most sensitive parts of the Stour Valley.
G17	Failure to consult with English Heritage about the impact of the proposals on Lamarsh Church before they were brought to their current state as a preferred option.	English Heritage was consulted on the project prior to the project pause. They provided feedback during the Route Corridor Study and on the Connection Options Report and their views were taken into account when developing the Indicative Alignment. Since the project has recommenced, National Grid has restarted engaging with what is now called Historic England and will continue to work with Historic England regarding the heritage implications of the proposals, and any appropriate mitigation.
G18	No evidence that any attention has yet been given to Lamarsh Church. Its listing status is the highest in the country (Grade I), making it of national importance. This is a very serious oversight.	The Grade I Listed church at Lamarsh has and is being considered as part of the consideration of the proposals (and is marked on the plans that accompanied the non-statutory consultation in spring 2021). The PEI Report includes a preliminary assessment of the likely effects on heritage and the setting of listed buildings.
G19	Underground cables would not get damaged by bad weather (more resilient).	Overhead lines are designed to remain generally 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. This is one of the reasons that the majority of the existing NGET network is made up of overhead lines which are very reliable forms of power distribution.
G20	Bury the existing lines / underground existing power lines through this area.	The need case and funding for the project is to deliver the new network reinforcement needed, rather than to work on existing overhead lines (other than where this is required to facilitate the project). Therefore, while two stretches of underground cable are proposed through the Dedham Vale AONB and part of the Stour Valley as part of the new reinforcement, no stretches of existing line will be put underground (although approx.25 km of existing 132kV line and 2.5km of existing 400kV line will be removed). This is because undergrounding existing lines is not required to mitigate the

		impacts of the proposed new line, and therefore the substantial cost to bill payers, as well as the environmental impacts of construction, would not be justified.
		Although National Grid has a VIP project, which makes use of Ofgem funding to reduce the impact of existing transmission lines in AONBs and National Parks in England and Wales, this is a separate initiative and does not apply to the Bramford to Twinstead project.
G21	Concern as the proposed corridor appears to cross a property's garden.	As a general principle, National Grid seeks to avoid routing overhead lines close to residential areas as far as possible, in accordance with the 'Holford Rules'. Due to their linear nature however, and the other technical and environmental factors which influence the design process, overhead lines do need to pass close to residential properties in some instances.
		For landowners, National Grid acknowledges that any proposed new work may cause concern. Diminution in 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. 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 the property ownership being worth less as a direct result of the works.
G22	Access to the proposed undergrounding site near the historically important Sawyers Farm will need careful examination and agreement, since the current infrastructure is unable to support heavy vehicles. We would like to see details of the proposals in this regard, mindful that an alternate site nearer an existing road may be a better solution.	The Project Development Options Report presented at the non-statutory consultation (National Grid, 2021) included a summary of the alternative options considered at the Stour Valley East CSE compound as part of a back check and review undertaken in 2020. This concluded that the current location is screened both through existing topography and also existing vegetation that the effects on the setting of the listed building are likely to be limited. Sawyers Farm listed building has and is being considered as part of the consideration of the proposals. The PEI Report includes a preliminary assessment of the likely effects on heritage and the setting of listed buildings.
G23	Why can't the new line follow the route of the existing lower voltage line?	The new 400kV overhead line generally follows the route of the existing 132kV overhead line for the majority of the route and consideration has also been given to paralleling the existing 400kV overhead line where practicable. In Section G Stour Valley the alignment of the underground cables diverts away from the existing 132kV overhead line due to existing site constraints such as woodland areas and the proximity to Sparrows Farm (a listed building).
		Following the relocation of Stour Valley West CSE, the project team have identified a new cable route through the Stour Valley, which provides an efficient route between Henny Road and the Stour Valley West CSE. The proposed relocated Stour Valley West CSE compound and the alternative route would offer benefits compared to the Indicative Alignment and have therefore been taken forward as part of the Draft Alignment. National Grid is undertaking further engineering and environmental surveys of this route to inform the route refinement and potential mitigation going forward.

G24	No risk to there being huge solar power farms in future?	The project is needed to carry cleaner greener energy from offshore wind, new nuclear and interconnectors with other countries across the North Sea. The new GSP substation at Butler's Wood would be designed solely to provide supplies to the local UKPN distribution network.
		Should any separate applications be brought forward by developers in the future, be these for solar farms or anything else, these would be considered on their own merit by the appropriate determining authority. Depending on the type of application, the determining authority is either the local planning authority (Braintree District Council or Babergh & Mid-Suffolk District Councils) or the Secretary of State (SoS). It would be the responsibility of the determining authorities to consider any such application, and to determine it in accordance with national and local planning policy and other material considerations.
G25	Concern regarding future income for the Church.	It is not anticipated that the development of the proposals will affect the income of churches in the area.
G26	The additional immediate capital costs for undergrounding will be far exceeded by the increase in related revenue and in the value of the beauty of the countryside to many generations in the future.	There is an additional cost of undergrounding in the Stour Valley compared to using overhead lines, and the same is true for undergrounding the Dedham Vale. To use overhead lines throughout the route would cost less than the cost of a fully undergrounded scheme. The additional cost of undergrounding the section between the Dedham Vale AONB and the Stour Valley (including a cost saving from not building the two cable sealing end compounds) is not considered to be justifiable in the context of National Grids duties and obligations. The current proposals are considered to strike the right balance. The cost of developing projects, including the Bramford to Twinstead project, is ultimately passed to the bill-paying consumers of electricity. Amongst National Grid's duties and obligations is the requirement to be economic and efficient, keeping costs down in the interests of consumers. National Grid is also regulated by Ofgem, a non-ministerial government department and an independent National Regulatory Authority, whose role is to protect consumers through delivering a greener, fairer, energy system. Therefore, as costs of projects are passed on to consumers, National Grid must strike the right balance and ensure that the costs to consumers are managed.
G27	Surely sea cabling going into London using existing networks would be vastly superior outcome?	Offshore HVDC projects are typically very costly and unlikely to deliver the same level of network capability when compared with equivalent onshore projects, so the benefits and costs of these types of projects needs to be weighed up against the impacts of onshore construction. More generally, the Government is currently conducting an OTNR, examining how power from offshore generation and interconnectors can come onshore in a more coordinated way. A large number of potential strategic options were considered for the project, including offshore HVDC cables. The conclusion was that the use of offshore cables for this reinforcement would not fully address the needs case, namely the capacity constraints between Bramford and Twinstead, or comply with the relevant safety and quality of supply standards. This means the project is required regardless of offshore coordination.
G28	Why the Stour Valley?	The new line needs to tie in with the existing 400kV overhead line within the Stour Valley, before continuing to Pelham. The route corridor more broadly was chosen because it would represent the least scale of change to the existing environment, as it allows the new route to largely parallel the existing 400kV line, and to replace the existing 132kV line which is to be

removed. Alternative routes would mean lines being introduced into areas where there is currently no transmission infrastructure, resulting in a greater scale of change.

Matters raised regarding the GSP Substation

Table 3.7 - Summary of consultee comments on the GSP Substation and National Grid's response.

Ref Summary of matters raised to National Grid's regard had to matters raised no feedback received

BW1	The consultation did not provide sufficient detail on the location and the NOA does not make specific reference to the proposed location.	The pre-application design process is an iterative one, and National Grid did not have detailed design information available at the point at which non-statutory consultation was undertaken. The design continues to be developed and refined in order to take account of feedback received in the non-statutory engagement as well as further engagement with UK Power Networks. The consultation process is designed to obtain early feedback. Details of the latest proposals, including details of the proposed GSP substation, are presented within the statutory consultation materials of particular note is the project description in Chapter 4 of the Preliminary Environmental Information Report and also on the General Arrangement Plans.
BW2	Very little detail was provided on the GSP substation and the CSE compound. Further surveys must be conducted to assess any physical impacts upon surrounding properties.	The 2021 non-statutory consultation re-introduced the proposals. Further details about what is proposed is presented in statutory consultation material including the project description in Chapter 4 of the PEI Report and also on the General Arrangement Plans. The PEI Report provides details of the survey work undertaken to date and further surveys proposed.
BW3	Concerned about the impact on wildlife and environment in the woodland.	Amongst National Grid's duties is to have regard to the desirability of (amongst other things) conserving flora and fauna, and to do what it reasonably can to mitigate any effects. A suite of ecological surveys is currently being undertaken on the project, which inform the design and approach to mitigation. National Grid is working closely with the relevant statutory bodies, including Natural England.
BW4	The current proposed location is not supported and the site near	National Grid previously considered the proposed location at Hedingham Steam Railway Museum. This location was not progressed, as the proposed location between Butler's Wood and Waldegrave Wood was preferred due

	Hedingham Steam Railway Museum may be a much better alternative.	to it having the lowest impact on the landscape character of the area, visual amenity, ecology and the historic environment, as well as being the least constrained from a technical perspective.
BW5	Concerned about location of substation next to the A131 (visual impact).	National Grid has previously considered a number of potential locations for the GSP substation. The proposed location at Butler's Wood was the least environmentally constrained option, partly due to it having the lowest impact on the landscape character of the area, visual amenity, and the historic environment. The EIA will include a landscape and visual assessment, which will assess the impacts of the project on views and identify any required mitigation.
BW6	Is the substation needed?	The project involves removing the existing 132kV overhead line between Burstall Bridge and Twinstead and generally using this alignment for the new 400kV overhead line. The 132KV overhead line is owned by UK Power Networks (UKPN), the distribution network operator (DNO) in this area. The GSP substation is needed to connect the remaining 132kV overhead line into the network to prevent a disruption in local power supply when the 132kV line is removed as part of the project.

Other matters raised during the non-statutory consultation

 Table 3.8 - Other matters raised during the non-statutory consultation.

Ref no	Summary of matters raised to feedback received	National Grid's response
X1	The power line should be underground for the whole route / bury the cables underground.	The relevant NPS makes clear that pylons are often the appropriate means of delivering high voltage transmission infrastructure, except in particularly sensitive landscapes where mitigation (e.g. underground cables) may be used instead. In Section AB Bramford to Hintlesham, underground cables are not considered to be the appropriate technology as the area is not designated. Embedded measures include removing the existing 132kV line and paralleling the new 400kV line with the existing one, which will reduce the scale of change of the landscape.
		National Grid has carefully considered feedback we have received during earlier consultations, the alternatives available, and other factors including National Grid's own duties and obligations. These duties include balancing economy and efficiency, keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity (i.e. the natural environment, cultural heritage, landscape and visual quality).
		National Grid proposes to use underground cable within the Dedham Vale AONB and parts of the Stour Valley. Elsewhere along the route, the higher cost of cables to bill-paying consumers, and the environmental implications of installing and

		maintaining them, mean that underground cables are not considered justifiable in the context of national policy or National Grid's statutory duties.
X2	Underground wires on this route would be a mistake.	The extent of undergrounding, including an area of the Stour Valley and the Dedham Vale AONB, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available, and other factors which need to be taken into account, including National Grid's duties and obligations. That includes balancing the need to be economic and efficient and keep costs down, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality.
Х3	Being outside the AONB boundary does not mean permission to destroy the landscape. Areas outside of the AONB should be afforded the same protection. Underground the new line throughout the Dedham Vale and Stour Valley. Greater length of undergrounding should be committed to which encompasses the whole of the project area.	The relevant NPS ⁹ makes clear that pylons are often the appropriate means of delivering high voltage transmission infrastructure, except in particularly sensitive landscapes where mitigation, e.g. underground cables, may be used instead. National Grid has carefully considered the feedback received during earlier consultations, the alternatives available, and other factors including National Grid's 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 Grid proposes underground cable within the Dedham Vale AONB and an area of the Stour Valley. Elsewhere along the route, the higher cost of 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.
X4	Proposal is welcomed to underground sections of the new 400kV line where it is considered that the detrimental impacts of the upgraded overhead line warrant this approach, a far more extensive, single section of undergrounding should be delivered.	The extent of undergrounding, within the Dedham Vale AONB and an area of the Stour Valley, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available and other factors which need to be taken into account, including National Grid's duties and obligations. That includes balancing the need to be economic and efficient and keep costs down, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. The cost of a fully undergrounded scheme is not considered to be justifiable in the context of National Grids duties and obligations. The current proposals are considered to strike the right balance.
X5	Protecting the environment and wildlife habitat is the priority / environmental	Amongst National Grid's duties is to have regard to the desirability of (amongst other things) conserving flora and fauna, and to do what it reasonably can to mitigate any effects. A suite of ecological surveys is currently being undertaken,

⁹ National Policy Statement for Electricity Networks Infrastructure (EN-5) – Department of Energy & Climate Change – July 2011

impacts and ecology impacts	feeding into the ongoing process of EIA.	The EIA will identify potential significant effects and potential mitigation. National
need to be assessed.	Grid is working closely with the relevant	statutory bodies, including Natural England.

X6 Criticism of small energy The Bramford to Twinstead project is being progressed by NGET to meet National Grid's statutory responsibility to develop schemes (e.g. solar farms) and maintain an efficient, co-ordinated and economical system of electricity transmission in England and Wales. This e.g. not having project does not involve any proposals for energy generation. environmental consideration of the impact of these. No Should any separate applications be brought forward in the future by other developers, these would be considered on their National Grid control or own merit by the appropriate determining authority. Depending on the type of application, the determining authority is consideration over these either the local planning authority (Braintree District Council or Babergh & Mid-Suffolk District Council) or the Secretary of State (SoS). It would be the responsibility of the determining authorities to consider any such application, and to determine being built. it in accordance with national and local planning policy and other material considerations. The EIA being undertaken on the Bramford to Twinstead project includes an assessment of the cumulative effects arising from other proposed developments. Χ7 This appears to be a catalyst The reinforcement between Bramford and Twinstead is one of a number of network reinforcements needed to deliver 40 for additional power lines, GW of offshore wind by 2030. Additional onshore reinforcements identified in the region in the NOA (National Grid, 2021), are needed to deliver on the Government's increased target of 40 GW of offshore wind connected by 2030. Stakeholders plus a hydrogen production will be consulted on proposals to reinforce other parts of the network as and when they progress. plant for the Felixstowe Port to be attached to the Bramford Substation. There The EIA being undertaken on the Bramford to Twinstead project includes an assessment of the cumulative effects arising is no consideration of the from other proposed developments. cumulative impact of this. X8 Concerned about noise from The proposed overhead line would be of the same design and configuration, and would operate in the same way, as the pylons / substations existing 400kV overhead line. The noise behaviour of the new overhead line, in drv, wet or damp weather, would be the (including in damp / rainy same as the existing 400kV overhead line. 'Triple Araucaria' is the quietest conductor system that National Grid can use, and we do not expect there would be significant effects due to noise from the operation of the new overhead line. All weather). fixtures and fittings associated with the overhead line would be sourced according to National Grid technical specifications which include requirements to make sure any noise due to the effect of the wind and any noise due to corona discharge is minimised through good design. This is ensured through testing before these are registered for use on the transmission system. Any noise from the existing overhead line would not change as a result of the project. Χ9 The EIA will identify potential significant effects that could arise from the project and will identify potential mitigation, which Ensure that conservation / will include visual screening. The Environmental Statement will include a list of mitigation proposed and planting proposals mitigation plans are in place (including ensuring visual will be described within the Landscape and Ecological Management Plan submitted with the application for development consent. National Grid will liaise with other developers and stakeholders in the area, including Anglian Water, as part of screening of infrastructure) and liaise with Anglia Water / assessing the cumulative effects. The cumulative effects assessment will identify whether additional mitigation is required. mitigate flooding impacts.

X10	The proposed route runs through a variety of habitats, including some listed as UK and Suffolk Priority habitat. The Natural Environment and Rural Communities (NERC) Act 2006 imposes an obligation on all public bodies, to have regard to the conservation of biodiversity, particularly of those species and habitats identified as being of principal importance, which are those listed on Section 41 of this Act.	National Grid has had regard to the NERC Act 2006, along with other relevant legislation, in the development of the Bramford to Twinstead project. Amongst National Grid's duties is to have regard to the desirability of (amongst other things) conserving flora and fauna, and to do what it reasonably can to mitigate any effects. The routing and siting of the proposals has avoided statutory designated sites where practicable. A suite of ecological surveys is currently being undertaken, feeding into the EIA, which will identify the potential significant effects and potential mitigation. National Grid is working closely with the relevant statutory bodies, including Natural England.
X11	The proposals include undergrounding of cables in the Dedham Vale AONB and also the Stour Valley. Both are proposed undergrounding because of their landscape importance, but their ecological value is also intrinsically linked to their landscape characteristics and both these areas are of particularly high biodiversity interest.	Amongst National Grid's duties is to have regard to the desirability of (amongst other things) conserving flora and fauna, and to do what it reasonably can to mitigate any effects. This influenced the routing and siting of the proposed cable routes, which seek to avoid sensitive areas in the first instance. The proposed cable routes continue to respond to sensitivities, including ecological. A suite of ecological surveys is currently being undertaken, feeding into the EIA, which will identify the potential significant effects and potential mitigation. National Grid is working closely with the relevant statutory bodies, including Natural England.
X12	The proposed route appears to pass through four County Wildlife Sites. In Essex, the impacts of the route upon four Local Wildlife Sites as well as an Essex Wildlife Trust Reserve. Such sites, described as Locally Designated Sites in the National Planning Policy	Amongst National Grid's duties is to have regard to the desirability of (amongst other things) conserving flora and fauna, and to do what it reasonably can to mitigate any effects. A suite of ecological surveys is currently being undertaken, feeding into the EIA, which will identify the potential significant effects and potential mitigation. National Grid is working closely with the relevant statutory bodies, including Natural England.

	Framework (NPPF), have a known county or regional importance for wildlife. The proposals will need to demonstrate that they do not result in any negative impacts upon these sites, nor result in the fragmentation of the wider ecological network, with mitigation measures proposed to ensure this.	
X13	In line with National Grid's own 'Biodiversity and Resilience of Ecosystems Duty Report 2019' the scheme should demonstrate a minimum 10% environmental net gain, including 10% biodiversity net gain. In line with industry guidance for net gain, it should be demonstrated that the entire scheme can achieve 10% gain, as well as individual phases. This must be applied for all works, including enabling works and both temporary and permanent habitat loss.	National Grid has committed to delivering 10% Biodiversity Net Gain (BNG) on this project. National Grid is working with environmental organisations and landowners to identify potential opportunities for delivering areas of habitat creation and improvement. Initial areas for BNG have been identified through a desk-based search and site visits. As further baseline data are collected, and initial discussions take place with consultees and landowners it is likely that there will be some refinement of these sites as the EIA and design process evolves. Final proposals will be included as part of the application for development consent. The Biodiversity Metric 3.0 (Natural England, 2021b) will be used to quantify the amount of BNG required and that will be delivered.
X14	The route appears to be partially within the Internal Drainage District of the East Suffolk Internal Drainage Board (IDB) and therefore the Board's Byelaws apply.	East Suffolk IDB is a statutory consultee and will be contacted through the development of the project to discuss any potential consents or permits that would be relevant to the project.

X15	Consultation should be suspended / delayed until proposed route for AENC/ATNC has been established and made public. Also delay consultation until the consultation on additional infrastructure changes to add additional capacity is done so they both be considered together.	Work on the new proposed ATNC and AENC projects (now known as East Anglia GREEN) are still at an early stage, and routing and siting has yet to be completed. At present however, these projects are anticipated to comprise a new 400kV double circuit connection from Norwich Main substation to Bramford substation, and a new 400kV double circuit connection from Bramford substation to Tilbury substation via a new connection substation in Tendring District. This early information is provided however in response to the queries raised in consultation feedback.
		Reinforcing the network between Bramford and Twinstead has been described by the System Operator as critical in all future energy scenarios. Network assessments show it is needed to deliver cleaner, greener electricity by 2028. Nationally significant projects like Bramford to Twinstead take a long time to deliver and National Grid must continue to develop the proposals as the reinforcement is urgently required. The emergence of new proposals is not a reason to suspend work on Bramford to Twinstead. The EIA being undertaken on the Bramford to Twinstead project will include an assessment of the cumulative effects arising from other proposed developments.
X16	Need to see full drawings of the proposal.	Feedback from the 2021 non-statutory consultation is being taken into account as National Grid develop detailed proposals. Full details of the latest proposals, including Order Limits and a large degree of construction-phase, engineering, and environmental information is available as part of the statutory consultation.
X17	Consultation should be stopped / delayed, to bring other options back to the table / consider other options.	The 2021 non-statutory consultation re-introduced the proposals following the project pause. National Grid has reviewed the decisions made previously, including a review of strategic options and has continue to consider the Draft Alignment as the best option to take forward. Further details about the option appraisal can be found in the Project Development Options Report (National Grid, 2022).
X18	Lack of transparency in decision not to proceed with SCD2 as an alternative to ATNC.	This consultation is about the reinforcement needed between Bramford and Twinstead. Proposals for ATNC (East Anglia GREEN) will be developed separately and subject to full consultation. Following the Prime Minister's Ten Point Plan and Energy White Paper raising the 2030 offshore wind target to 40 GW, the System Operator has needed to consider how the new target will be delivered in an efficient, coordinated and economical way. NGET owns, builds and maintains the transmission network in England and Wales and that is developing the proposals for the Bramford to Twinstead project. National Grid ESO is the Electricity System Operator (ESO) and manage the network, ensuring the right amount of energy is where it is needed. It is entirely separate from NGET. Every year National Grid ESO's identify and recommend major National Electricity Transmission System (NETS) reinforcements projects to meet the future network requirements. The System Operator's assessment, is that an onshore reinforcement will deliver significantly greater capability at much lower cost than SCD2.
X19	Information provided is poor - it is not easy to understand the route / lack of detail - more needed.	Full details of the latest proposals, including Order Limits and a large degree of construction-phase, engineering, and environmental information will be made available as part of the statutory consultation.

X20	Decision has been made that proposals will go ahead anyway / Just a box-ticking exercise.	It has been eight years since National Grid previously presented proposals for the reinforcement and it has been necessary to introduce the proposals to those who aren't previously familiar with them. As such National Grid has invited views through this consultation about whether the right balance is being struck regarding National Grid's various duties, and this has been done for the entirety of our proposals along the whole route of the reinforcement. The outcome of consultation is not pre-determined, and views expressed can and do make a difference to the development of the project proposals. Consultation is a legal requirement and forms an important part of how the development and design is progressed, National Grid is also required to have genuine regard to the consultation responses received and to demonstrate effective consultation. National Grid will take feedback into consideration into the continued development of the design, and further consultation is being held on the detailed proposals.
X21	Unable to view documents / maps on the webpage (maps not clear).	All consultation materials were available on the project website (https://nationalgrid.com/bramford-twinstead). A contact number and email were also available to help those who were unable to access / view the information and the team was available to assist with these enquiries. Details about the consultation and how to obtain printed copies of the consultation documents were available online and mailed out to over 3,000 properties within 1 km of the proposed route.
X22	Questions are poor and misleading. Members of the public do not have technical knowledge beyond what you have told them - not independent.	A strong response was received to the consultation, with over 330 completed feedback forms in addition to written responses. Nearly 60 % of respondents have indicated that they feel the consultation was good or very good. National Gird has made every attempt to make sure the consultation materials were easy to understand and accessible. National Grid is of the view that the consultation was effective and robust in order to inform consultees and seek their views on the proposals.
X23	Greater weight should be given to responses from people living in affected postcodes / local residents know the area best.	All views expressed in response to the consultation are being considered as National Grid continue to develop its detailed proposals.
X24	If you have to put in cabling, please situate it alongside road or rail links where infrastructure is present for ease of access and maintenance.	The current Draft Alignment has been developed using an iterative process of options appraisal at each stage of the project. This involves a balanced consideration of environmental, socio-economic, technical and cost factors, which – alongside consultation with landowners and the public – has informed decision making on the proposed cable routes. In many instances, the options appraisal process has not resulted in routing cables alongside roads or railways being considered the most appropriate approach in order to reduce disruption to infrastructure during construction. Permanent access routes for maintenance are not generally required on the project as the line is generally inspected by either air, foot or light vehicles such as a 4x4. Permanent access tracks are required to the CSE compounds and GSP substation and consideration of location and length of access route is considered as part of the options appraisal.

X25	Don't have enough information really about pylon designs, their location and any long-term issues with burying cables.	Full details of the latest proposals, including Order Limits and a large degree of construction-phase, engineering, and environmental information is being made available as part of the statutory consultation.
X26	National Grid deliberately not disclosing a potential 3rd pylon line: Attempting to deny local people the opportunity to consider the cumulative impacts upon the environment and their wellbeing.	Work on the new proposed East Anglia GREEN reinforcements is still at an early stage, and routing and siting has yet to be completed. At that stage there will be discussion with local authorities and others. As progress is made on these proposals there will be discussions with local authorities and other stakeholders, and it is anticipated that wider public consultation will be undertaken at appropriate times in 2022. At present however, these projects are anticipated to comprise a new 400kV double circuit connection from Norwich Main substation to Bramford substation, and a new 400kV double circuit connection from Norwich Main substation via a new connection substation in Tendring District.
X27	The views of those living in the area will not be listened to.	All views expressed in response to the consultation are being considered as National Grid continues to develop its detailed proposals. Feedback from the 2021 non-statutory consultation has been taken into account in developing the Draft Alignment, as documented in this document. Feedback from the statutory consultation will be used to inform the final alignment presented in the application for development consent.
X28	The community needs to know about future proposed reinforcement between Bramford and Twinstead.	The 2021 non-statutory consultation provided residents and local communities with information about the project. National Grid is therefore taking steps to make sure that the community is made aware of the proposals and has the opportunity to provide their feedback. Work on the new proposed East Anglia GREEN reinforcements is still at an early stage, and routing and siting has yet to be completed. When sufficient progress has been made on these proposals there will be discussion with local authorities and other stakeholders, and it is anticipated that wider public consultation will be undertaken at appropriate times in 2022. At present however, these projects are anticipated to comprise a new 400kV double circuit connection from Norwich Main substation to Bramford substation, and a new 400kV double circuit connection from Bramford substation to Tilbury substation via a new connection substation in Tendring District.
		route. This assumption is subject to the outcome of the ongoing routeing and siting work which is anticipated to conclude in Spring 2022.
X29	Sent a reply to the previous proposals consulted on, this appears to be a departure from previously agreed plans.	The Indicative Alignment presented at the 2021 non-statutory consultation is broadly similar to the alignment presented within the Connections Options Report in 2012. Given that the project has been on pause for a number of years, and as the proposals will be new to some people, the non-statutory consultation sought to seek current views on the proposals as developed prior to project pause.

X30	Consultation documents fail to mention that additional routing is going to be necessary.	The Indicative Alignment presented at the 2021 non-statutory consultation is broadly similar to the alignment presented within the Connections Options Report in 2012. Given that the project has been on pause for a number of years, and as the proposals will be new to some people, the non-statutory consultation sought to seek current views on the proposals as developed prior to project pause. National Grid will review and response to the feedback received; this could involve changes to the project (including potential re-routing) in response to the feedback received. There could also be changes to the project as a result of the ongoing environmental and engineering surveys and as part of the Environmental Impact Assessment process.
X31	Social media / online consultation is not the right way to raise awareness as it excludes older people.	As set out in the Consultation Strategy, a blend of traditional and digital approaches were used to ensure the widest possible reach to all sectors of the local community in line with Government guidelines relating to the control of the spread of coronavirus. Paper copies of consultation materials, including newsletters, were issued to more than 3,164 residential and business addresses within 1km of the proposals, together will other identified stakeholders including elected representatives and representatives of third-party and community interest groups. This included details of how to get involved in the consultation, including through telephone surgeries and call backs and how to request paper copies of the project material. During the consultation, people could submit feedback by speaking with members of the project team via a number of channels, including a freephone information line (0808 196 1515 and via the freepost address (B T REINFORCEMENT). A strong response was received to the consultation and nearly 60% of respondents have indicated that they felt our consultation was good or very good. A total of 537 feedback submissions were received from community stakeholders and consultees, along with members of the local community. This comprised of 243 paper feedback forms, 141 online feedback forms, 139 emails sent to the project inbox and 14 letters.
		The feedback received was from respondents ranging from the 18-24 years category to the 85+ category. The majority of responses were received from those in the 65-74 age group (25.3%), and the 55-64 age group (24.3%). The next most represented age group was 45-54, which accounted for 17.4% of respondents. 13.8% of respondents were 35-44 years old and 11.7% were 75-84. At the lower end, 4.2% of respondents were within the 25-34 age groups, 2.3% were from the 85+ age group, and just 1.1% were from the 18-24 age group. This sample of respondents is representative of the wider community when looking at 2019 data regarding the age makeup of Parishes along the Bramford to Twinstead route.
		Subject to ensuring full and ongoing compliance with all national and local legislative requirements and guidelines (including those introduced in response to the COVID-19 pandemic), National Grid plan to hold a number of face-to-face events, in the form of public exhibitions and drop-in sessions for the statutory consultation and these will be widely promoted.
X32	This is merely a new presentation of an earlier proposal.	The current proposals do largely reflect the 2013 proposals. The purpose of the 2021 non-statutory consultation was to reintroduce the project to people, particularly those who may be new to the area and were not involved in the previous consultation events. There were some changes and new opinions sought on the Indicative Alignment following the back check and review undertaken following recommencement of the project. Feedback from the 2021 non-statutory consultation and from the more detailed statutory consultation will feed into the project decisions.
X33	The consultation should have been delayed due to	As a result of the coronavirus pandemic, digital methods for consultation were used to enable the public consultation to be held in line with government advice on maintaining social distancing and avoiding face-to-face meetings. to make the public

	restrictions on movement (i.e. Covid 19) / should not have taken place during pandemic	consultation as accessible as possible, National Grid used a blend of digital and traditional engagement channels to present information on the project and gather feedback on the proposals.
X34	Not consulted with / not aware of proposal - seems poorly advertised.	As set out in the Consultation Strategy, National Grid used a blend of traditional and digital approaches to ensure the widest possible reach to all sectors of the local community in line with Government guidelines relating to the control of the spread of coronavirus. National Grid sent paper copies of consultation materials, including newsletters, were issued to more than 3,164 residential and business addresses within 1km of the proposals, together will other identified stakeholders including elected representatives and representatives of third-party and community interest groups. During the consultation period, the project website received 5,499 sessions from 4,564 users. The website has received a total of 7,919 page views. Across Facebook, Twitter and Instagram, ad campaigns ran from 1 April to 6 May. The separate Spotify campaign ran between 25 March and 22 April. Each ad directed users to visit the project website and engage with the consultation, with ads targeted at users living close to the route of the reinforcement and nearby communities.
X35	You cannot pick up the process where it ended 8/9 years ago and just continue, as much has changed since. The consultation needs to be restarted.	At recommencement of the project National Grid carried out a back check and review exercise of the project and the decisions taken up to the point of project pause in 2013, concluding that the project and its design evolution remained largely appropriate and suitable for progressing. Where areas were identified for further investigation, these were addressed either through additional survey or design work (where possible at that stage) or were identified as being topics of further discussion with stakeholders going forward. Following the review, National Grid continues to consider the selected route as the best option to take forward. Feedback has been invited on all aspects of the project development to date, but National Grid is not proposing to consult separately on the original strategic options or route corridor options.
X36	Involve local schools in the plans and development.	National Grid will continue to promote the proposals throughout local communities and is currently consulting again as part of the statutory consultation.
X37	Work with the Green Party / Green Charities / green businesses.	All interested stakeholders are encouraged to engage with and respond to the statutory consultation, and NGET will have regard to all feedback received. Current consultees include Natural England, the Government's advisor on the natural environment in England, the Environment Agency and the Royal Society for the Protection of Birds.
X38	Complaints about the consultation process - launched at a time when Central Government are actively considering an application for an AONB extension to include the parishes of Alphamstone and Lamarsh;	At this time, Dedham Vale AONB has not been extended and there is no defined boundary of what any future extension (if determined) would look like. Natural England has advised the project that decisions should be based on the effects on the existing Dedham Vale AONB and it's setting as currently designated (in line with the current NPS).

X39	Complaints about the consultation process - launched and concluded in a period of Covid-19 lockdown. Many of our residents are older and retired. Some have no internet facilities. Current restrictions have meant that public meetings have been impossible.	National Grid used a blend of traditional and digital approaches to ensure the widest possible reach to all sectors of the local community in line with Government guidelines relating to the control of the spread of coronavirus. Paper copies of consultation materials, including newsletters, were issued to more than 3,164 residential and business addresses within 1km of the proposals, together will other identified stakeholders including elected representatives and representatives of third-party and community interest groups. This included details of how to get involved in the consultation, including through telephone surgeries and call backs and how to request paper copies of the project material. As a result of the coronavirus pandemic, digital methods for consultation were used to enable the public consultation to be held in line with government advice on maintaining social distancing and avoiding face-to-face meetings. To make the public consultation as accessible as possible, National Grid used a blend of digital and traditional engagement channels to present information on the project and gather feedback on the proposals.
X40	Awareness of further National Grid updates to include a North/South transmission line through Bramford, as well as the ongoing review by Department for Business,	Work on the new proposed East Anglia GREEN reinforcements is still at an early stage, and routing and siting has yet to be completed. When sufficient progress has been made on these proposals there will be discussion with local authorities and other stakeholders, and it is anticipated that wider public consultation will be undertaken at appropriate times in 2022. At present however, these projects are anticipated to comprise a new 400kV double circuit connection from Norwich Main substation to Bramford substation, and a new 400kV double circuit connection from Bramford substation to Tilbury substation via a new connection substation in Tendring District.
	Energy and Industrial Strategy (BEIS) of the future capabilities of offshore	More generally, the Government is currently conducting an OTNR, examining how power from offshore generation and interconnectors can come onshore in a more coordinated way.
	transmission. Consultation should take place at a time when all communities and stakeholders are fully informed of the total cumulative impact of	However, the Bramford to Twinstead project is required to resolve a critical bottleneck on the onshore network to support power exporting from East Anglia and ensure National Grid can continue to operate a safe, compliant and economic transmission network. This means the project is required regardless of offshore co-ordination, as there will still be a significant increase in the levels of power being brought onshore as National Grid move towards the Government's ambition of connecting 40GW of offshore wind by 2030.
	proposals.	The EIA being undertaken on the Bramford to Twinstead project will include an assessment of the cumulative effects arising from other proposed developments.
X41	Concerned about the insufficient non-statutory and choice of timing. With the chosen date range of the non-statutory consultation being held during a national lockdown, where there are	National Grid used a blend of traditional and digital approaches to ensure the widest possible reach to all sectors of the local community in line with Government guidelines relating to the control of the spread of coronavirus. As a result of the coronavirus pandemic, digital methods for consultation were used to enable the public consultation to be held in line with government advice on maintaining social distancing and avoiding face-to-face meetings. to make the public consultation as accessible as possible, National Grid used a blend of digital and traditional engagement channels to present information on the project and gather feedback on the proposals.

significant restrictions of public gathering, those impacted by the project, but outside of the 1km range for the notification letter, would have been severely limited in receiving communication about the re-commencement of the proposal.

assessment of this to the public. This is a significant error in the process, and has

therefore limited the effectiveness of the consultation.

Prior to undertaking the 2021 non-statutory consultation, National grid undertook a back check and review on the project to X42 The situation today is very see whether there had been any changes to policy, the environment or other factors that would have changed previous different to that of 2009-2013, yet we could see no project decisions. The back check and review (as summarised in the Project Development Options Report published as updated documentation that part of the non-statutory consultation (National Grid, 2021), concluded that the decisions taken were robust. This included a assesses this changed review of the extent of undergrounding and further details can be found in the current Project Development Options Report (National Grid, 2022) published as part of the statutory consultation material. landscape and the cumulative impact of all these proposals alongside Regarding the choice of technology, as part of its project development process, National Grid carefully considers whether that of the Bramford to the use of underground cables, rather than overhead lines, is an appropriate approach in the context of national policy and Twinstead line proposed. National Grid's various statutory duties. National Grid is proposing underground cable within the Dedham Vale AONB and We note that the cabling for parts of the Stour Valley. Elsewhere along the route, the higher cost of cables to bill-paying consumers, and the the EA1 project was fully environmental implications of installing and maintaining them, are not considered to be justifiable in the context of national underground, with the policy or National Grid's statutory duties. mitigation on the landscape being a key factor for this As part of the EIA on the project, National Grid is undertaking a landscape and visual assessment. This will include a full decision. With such a baseline assessment of the existing landscape character, which will be used as the basis of the assessment and to inform significant change in the need for additional mitigation. The EIA also includes a cumulative effects assessment, which will consider the combined circumstances, it is effects of the project with other proposed development in the area. Further details on both of these assessments can be disappointing that National found in the PEI Report published as part of the statutory consultation material. Grid has not provided any

X43 A greater proportion of the The Indicative Alignment presented at the 2021 non-statutory consultation broadly reflected the alignment at the time of the new 400kV line be placed project pause in 2013 (differences between the two were highlighted in the Project Development Options Report published underground than is as part of the non-statutory consultation (National Grid, 2021). currently proposed and that the starting point for this The 2021 non-statutory consultation sought feedback on whether the extent of undergrounding was balanced given other consultation should be an factors such as the need to be economic and efficient and environmental effects associated with undergrounding such as adherence to the on habitats and archaeology. The feedback from the consultation was supportive of undergrounding the Stour Valley. concessions given by Therefore National grid can confirm the commitment made in 2013, that it intends to underground through the Dedham National Grid when the Vale AONB and parts of the Stour Valley. Elsewhere along the route, the higher cost of cables to bill-paying consumers,

	Bramford to Twinstead upgrade was previously considered in 2013.	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.
X44	Negative visual impact of pylons on countryside - are there any alternatives?	The Project Development Options Report (National Grid, 2022) published as part of the statutory consultation material presents the alternatives that have been considered in the development of the project. This includes a summary of the decisions to underground certain sections of the reinforcement.
	Impact on the lives of the communities affected and the landscapes they live and work in, is utterly unacceptable.	As part of the EIA on the project, National Grid is undertaking a landscape and visual assessment. This will include a full baseline assessment of the existing landscape character and understanding of the views experienced by communities and people within the area. This will be used to identify the potential significant effects of the project and the need for any additional mitigation.
X45	Why can't we use the existing cable line / pylons.	A new route is needed between Bramford and Twinstead Tee because, with substantial new sources of energy connecting in the region by the end of the decade, the existing overhead line carrying circuits west from Bramford to Pelham and from Bramford to Braintree/Rayleigh/Tilbury, would be overloaded.
		Installing a new line (two circuits) between Bramford and Twinstead Tee, allows the network to be reconfigured to create two separate double circuit routes that will avoid overloading the existing circuits and will provide flexibility and agility in the way the network interacts. A completely new line is required in place of the existing 132kv line, because the clearances and structural integrity of the existing infrastructure would be insufficient to support a 400kv line.
X46	Can we have new, better designs for overground pylons please? (e.g. those used in Scandinavia).	National Grid had previously looked at alternative designs for the pylons, and the decision not to take them forward for the Bramford to Twinstead project has been reviewed. Alternative designs include the new mono-pole 'T-pylon' which is being used on the Hinkley Connection Project as well as lower height lattice towers, which are bulkier versions of the regular lattice designs and generally do not work so well in low-land valley landscapes. As the new pylons would run alongside the existing 400 kV overhead line, it was felt that introducing a new design into the landscape would look worse than using a similar styled lattice tower.
X47	Visual impact this scheme will have on local tourism and hospitality is an extreme worry / negative impact on visitors.	Amongst National Grid's duties is 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 underground cables in the areas of highest amenity value (Dedham Vale AONB and parts of the Stour Valley) and removal of the existing 132kV line will further reduce the effects of the project. Once the new line is built and reinstatement planting has matured, it is not anticipated that there will be any effects on visitor attractions.
		Construction-phase effects, such as on views and increased traffic on local roads, are anticipated to be localised and short in duration. These will be reduced through good practice measures identified within the EIA.
X48	Heard rumour that snow does not settle above buried cables - is this true?	Underground cables are larger than overhead conductors, which is to reduce the electrical resistance and therefore the amount of heat produced. Furthermore, special insulation is used to maintain the cable rating. Therefore, while there are many variables unconnected to transmission infrastructure which influence whether snow settles and to what extent, substantial engineering measures are taken to reduce as much as possible the loss of heat energy from buried cables.
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X49	There is significant pressure to move to this part of East Anglia. Need to be able to plan increased housing without worrying whether the proposed developments will be blighted by pylons.	The new 400kV overhead line mainly follows the route of the existing 132kV overhead line, which will have associated land rights. This limits the sterilisation of new areas that could be developed in the future. In addition, accesses will be restored after construction, which would reduce the risk of severance to land parcels that could be used for future development. Therefore, the project is unlikely to have a significant effect on future planning allocations and development during operation. Furthermore, the project has been in the public domain for in excess of 10 years, and the local planning authorities are likely to have had regard to it in the allocation of housing sites. In any case, for the most part, housing and transmission infrastructure can coexist without issue.
X50	Proposed undergrounding of the new 400kV line through the northern edge of the Dedham Vale AONB is welcomed. However, restricting the underground	The extent of undergrounding, within the Dedham Vale AONB and parts of the Stour Valley, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available and other factors which need to be taken into account, including National Grid's duties and obligations. That includes balancing the need to be economic and efficient and to keep costs down, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality.
	stretch to the designated area will result in significant harm to the scenic qualities of the AONB. The extent of undergrounding proposed will require two CSE	Following the 2021 non-statutory consultation, the proposed location of the Dedham Vale East CSE compound has been moved further away from Dollops Wood, to a new position between two existing blocks of woodland at Millfield Wood. The existing woodland will be retained and will provide visual screening for the CSE compound. The site at Millfield Wood is approximately 1km further east, and away from the AONB boundary and Dollops Wood itself, than the originally proposed location.
	Compounds adjacent to the AONB boundary at Dollops Wood and Boxford Fruit Farm which, at 85m x 50m together with permanent access roads, will be significant industrial intrusions into the Suffolk countryside.	The location of the Dedham Vale West CSE compound was considered to be appropriate within the setting of the AONB. Further consideration of the effects on the AONB and setting can be found in the PEI Report.
X51	The installation of a new 400kV overground pylon line, together with the CSE compounds immediately adjacent to the AONB will be visible from many locations	Amongst National Grid's duties is to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate any effects. A landscape and visual assessment is being undertaken, feeding into the ongoing process of EIA. This looks at the potential for both positive and negative effects on the landscape and also at the appropriate mitigation to put in place. The PEI Report has been published as part of statutory consultation and provides a preliminary 'snapshot' of the EIA and landscape and visual assessment undertaken to date. National Grid is working

	within the AONB itself and in views across the AONB, harming the scenic quality of this designated landscape. The amount of wirescape on view and it is vital therefore that a comprehensive LVIA should inform the extent and location of undergrounding of the additional 400kV line rather than the current blunt approach based on the AONB boundary.	closely with the relevant statutory bodies, including Natural England and the Dedham Vale AONB and Stour Valley Partnership.
X52	The overhead lines and required CSE compounds would nullify any benefit derived from limited undergrounded sections. This approach also misses a wider opportunity to remove some of the wirescape which currently blights communities, harms the setting of heritage assets and impacts large areas of Suffolk countryside.	The extent of undergrounding, within the Dedham Vale AONB and an area of the Stour Valley, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available and other factors which need to be taken into account, including National Grid's duties and obligations. That includes balancing the need to be economic and efficient and keep costs down, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality.
X53	A comprehensive Heritage Impact Assessment is needed to inform the route selection of both undergrounding and overhead sections of the new 400kV line. It is of great concern that National Grid's consultation material refers only to designated heritage assets which are designated at grade I or II* and does not indicate any grade II listed assets on its section maps.	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. An EIA is being undertaken, which includes assessment of the project on the historic environment. This includes an assessment on all heritage assets including grade II listed buildings. The mapping at the 2021 non-statutory consultation did not show Grade II listed buildings due to the large number of features that were being presented and to retain the clarity of the mapping. The PEI Report includes maps of all designated assets including grade II listed buildings.

	The Hintlesham section of the project notes the location of grade I listed Hintlesham Hall as a factor in selecting the route of the new overhead line but takes no consideration of a number of grade II listed assets in the vicinity including: College Farmhouse, Park Farmhouse, Normans Farmhouse and Old Hall House.	
X54	Remove existing cabling (132kv and 400kv lines) and infrastructure / remove redundant power lines.	The need case and funding for the Bramford to Twinstead project is to deliver the new network reinforcement needed, rather than to work on existing overhead lines (other than where this is required to facilitate the Bramford to Twinstead project). Therefore, while two stretches of underground cable are proposed through the Dedham Vale AONB and part of the Stour Valley as part of the new reinforcement, no stretches of the existing 400kV overhead line will be put underground as this would still be required if the project was built. This is because undergrounding existing lines is not required to mitigate the impacts of the proposed new line, and therefore the substantial cost to bill payers, as well as the environmental impacts of construction, would not be justified.
X55	To protect our precious countryside we must look to transmit as much electricity from its point of creation (the East Anglian coastline), to its point of use (the major metropolitan areas including London), via an undersea transmission network. Where this is not possible, undergrounding should be employed as far as possible to mitigate the impact on local communities.	Offshore HVDC projects are typically very costly and unlikely to deliver the same level of network capability when compared with equivalent onshore projects, so the benefits and costs of these types of projects needs to be weighed up against the impacts of onshore construction. Nonetheless, before progressing with designing the Bramford to Twinstead project, a large number of potential strategic options were considered. These included offshore HVDC cables. However, the conclusion was that the use of offshore cables for this reinforcement would not fully address the needs case, namely the capacity constraints between Bramford and Twinstead, or comply with the relevant safety and quality of supply standards. The extent of undergrounding, including an area of the Stour Valley and the Dedham Vale AONB, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available, and other factors which need to be taken into account, including National Grid's duties and obligations. That includes balancing the need to be economic and efficient and keep costs down, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality.

X56	Are you going to make solar panels compulsory on all homes, and increase solar farms as well as wind farms?	NGET's role is to owns, build and maintain the high voltage transmission network in England and Wales, and therefore this is not a decision that National Grid can make.
X57	What is the timescale for removing the 132kv line?	The project is an NSIP and therefore requires a DCO from the Secretary of State. The project is currently assuming that if the DCO was granted, works would commence in 2024. Certain components of the project that could fall under alternative planning regimes may be consented and constructed earlier.
		The detailed construction programme has not been developed at this stage of the project, however the construction phasing of the removal of the 132kV overhead line would need to happen after the construction of the GSP substation. The GSP substation is anticipated to take approximately 18 months to construct and commission. The phases that follow after this would take approximately four years and would firstly involve removal of the existing 132kV overhead line, as the new 400kV proposed transmission line would use the same alignment in a number of locations. Installation of the new overhead line and underground cables would be undertaken following removal of the existing 132kV overhead line, and are likely to occur concurrently, with a rolling programme along the working area enabling multiple sections to be undertaken at the same time.
X58	Make use of scheme to supply power for electric vehicle charging to benefit the local community.	Electric vehicles rely on regular charging from the local electricity network and there are a number of public electric vehicle charging networks in the UK. National Grid is not responsible for providing access to these charging networks.
X59	Scheme will result in disruption to walking routes (i.e., Severance).	All designated public rights of way (PRoWs) will be identified, and any potential temporary closures applied for/detailed in the DCO. All designated PRoWs crossing the working area will be managed with access only closed while construction activities occur. Any required temporary diversions will be clearly marked at both ends with signage explaining the diversion, the duration of the diversion and a contact number for any concerns. Further details can be found in the PEI Report.
X60	The current plan would have a huge impact on farming (e.g., disruption and added operational costs).	National Grid is 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 construction programme is developed. National Grid will seek to work with the farming community to limit disruption where practicable.
X61	Chaotic construction phase having impact on farming business.	National Grid is 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 construction programme is developed. National Grid will seek to work with the farming community to limit disruption where practicable.
X62	Concerned about noise and other impacts resulting from	The EIA includes an assessment of the effects of the project on people including from noise and traffic during construction. The PEI Report presented the preliminary findings of the assessment. The Outline Code of Construction Practice contains

	the construction phase (e.g. dust / impact of lorries on local roads).	a number of good practice measures to reduce construction phase effects. Further details and any additional mitigation will be presented within the Outline Construction Environment Management Plan (CEMP) submitted with the application for development consent.
X63	Keep residents informed / good communication. Including any road works and or disruption to businesses during construction.	National Grid will continue to keep residents informed throughout the application process and is committed to keeping residents informed during works. To make sure National Grid reduce disruption to the local community a Construction Traffic Management Plan (CTMP) will be developed in consultation with the relevant Highway Authorities. When it comes to construction, clear signage will be provided to make sure construction traffic uses the agreed route and stays within the speed limit for construction traffic. National Grid emphasise to its employees and contractors the special care that they need to take when driving to and from the areas we are working in. National Grid will do as much as it reasonably can to keep disturbance to the local community to a minimum.
X64	Ensure that road infrastructure is upgraded along the route.	National Grid is not responsible for highway maintenance, which is the responsibility of the relevant Highways Authorities. National Grid is working with the relevant Highways Authorities to capture any required good practice measures which will be presented within the Outline CTMP submitted with the application for development consent.
X65	Construction of a new phase would affect the value of property and blight the area for generations.	The Compulsory Purchase Code allows for a claim of compensation for the loss that you 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. National Grid acknowledges that any proposed new work may cause concern to landowners. Diminution in 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.
X66	Request for compensation due to scheme.	National Grid acknowledges that any proposed new work may cause concern to landowners. All claims in respect of damage to the land or property will be agreed on an individual basis on production of evidence and proof of loss. 'injurious affection' and any other appropriate Heads of Claim will be considered on an individual basis in accordance with current legislation.
X67	Compulsory purchase properties in the area.	The Compulsory Purchase Code allows for a claim of compensation for the loss that you 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. National Grid acknowledges that any proposed new work may cause concern to landowners. Diminution in 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.
		Statutory Blight occurs when the value of a property is reduced due to works and the owners are unable to sell it at market value. The diminution in value is assessed on a case-by-case basis and the onus is on the claimant to submit a valid blight notice. Blight applies to land if the compulsory acquisition of the land is authorised by a DCO and the land falls within the limits of deviation within which powers of compulsory acquisition conferred by a DCO are exercisable. National Grid has no statutory powers to compulsory acquire residential property and will always seek to mitigate the diminution in value by appropriate routing.

X68	There should be a financial incentive or contribution for community infrastructure.	When operating in an area, National Grid has 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.
X69	Understand that shallow- type underground power routes can sterilise the ground in large areas around the cables. Is this true?	National Grid cables will be a minimum of 900mm deep to the protective tiles. Crops can be farmed over the top of the cables, though deep rooting trees may not be planted over the cables. 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. This will be achieved to a depth of 1.2m (or the maximum natural soil depth if this is shallower) except over buried cables.
X70	Concerned about negative impact of overhead power lines on health (including health of children).	At National Grid, all equipment is designed to comply with the Government Guidelines and policies for EMF. National Grid fully recognises people's concerns and takes this issue very seriously. National Grid relies on authoritative and independent scientific organisations such as the WHO and the UK HPA to review the worldwide body of scientific evidence on EMFs and health. National Grid has a responsibility to ensure the safety of the proposed overhead line. As far as EMFs are concerned, National Grid discharge that responsibility by ensuring that our network complies with any appropriate independent safety standards, i.e., the exposure limits advised by the HPA and adopted by Government. For further information visit www.emfs.info
X71	Can you confirm that further research has been undertaken within the last decade which confirms that the increased risks of childhood leukaemia are NOT directly related to increased exposure to EMF or any other factor directly relating to overhead lines? We request a repeat, thorough consultation in person on this matter to fully update us on the latest research.	Research into the potential health effects of EMF has been carried out for decades and National Grid look to independent authoritative review bodies to review that science and for Government to advice on appropriate measures to protect us all. A number of individual studies have been published over the last decade investigating the relationship of proximity to overhead lines and childhood leukaemia. A summary of some of the largest studies are summarised on www.emfs.info. Many of the recent studies have concluded that there has been a decline in the statistical risk observed over time, with some finding no statistically significant increase in risk of childhood leukaemia and proximity to overhead lines. It is still unclear if the statistical risk observed is evidence of a weak causal link with magnetic fields, some other factor associated with overhead lines or just by chance. Whilst the epidemiological evidence has become weaker in the last decade, the guidance from Public Health England and the WHO remains that there is uncertainty in the science. Based on that science, the UK has a carefully thought-out set of policies for protecting against EMFs, which includes both numerical exposure guidelines to protect against established, acute effects of EMFs at lower levels, including, specifically, the possibility of a risk for childhood leukaemia. National Grid believes it is right that the decision on what is acceptable or not is made independently of National Grid, rather than our own assessment of the science. National Grid's approach is to ensure that all of our assets comply with those policies, which are set by Government on the advice of their independent advisors. The proposed overhead line will be designed to ensure it and the existing overhead line are fully compliant with these policies and guidelines. This ensures that health concerns are properly and adequately addressed. The evidence concerning

		compliance with these policies as specified in NPS EN-5, including the numerical guidelines will be fully and publicly documented in the application for development consent.
X72	Don't believe this is needed / not justified / no benefit.	A new route is needed between Bramford and Twinstead because, with substantial new sources of energy connecting in the region by the end of the decade, the existing overhead line carrying circuits west from Bramford to Pelham and from Bramford to Braintree/Rayleigh/Tilbury, would be overloaded. Installing a new line (two circuits) between Bramford and Twinstead, allows the network to be reconfigured to create two separate double circuit routes that will avoid overloading the existing circuits and will provide flexibility and agility in the way the network interacts.
		Reinforcing the network between Bramford and Twinstead has been described by the System Operator as critical in all future energy scenarios. Network assessments show it is needed to deliver cleaner, greener electricity by 2028.
X73	This scheme means that East Anglia is being disproportionally impacted more than other regions.	To meet the 2030 target and 2050 legislation and move to a low carbon future using energy from offshore wind, nuclear power and interconnectors National Grid need to transport that energy from where it is produced or comes ashore, to where it is needed. With around 60 percent of all offshore wind developments looking to bring their energy from offshore wind around the East Coast, East Anglia will play a vital role is delivering that energy to the entire UK population.
X74	Since much of the energy requirement is nuclear and I disagree that nuclear generated energy should be increased there may not need to be a reinforcement in this area at all. Further regeneration at Sizewell should stop.	This consultation is about the reinforcement needed between Bramford and Twinstead, and is not only driven by Sizewell C. The Bramford to Twinstead project is needed to deliver cleaner greener energy from offshore wind, greater interconnection with countries across the North Sea and, new low carbon nuclear generation and along with other reinforcements, is vital to delivering the Government ambition for 40 GW of offshore wind by 2030.
X75	The proposals appear to criss-cross other lines, it does not appear efficient.	The proposal does not cross any existing 400kV lines, except where the proposed new line interacts with the existing parallel 400kV line in the potential option around the north of Hintlesham Woods, where a transposition (swapping of positions of conductors) is being considered. The proposed new reinforcement is required to address a specific bottleneck between Bramford and Twinstead, and the route corridor was chosen because it would represent the least scale of change to the existing environment, as it allows the new route to largely parallel the existing 400kV line, and to replace the existing 132kV line which is to be removed.
X76	Proposed infrastructure has insufficient capacity to meet future needs - more powerlines are inevitable in future.	The reinforcement between Bramford and Twinstead is one of a number of network reinforcements needed to deliver 40GW of offshore wind by 2030. Additional onshore reinforcements identified in the region in the NOA (National Grid, 2021) are needed in addition to the Bramford to Twinstead project.

X77	No mention of the ATNC route that this second line is to take and ask for your immediate confirmation that it will not follow the route of BTNO (Bramford – Twinstead New 400kV Double Circuit) as this will mean three 400Kv pylon lines between Hadleigh and Layham.	Work on the new proposed East Anglia GREEN reinforcements is still at an early stage, and routing and siting has yet to be completed. When sufficient progress has been made on these proposals there will be discussion with local authorities and other stakeholders, and it is anticipated that wider public consultation will be undertaken at appropriate times in 2022. At present however, these projects are anticipated to comprise a new 400kV double circuit connection from Norwich Main substation to Bramford substation, and a new 400kV double circuit connection from Bramford substation to Tilbury substation via a new connection substation in Tendring District. The ongoing optioneering work for East Anglia GREEN is not currently indicating a tripling of the Bramford to Twinstead route. This assumption is subject to the outcome of the ongoing routeing and siting work which is anticipated to conclude in Spring 2022.
X78	Underground cables are more resilient and less prone to failure due to disruption (e.g. weather events).	The overhead line designs which are employed in England and Wales remain generally robust and operational in the worst weather conditions. However, while 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 NGET network is made up of overhead lines, which have been proven to be a reliable form of electricity transmission.
X79	Insufficient consideration to undergrounding new lines (including lack of accurate costings / varying costings).	To use overhead lines throughout the route would cost less than the cost of a fully undergrounded scheme. A fully undergrounded line would not meet National Grid's duty to be economic and efficient. The current proposals are considered to strike the right balance.
X80	Think about the potential risks to health and security (e.g. terrorism) of undergrounding the power cables.	National Grid takes the issue of health very seriously. It is right that the decision on what is acceptable or not is made independently of industry. Accordingly, National Grid design all its equipment, overhead lines, cables and substations to comply with Public Health England's recommended exposure guidelines. A vast amount of research has been done into the possibility of health effects, without establishing any risks below these levels. There will be an EMF Compliance Report submitted as part of the DCO application. Security, including sabotage and arson (including terrorism) is being considered as part of the process of EIA as part of the statutory consultation material.
X81	Bring electricity onshore from wind farms via old, decommissioned power stations, where infrastructure already exists.	It is for the individual developers (not National Grid) to identify how their development connects to land as part of their options appraisal and project development. However, there is discussion currently taking place about how connections from offshore wind farms can be coordinated. The department for Business, Energy and Industrial Strategy (BEIS) is conducting an Offshore Transmission Network Review (OTNR) which looks into the way that the offshore transmission network is designed and delivered, consistent with the ambition to deliver net zero emissions by 2050. National Grid ESO is also carrying out work that is feeding into the BEIS review.

X82	Route power cables under the sea instead, including the Thames Estuary.	The strategic options appraisal considered alternative options such as routes that included undersea cables and via the Thames Estuary. Details can be found in the Project Development Options Report 2022.
X83	Where is the analysis of the reduced need for transmission vs distribution i.e. local / develop the local grid and battery storage for localised distribution?	National Grid ESO publishes in the Network Options Assessment (NOA) recommendations of major National Electricity Transmission System reinforcement projects to meet future network requirements. System demand requirements and generation connections to the transmission network ultimately determine how the Electricity Transmission Network must be configured and, if necessary, where reinforcement works are required.
X84	As an alternative, could energy storage infrastructure be used to balance demand and supply - minimising the need for high-capacity power lines?	National Grid ESO publishes in the Network Options Assessment (NOA) recommendations of major National Electricity Transmission System reinforcement projects to meet future network requirements. System demand requirements and generation connections to the transmission network ultimately determine how the Electricity Transmission Network must be configured and, if necessary, where reinforcement works are required. The use of energy storage infrastructure would not remove the need for the Bramford to Twinstead project.
X85	Use heat from underground cables to heat nearby homes.	It is not a practical option to recover the heat from underground cables over 4-5km.
X86	The amenity implications of a wholly new route through an AONB, and the resulting local resistance, would be enormous. Concern about precedent for a third line in the future.	The extent of undergrounding, within the Dedham Vale AONB and an area of the Stour Valley, is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available and other factors which need to be taken into account, including National Grid's duties and obligations. That includes balancing the need to be economic and efficient and keep costs down, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality.
		Work on the new proposed East Anglia GREEN reinforcements is still at an early stage, and routing and siting has yet to be completed. When sufficient progress has been made on these proposals there will be discussion with local authorities and other stakeholders, and it is anticipated that wider public consultation will be undertaken at appropriate times in 2022. At present however, these projects are anticipated to comprise a new 400kV double circuit connection from Norwich Main substation to Bramford substation, and a new 400kV double circuit connection from Bramford substation to Tilbury substation via a new connection substation in Tendring District.
		The ongoing optioneering work for East Anglia GREEN is not currently indicating a tripling of the Bramford to Twinstead route. This assumption is subject to the outcome of the ongoing routeing and siting work which is anticipated to conclude in Spring 2022.

X87	Regarding a new 400 kV line from Norwich via Bramford to Tilbury - there are only two options for its route: paralleling the existing and proposed lines to Twinstead, or a wholly new route through the Dedham Vale AONB (or conceivably the Suffolk Coasts & Heaths AONB). (Strictly, there may be a third option, to divert North of Bramford and take an offshore route. If the first option was a possibility, it would subvert the present consultation. But it has not been conclusively ruled out. National Grid have repeatedly said that National Grid do not put three lines in one corridor).	Work on the new proposed East Anglia GREEN reinforcements is still at an early stage, and routing and siting has yet to be completed. When sufficient progress has been made on these proposals there will be discussion with local authorities and other stakeholders, and it is anticipated that wider public consultation will be undertaken at appropriate times in 2022. At present however, these projects are anticipated to comprise a new 400kV double circuit connection from Norwich Main substation to Bramford substation, and a new 400kV double circuit connection from Bramford substation to Tilbury substation via a new connection substation in Tendring District.
X88	Those who benefit from the scheme should meet the costs / the whole nation should fund this.	National Grid is funded by a price control mechanism which is agreed with and set by 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. This is the fairest approach to ensuring wherever the location of the proposed development or upgrade, as the entire UK population could benefit the cost is equally spread across all customers.
X89	Is it more expensive to lay cables underground versus overhead pylons especially when considering on-going maintenance?	The cost of placing cables underground is considerably higher than building overhead lines and National Grid would need to justify this additional spend to Ofgem. The relevant 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 unacceptable in planning terms, taking account of the specific local environment and context.
X90	Costs / finances are driving the design of the scheme. E.g. suggestions that there is not enough money for undergrounding.	The cost of underground cables is considerably higher than overhead lines. National Grid has to balance its duties and responsibilities. That includes balancing the need to be economic and efficient and keep costs down, with a duty to preserve amenity. National Grid would need to justify the additional costs of undergrounding to Ofgem. The relevant 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 unacceptable in planning terms, taking account of the specific local environment and context.

X91	Combining the Bramford to Twinstead reinforcement and ATNC as a single undergrounding project would narrow the differential between the costs of overhead pylon transmission and undergrounding.	The Bramford to Twinstead project and future NGET projects (including ATNC) address discrete and separate need drivers and are required along different programmes. National Grid will continue to take stock of wider industry developments and we will continually review the need for the Bramford to Twinstead project and other reinforcements in line with future NOA updates.
X92	Hope this scheme shall be put out to competitive tender, National Grid are a monopoly and have proven extremely inefficient at managing new projects.	NGET currently anticipates constructing and operating the project. In any event the main works contract will be put out to competitive tender. Ultimately, it will be OFGEM that will decide whether NGET has delivered the project economically and efficiently. While the ESO explain in NOA 2020/21 that Bramford to Twinstead theoretically meets the criteria for competition, National Grid has a level of baseline funding allowance confirmed as part of the RIIO-T2 regulatory deal. It is anticipated that the remainder will form part of the RIIO-T3 baseline funding. It is not anticipated that Bramford to Twinstead will be subject to late competition delivery model by a third party. These models have not yet been developed and would require primary and secondary legislation to implement and so not readily available for Bramford Twinstead delivery.
X93	What is the relationship of UK Power Networks (a HK Chinese owned company) to National Grid - we need an independent review of the proposals to ensure that plans will be pushed through in the most cost-effective way?	NGET owns and operates the high-voltage transmission network in England and Wales. UK Power Network (UKPN) is a distribution network operator, which owns and operates the lower-voltage distribution network. These are two separate companies, both licenced under the Electricity Act 1989 and regulated by OFGEM. NGET works closely with UKPN to ensure that proposals are coordinated and in the best interests of energy consumers. The Project Development Options Report sets out further detail. Ultimately OFGEM will decide whether the project has been delivered economically and efficiently.
X94	Use local suppliers / employment to maximise benefits to the UK economy and region.	Whilst our substations generally are operated remotely and require maintenance rather than operational personnel routinely on site, our Bramford substation is a local operational team base location. There are also huge opportunities in the renewable energy sector that our proposals support. As the Government explain in the Energy White Paper, 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 Prime Minister's Ten Point Plan sets out a vision that will support up to 250,000 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. Where we are delivering 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 to develop new skills.

X95	Relying on old and antiquated distribution network technology is assuredly short-sighted / will be outdated soon.	National Grid is committed to using proven up-to-date technology. In the way National Grid manages the network and in the design of these proposals, it is using all the latest technological solutions. However, a new route is needed between Bramford and Twinstead Tee because, with substantial new sources of energy connecting in the region by the end of the decade, the existing overhead line carrying circuits west from Bramford to Pelham and from Bramford to Braintree/Rayleigh/Tilbury, would be overloaded.
X96	Were told years ago that these are needed, but they clearly weren't.	Between 2009 and 2013 work was previously undertaken to develop proposals to add this much needed network capability between Bramford and Twinstead Tee. Several rounds of extensive consultation were undertaken, and many meetings held with community representatives, council officers and environmental bodies. Changes to when planned new generation would come online in East Anglia, in particular Sizewell C, meant that work was put on hold at the end of 2013. However, Bramford to Twinstead is an essential project in reinforcing the electricity transmission network in East Anglia to enable increased volumes of generation. It is fundamental to delivering the Government's 40GW of offshore wind by 2030 and their Net Zero ambition.
X97	Insufficient detail provided on the sealing end compounds: Should be given at this stage.	Further details of the latest proposals, including the CSE compounds, has been made available as part of the statutory consultation material.
X98	Get local farmers and ground workers to bury the cables underground - it will be much cheaper.	The construction of the proposed reinforcement will be a highly technical construction project and will require specialised contractors with the required expertise and experience, sourced via a competitive tender. However, drawing from experience from other National Grid projects, it is likely that approximately 10% of the workforce could be secured from the local labour market. Furthermore, National Grid promotes the use of local supply and small & medium enterprises (SMEs) through the main contractors.
		In addition, National Grid works with schools and local authorities to encourage the next generation of engineers and help the long term unemployed to develop new skills.
X99	Levy a toll on electricity carried through a parish.	This is not how electricity transmission infrastructure is funded. National Grid is funded by a price control mechanism which is agreed with and set by 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. The cost of developing projects including the Bramford to Twinstead project is therefore ultimately passed to the bill-paying consumers of electricity.
X100	Bribery / Negative reaction to question of what benefits can be delivered and what can offset impact for residents?	National Grid wish to gather views from local communities on how the proposals could be mitigated or where the impacts could be offset.

3.5 How feedback has influenced design

Design changes

- 3.5.1 Following the close of the non-statutory consultation in May 2021, a number of design changes have been incorporated into the proposals. Proposed design amendments were carefully considered in the context of environmental constraints and opportunities, engineering feasibility and cost, planning policy and other relevant considerations. Proposed design amendments were considered whether they arise from non-statutory consultation feedback or from other drivers (e.g. continued design and development, ongoing discussion with stakeholders).
- 3.5.2 The process of considering design changes included an initial filter for benefit and feasibility, an assessment incorporating inputs from relevant technical experts, and further stages of additional study if required. The outcome of the design change process is either that a change is included in the project design, or that the change is not made following balanced and informed consideration.

Changes to the Project

- 3.5.3 To understand how regard has been had to feedback received during the non-statutory consultation, including whether suggested changes have or haven't been made to the proposed design, it is important to understand all changes to the project whether driven by consultation feedback or not.
- 3.5.4 Accordingly, a summary of the key commitments and changes identified following this non-statutory consultation include:
 - Following feedback from key stakeholders, National Grid can confirm its intention of undergrounding the new 400kV transmission line through the Dedham Vale AONB and in parts of the Stour Valley from the western side of Alphamstone to South of Workhouse Green.
 - National Grid is now proposing to construct both sections of underground cables using a ducted solution where feasible (with the cable laid within conduits). This will allow the construction teams to pull the cables through ducts laid in the ground. There are engineering advantages to using this method, and it will also reduce the length of time that open trenches are required, meaning that reinstatement can commence sooner than could happen with a standard open trenching technique.
 - The option National Grid intends to take forward at Dollops Wood is the alternative cable route presented at the non-statutory consultation (2021) to the north of the woods. Whilst an option was explored to undertake a trenchless crossing beneath this sensitive woodland, ground conditions were deemed to be unfavourable for this construction technique which brought about a level of environmental risk. The alternative route to the north will avoid Dollops Wood, prevent the need for a trenchless crossing beneath the woodland, and remove this section of the cable from the woodland and the AONB boundary.
 - Following feedback received during the non-statutory consultation, Stour Valley West CSE Compound will be relocated further south, on the southern side of Henny Back Road. The relocation of this CSE Compound will increase the amount of 400kV overhead line removal between Stour Valley West CSE Compound and Twinstead Tee.

- Following the relocation of Stour Valley West CSE Compound, the project team has explored potential options to provide a more direct alignment for the new 400kV underground cable route (and hence reduce the land disturbance). An alternative route has been identified on the eastern side of Henny Back Road.
- Following feedback from key stakeholders, National Grid and its technical specialists have explored options to relocate Dedham Vale East CSE Compound further away from the AONB boundary and reduce the potential for effects on the setting of the AONB and the Conservation Area at Polstead. A number of options were considered following the non-statutory consultation feedback bearing in mind all of National Grid's statutory duties. A location approximately 1km from the AONB boundary between two existing blocks of woodland at Millfield Wood has been taken forward. The existing woodland will be retained and will provide visual screening for the CSE Compound.
- The overhead line alignment on the approach to Bramford Substation has been altered to allow for a better electrical configuration at the substation, more efficient construction, and to reduce the number of pylons (changes mean three of the existing 400kV pylons will be removed and replaced with one new pylon).
- Following feedback on the landscape and visual impact of the indicative alignment presented at the non-statutory consultation to the north of Hintlesham Woods, National Grid has undertaken a back check and review of previously discounted options in this area. Hintlesham Woods is designated as a Site of Special Scientific Interest (SSSI), ancient woodland and is also an RSPB reserve. This review identified an additional option which will be the subject of consultation. These are presented as Hintlesham Woods Option 1 and Hintlesham Woods Option 2 in statutory consultation material (the Project Development Options Report and the Preliminary Environmental Information Report). Further details on each of the options is provided in Section 4.3 of the Preliminary Environmental Information Report:
 - Option 1 (as consulted on during the non-statutory consultation) the proposed 400kV overhead would use the existing alignment and pylons of the exiting 400kV overhead line through the woods, and the existing 400kV overhead line would be re-routed around to the north and west of the woods on newly constructed pylons.
 - Option 2 (being explored due to feedback received during and following non-statutory consultation) the proposed 400kV overhead line would parallel the existing 400kV overhead line to the south, with pylons located outside of the woodland and the conductors oversailing the woods.
- The 2013 design has been retained in Hintlesham Woods Option 1 where agreements had been previously made with Historic England in relation to Hintlesham Hall. National Grid is in discussions with Historic England regarding Hintlesham Woods Option 2 and seeking to position the new pylons in locations that reduce the effects on the setting from key views. National Grid will also be agreeing a mitigation strategy for the hall including planting proposals for the option which is taken forward.
- The draft Order Limits have been widened at key areas to accommodate land for environmental mitigation, compensation and enhancement, including landscape and visual screening and Biodiversity Net Gain proposals; the details of which will be developed following further baseline surveys and further discussions with consultees. Key areas for widening the draft Order Limits have included land

surrounding the GSP substation, CSE compounds and areas where habitat improvements or habitat connectivity could be enhanced. It is important to note that Biodiversity Net Gain won't be restricted to these expanded parts of the draft Order Limits and may not use all initially identified locations.

- Other key commitments that have been made bearing in mind the non-statutory consultation feedback and back check of the 2013 design by the project team have included:
 - The River Stour trenchless crossing will be extended to the east across the B1508 (St Edmund's Hill) to allow the retention of recent planting along the river;
 - The draft Order Limits have been adjusted to reduce the impact on Source Protection Zone 1;
 - Widening of the draft Order Limits to allow storage of construction materials outside of the floodplain where practicable;
 - Use of full line tension gantries at three of the CSE compounds to reduce the visual impact of an additional terminal pylon;
 - Narrowing of the working area at hedgerow crossings where practicable to reduce the amount of habitat loss and retain as many landscape features as possible;
 - Avoidance of impacts on woodlands where practicable (including retaining a distance from ancient woodland to prevent effects to the tree canopy and roots), or reduction of impact where avoidance is not possible;
 - The draft Order Limits have been adjusted to avoid other sensitive habitat such as swamp and fen, where practicable; and,
 - The draft Order Limits have been adjusted to reflect land parcels and to affect fewer landowners.
- 3.5.5 Tables 3.9 3.14 below break down the project into its component sections and identify which of the above design changes have been incorporated as a result of suggestions from respondents at the non-statutory consultation stage.
- 3.5.6 Furthermore, they demonstrate in a 'You Said, We Did' format how regard has been had to each of the design change suggestions made, whether they have been incorporated entirely, in part, or not at all, and summarise the rationale behind the decision making.
- 3.5.7 Note that comments from respondents have been treated as design change suggestions where, even if not articulated specifically in this manner, they can reasonably be interpreted as such.

Table 3.9 - Section A-B Bramford to Hintlesham

You said	We did
The visual impact of diverting around Ramsey Wood is massive for the affected properties.	Following feedback on the landscape and visual impact of the proposed alignment to the north of Hintlesham Woods, National Grid has undertaken a back check and review of previously discounted options in this area. Hintlesham Woods is designated as a Site of Special Scientific Interest (SSSI), ancient woodland and is also an RSPB reserve. This review has identified an additional option which will be the subject of consultation. These are presented as Hintlesham Woods Option 1 and Hintlesham Woods Option 2 in consultation material (the Project Development Options Report and the Preliminary Environmental Information Report). Further details on each of the options is provided in Section 4.3 of the Preliminary Environmental Information Report:
	 Option 1 (as consulted on during the non-statutory consultation) the proposed 400kV overhead would use the existing alignment and pylons of the exiting 400kV overhead line through the woods, and the existing 400kV overhead line would be re-routed around to the north and west of the woods on newly constructed pylons.
	 Option 2 (being explored due to feedback received during and following non-statutory consultation) the proposed 400kV overhead line would parallel the existing 400kV overhead line to the south, with pylons located outside of the woodland and the conductors oversailing the woods.
	National Grid is seeking feedback on both options as part of its statutory consultation, with a view to identifying the most appropriate solution which strikes the right balance.

Table 3.10 - Section C Brett Valley

You said	We did
The substation should be in/near Layham pit not in Dollops Wood/Heath Road (if cables aren't underground).	The proposed location of the Dedham Vale East CSE compound has been moved 1km further away from Dollops Wood and the AONB boundary, to a new position between two existing blocks of woodland at Millfield Wood. This new proposed location was identified following a review of a number of potential options, including locating the CSE compound at Layham Quarry. This review took account of consultation feedback in the context of National Grid's various statutory duties. The existing woodland will be retained and will provide visual screening for the CSE compound.

Table 3.11 - Section D Polstead

You said	We did
The eastern CSE compound near the AONB enclosing Dollops Wood at Polstead must not be sited within the AONB at Dollops Wood.	Following feedback from key stakeholders, National Grid and its technical specialists have explored options to relocate Dedham Vale East CSE Compound further away from the AONB boundary and reduce any potential effect on the setting of the AONB and the Conservation Area at Polstead. A number of options were considered following the non-statutory consultation feedback bearing in mind all of National Grid's statutory duties. A location approximately 1km from the AONB boundary between two existing blocks of woodland at Millfield Wood has been taken forward. The existing woodland will be retained and will provide visual screening for the CSE Compound.
Move the CSE Compound / Capping Station further away from Dollops Wood.	Following feedback from key stakeholders, National Grid and its technical specialists have explored options to relocate Dedham Vale East CSE Compound further away from the AONB boundary and reduce any potential effect on the setting of the AONB and the Conservation Area at Polstead. A number of options were considered following the non-statutory consultation feedback bearing in mind all of National Grid's statutory duties. A location approximately 1km from the AONB boundary between two existing blocks of woodland at Millfield Wood has been taken forward. The existing woodland will be retained and will provide visual screening for the CSE Compound.
Route round Dollops Wood preferred to direct drilling under the wood / Negative impact on Dollops Wood.	The option National Grid intends to take forward at Dollops Wood is the alternative cable route presented at the non-statutory consultation 2021, to the north of the woods. Whilst an option was explored to undertake a trenchless crossing beneath this sensitive woodland, ground conditions were deemed to be unfavourable for this construction technique which brought about a level of environmental risk. The alternative route to the north will avoid Dollops Wood, prevent the need for a trenchless crossing beneath the woodland, and remove this section of the cable from the woodland and the AONB boundary. 132kV overhead line removal works will take place within Dollops Wood.
If this section goes through Dollops Wood, there would be underground cables and there will not be big trenches which would be detrimental to the wood?	The option National Grid intends to take forward at Dollops Wood is the alternative cable route presented at the non-statutory consultation 2021, to the north of the woods. Whilst an option was explored to undertake a trenchless crossing beneath this sensitive woodland (leaving the habitat above undisturbed), ground conditions were deemed to be unfavourable for this construction technique which brought about a level of environmental risk. The alternative route to the north will avoid Dollops Wood, prevent the need for a trenchless crossing beneath the woodland, and remove this section of the cable from the woodland and the AONB boundary.
Polstead is designated as a Conservation Area and one of the locations for the CSE would be on the edge of Dollops Wood which borders the conservation area at its southern end. Consideration should be given to the placement of the CSE further away from Polstead Conservation Area and with this in mind, further consideration should	Following feedback from stakeholders, National Grid and its technical specialists have explored options to relocate Dedham Vale East CSE compound further away from the AONB boundary and reduce any potential effect on the setting of the AONB and the Conservation Area at Polstead. A number of development scenarios have been considered following the non-statutory consultation feedback bearing in mind all of National Grid's statutory duties. A location approximately 1km from the AONB boundary between two existing blocks of woodland at Millfield Wood has been taken forward. The existing woodland will be retained and will provide visual screening for the CSE compound. This will reduce the potential effects on the Conservation Area.

be given to the northern placement of the CSE.	
Layham Quarry is a far more suitable site for a CSE compound; National Grid is encouraged to bring this option back onto the table.	Following feedback from the 2021 non-statutory consultation, National Grid reviewed the location of Dedham Vale East CSE compound to see whether this can be moved to Layham Quarry. This was considered in the context of National Grid's statutory duties. It was not taken forward, due to the costs associated with the additional c.2km of underground cable required. However, during this exercise, an alternative location for this CSE compound has been identified at Millfield Wood, approximately 1km from the AONB boundary, where the existing woodland will provide visual screening for the CSE compound.

Table 3.12 - Section E Dedham Vale

You said	We did
Concern about the impact on Dollops Wood.	The option National Grid intends to take forward at Dollops Wood is the alternative cable route presented at the non- statutory consultation 2021, to the north of the woods. Whilst an option was explored to undertake a trenchless crossing beneath this sensitive woodland (leaving the habitat above undisturbed), ground conditions were deemed to be unfavourable for this construction technique which brought about a level of environmental risk. The alternative route to the north will avoid Dollops Wood, prevent the need for a trenchless crossing beneath the woodland, and remove this section of the cable from the woodland and the AONB boundary.
	132kV overhead line removal works will take place within Dollops Wood.
The CSE compounds are visually dreadful and so need to be moved to a location where they can be hidden by landscaping etc.	Although there is not a CSE compound proposed within the AONB itself, National Grid has reviewed the locations of the four CSE compounds against potential impacts on the setting of the AONB. This review took account of consultation feedback in the context of National Grid's various statutory duties. The review also considered the presence of existing screening either through landform or vegetation. The location of the Dedham Vale West CSE compound was considered to be appropriate within the setting of the AONB.
	Following feedback from stakeholders, National Grid and its technical specialists have explored options to relocate Dedham Vale East CSE compound further away from the AONB boundary and reduce any potential effect on the setting of the AONB and the Conservation Area at Polstead. A number of development scenarios have been considered following the non-statutory consultation feedback bearing in mind all of National Grid's statutory duties. A location approximately 1km from the AONB boundary between two existing blocks of woodland at Millfield Wood has been taken forward. The existing woodland will be retained and will provide visual screening for the CSE compound.
	Furthermore, a landscape and visual impact assessment will be undertaken of the project as part of the ongoing EIA including 132kV overhead line removal, which will assess the potential for significant effects (beneficial and adverse) and whether additional mitigation is required.

It would be better to use the route via the north of Sprotts Farm.	Noted. The option National Grid intends to take forward at Dollops Wood is the alternative cable route presented at the non-statutory consultation 2021, to the north of the woods. Whilst an option was explored to undertake a trenchless crossing beneath this sensitive woodland (leaving the habitat above undisturbed), ground conditions were deemed to be unfavourable for this construction technique which brought about a level of environmental risk. The alternative route to the north will avoid Dollops Wood, prevent the need for a trenchless crossing beneath the woodland, and remove this section of the cable from the woodland and the AONB boundary.
Concerned regarding the potential impact of locating the CSE compounds on the margins of the AONB and adverse visual impacts associated with their construction.	Although there is not a CSE compound proposed within the AONB itself, National Grid has reviewed the locations of the four CSE compounds against potential impacts on the setting of the AONB. This review took account of consultation feedback in the context of National Grid's various statutory duties. The review also considered the presence of existing screening either through landform or vegetation. The location of the Dedham Vale West CSE compound was considered to be appropriate within the setting of the AONB.
	Following feedback from stakeholders, National Grid and its technical specialists have explored options to relocate Dedham Vale East CSE compound further away from the AONB boundary and reduce any potential effect on the setting of the AONB and the Conservation Area at Polstead. A location approximately 1km from the AONB boundary between two existing blocks of woodland at Millfield Wood has been taken forward. The existing woodland will be retained and will provide visual screening for the CSE compound.
	Furthermore, a landscape and visual impact assessment will be undertaken of the project as part of the ongoing EIA (including 132kV overhead line removal), which will assess the potential for significant effects during both the construction and operational phase (beneficial and adverse) and whether additional mitigation is required.
The effects of possible grid lines on the AONB fall to be assessed by their visual effects. These are not confined to the pylons and connecting cables located within the AONB. The topography is such that the pylons with the most far-reaching effects on the AONB are not located within it.	The alignment presents the opportunity to remove the existing 132kV overhead line, reducing the scale of change. As part of the Bramford to Twinstead project approx. 25km of existing 132kV overhead line and 2.5km of existing 400kV overhead line will be removed, 3km of which will be from the Dedham Vale AONB and 5km from the Stour Valley Project Area. The proposed reinforcement will be placed underground in the AONB and parts of the Stour Valley meaning there will be one less overhead line in these landscapes.
	The project will be subject to an Environmental Impact Assessment (both positive and negative effects), the results of which will be presented in an Environmental Statement. This will include an assessment of impacts on land within the setting to the AONB. The Environmental Statement will include the details of any mitigation measures that will be put in place to reduce the significance of environmental effects.
The location of the eastern CSE compounds has still to be agreed and further discussion with regards to the proposed options is needed.	The engagement which has taken place so far has provided National Grid with valuable feedback from key stakeholders. Drawing from this, the proposed location of the Dedham Vale East CSE compound has been moved 1km further east from the AONB boundary, to a new position between two existing blocks of woodland at Millfield Wood. This new proposed location was identified following a review of a number of potential options, taking account of consultation feedback in the context of National Grid's various statutory duties. The existing woodland will be retained and will provide visual screening for the CSE compound.
The western CSE is proposed to the west of Boxford Fruit Farms. This landscape is undulating and although	National Grid has reviewed the locations of the four CSE compounds taking into account consultation feedback in the context of National Grid's various statutory duties. The review considered the presence of existing screening either through landform or vegetation and how the CSE compound would appear in the landscape. Although it is proposed to move it

placed on a piece of flat land it has the	slightly west to reduce the number of landowners affected, the location of the Dedham Vale West CSE compound was
potential to be visible within a wider	considered to be appropriate within the landscape.
area.	

Concern is the siting of CSE compounds within the immediate setting of the AONB. If it cannot be screened by topography, the undergrounded section of the route across the AONB should be extended into the adjacent countryside so that the compounds can be visually removed from the AONB (or reduced visually to a below significant level) either by distance and/or allowing better topographical screening to be used	National Grid has reviewed the locations of the four CSE compounds against potential impacts on the setting of the AONB. This review took account of consultation feedback in the context of National Grid's various statutory duties. The review also considered the presence of existing screening either through landform or vegetation. The location of the Dedham Vale West CSE compound was considered to be appropriate within the setting of the AONB. Following feedback from stakeholders, National Grid and its technical specialists have explored options to relocate Dedham Vale East CSE compound further away from the AONB boundary and reduce any potential effect on the setting of the AONB and the Conservation Area at Polstead. A location approximately 1km from the AONB boundary between two existing blocks of woodland at Millfield Wood has been taken forward. The existing woodland will be retained and will provide visual screening for the CSE compound.
Alternative Options at Dollops Wood - To mitigate the impact on the AONB and its setting, the preferred route for the underground section would be Option 2ai or Option 2aii.	and operational phase (beneficial and adverse) and whether additional mitigation is required. The option National Grid intends to take forward at Dollops Wood is the alternative cable route presented at the non- statutory consultation 2021, to the north of the woods. Whilst an option was explored to undertake a trenchless crossing beneath this sensitive woodland (leaving the habitat above undisturbed), ground conditions were deemed to be unfavourable for this construction technique which brought about a level of environmental risk. The alternative route to the north will avoid Dollops Wood, prevent the need for a trenchless crossing beneath the woodland, and remove this section of the cable from the woodland and the AONB boundary. This approximately aligns with the Option 2aii presented during the spring 2021 consultation.
	132kV overhead line removal works will take place within Dollops Wood.

Table 3.13 - Section G Stour Valley

You said	We did
Remove unused / redundant powerlines? Remove the dead end 132kV line between Twinstead and the 400kV to 132kV transformers.	Following design changes since the 2021 non-statutory consultation, 2.5km of existing 400kV overhead line is proposed for removal by National Grid, an increase on the previously proposed amount of overhead line to be removed. This can be removed as the new Bramford to Twinstead project will render it redundant. This is in addition to the removal of approximately 25km of existing 132kV overhead line belonging to the Distribution Network Operator, UK Power Networks. The removal of these lines is embedded within the design and will reduce the landscape and visual effects from the project.
	The stretch of existing 132kV overhead line between the diamond crossing in the Twinstead area and the GSP substation is not owned or controlled by National Grid, as this too is a UK Power Networks asset and UK Power Networks would need

	to agree to relinquish their asset. Following feedback during the 2021 non-statutory consultation, National Grid has commenced discussions with UKPN about this asset and its future use.
Can proposals be rerouted to avoid Ansells Farm and to the CSE compound beyond Moorcot?	In response to feedback received at the 2021 non-statutory consultation, National Grid has relocated the Stour Valley West CSE compound further south, to the southern side of Henny Back Road. This new location avoids impacts to Ansells Farm and Moorcot. Relocating the CSE compound further south would also result in the removal of an extra section of the existing 400kV overhead line between Stour Valley West CSE Compound and Twinstead Tee (2.5km in total), which would have landscape and visual benefits.
The CSE compound should not be sited at Pylon 004 to the southwest of Ansells Farm as undergrounding will impact on Culverdown and its ancient grazing meadows.	As a result of the relocation of the Stour Valley West CSE compound, the project team has been able to review options to reduce the length of the cable route, taking account of National Grid's various statutory duties, and avoid Culverdown. An alternative route for the new 400kV cable has been identified on the eastern side of Henny Back Road and is shown in the statutory consultation material.
No consideration of the impact of underground cables has been given to the three houses further west, two of which are listed. Site cables and CSE compounds as far away from these as possible.	National Grid has relocated the Stour Valley West CSE compound further south, to the southern side of Henny Back Road. Relocating the CSE compound further south would also result in the removal of an extra section of the existing 400kV overhead line between Stour Valley West CSE Compound and Twinstead Tee (2.5km in total), which would have landscape and visual benefits.
Proximity of listed buildings so close to the CSE compound at Ansells Farm will change the rural character of this area forever.	National Grid has relocated the Stour Valley West CSE compound further south, to the southern side of Henny Back Road. Relocating the CSE compound further south would result in the removal of an extra section of the existing 400kV overhead line between Stour Valley West CSE Compound and Twinstead Tee (2.5km in total), which would have landscape and visual benefits.
CSE compound should instead be built at Pylon 005 as it is further from habitation, has better road access, is not significant in terms of flora and fauna - despite exposed location, it is actually well shielded and only affects four houses.	In response to feedback received at the 2021 non-statutory consultation, National Grid has relocated the Stour Valley West CSE compound further south, to the southern side of Henny Back Road. This new location would result in the removal of an extra section of the existing 400kV overhead line between Stour Valley West CSE Compound and Twinstead Tee (2.5km in total), which would have landscape and visual benefits.
Southern option route has several advantages over the current proposals in that it is a shorter and more direct route and will cause less disturbance both to ecologically sensitive countryside and to surrounding lanes from all the associated heavy goods traffic. We believe that the CSE compound could be located out of sight of any houses in the area.	In response to feedback received at the 2021 non-statutory consultation, National Grid has relocated the Stour Valley West CSE compound further south, to the southern side of Henny Back Road. This new location would result in the removal of an extra section of the existing 400kV overhead line between Stour Valley West CSE Compound and Twinstead Tee (2.5km in total), which would have landscape and visual benefits.

Although the existing 400kV line crossing the Bures to Sudbury C-road north of Daws Hall towards Henny Street would remain, we would lose the 125kV line of pylons and they would be replaced by a new, but undergrounded, 400kV line. The assurance our communities were given was clear. Many people are presently still under the impression that undergrounding is assured. The case for undergrounding is overwhelming.	In response to feedback received at the 2021 non-statutory consultation, National Grid has committed to taking forward an underground cable solution within parts of Section G Stour Valley. The proposals include c.4km of underground cable running from a CSE compound to the east of the B1508 to the relocated CSE compound adjacent to Henny Back Road near Alphamstone. The existing 132kV overhead line that runs parallel to the existing 400kV overhead line will be removed, as will the 400kV overhead line between Stour Valley West CSE Compound and Twinstead Tee which would have landscape and visual benefits.
Remove of the existing 132 kV overhead line up to the 'diamond crossing' to the southwest of Sparrows Farm. It is currently unclear why the existing section of overhead line between the diamond crossing and the proposed GSP substation would also not be removed.	The stretch of existing 132kV overhead line between the diamond crossing in the Twinstead area and the GSP substation is not owned or controlled by National Grid as this is a UK Power Networks asset and UK Power Networks would need to agree to relinquish their asset. Following feedback during the 2021 non-statutory consultation, National Grid has commenced discussions with UKPN about this asset and its future use.
overhead lines with even larger pylons is being contemplated near to a Grade I listed building and indeed nearer than the present 132kV line. We urge	In response to feedback received at the 2021 non-statutory consultation, National Grid has committed to taking forward an underground cable solution within parts of Section G Stour Valley. The proposals include c.4km of underground cable running from a CSE compound to the east of the B1508 to a CSE compound adjacent to Henny Back Road near Alphamstone. Through this stretch of the Stour Valley, underground cable will be used instead of overhead conductors and pylons. The existing 132kV overhead line that runs parallel to the existing 400kV overhead line will be removed, as will the 400kV overhead line between Stour Valley West CSE Compound and Twinstead Tee which would have landscape and visual benefits.
The Connection Options Report (May 2012) proposed a CSE compound location. This location would have significant negative impacts upon the Stour River Valley landscape character; local visual receptors; impact on public views from protected lanes, Public Rights Of Way, Loshes Meadow Nature Reserve, Sparrow's Farm and its setting (Grade II). The	In response to feedback received at the 2021 non-statutory consultation, National Grid has committed to taking forward an underground cable solution within parts of Section G Stour Valley. The existing 132kV overhead line that runs parallel to the existing 400kV overhead line will be removed, as will the 400kV overhead line between Stour Valley West CSE Compound and Twinstead Tee which would have landscape and visual benefits. Also following feedback received during the non-statutory consultation, Stour Valley West CSE compound will be relocated further south, on the southern side of Henny Back Road. An Environmental Impact Assessment will be undertaken for the project and presented within an Environmental Statement. This will identify any significant effects from the proposals and put forward mitigation where appropriate.

termination tower would be visible over a wide area. It would involve the permanent loss of pasture field, which is species rich. The proposed interim location for a CSE compound was also located within the area subject to an extension of the Dedham Vale AONB, and which appears as an AONB in all but designation.

Stour Valley East CSE compound -Option 5 and option 4 in particular would seem to represent the schemes that cause less harm to this historic environment and lie outside of the Stour Project Area. The impact upon the grade II* listed Sawyers Farm would also be reduced through the undergrounding of cable and the removal of the existing 132v line. It would also remove the CSE compound from what historic maps would seem to indicate, of been one of the main routes to the farmyard from the agricultural lands it farmed.

The 2020 Project Development Options Report identified several locations for the Stour Valley East CSE Compound. This list of locations included site options 4 and 5 as indicated. The long list of options was reviewed from a technical and environmental perspective, with a shortlist of options being assessed in further detail. This assessment identified Option 1 to be the preferred option as it reduces the length of cable required and the compound is partially screened by existing woodland. This screening helps to reduce the landscape and visual effects.

The Stour Valley East CSE compound is relatively well screened in terms of views from Sawyers Farm, as the farm is surrounded by existing planting and the CSE compound has been positioned to make use of the natural topography. In addition, further planting is included as an embedded measure within the design to further screen the CSE compound from surrounding viewpoints. National Grid consider this to be a suitable site for the CSE compound and do not consider it to have significant effects on the setting of Sawyer's Farm Grade II listed building.

You said	We did
Suggest using superconducting cable - this is more up to date and would future proof the line.	At present 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 by this project. While 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. Alternative technologies are addressed in Section 5.4 of the Project Development Options Report 2022 (provided as part of the statutory consultation).
Further detail on the CSE compounds must be given, their size, appearance and anticipated impact upon any heritage assets (designated and non- designated). No Grade II listed buildings have been identified on the	Design detail of the CSE compounds is provided in the statutory consultation documentation, alongside the preliminary findings of ongoing environmental assessment work which considers the potential impacts of the proposals including those on listed buildings. The location of listed buildings can be found on Figure 8.1 in the PEI Report.

Table 3.14 - General comments received to the non-statutory consultation

maps provided, however there are
many in close proximity to the
proposed compounds.

Further assessments by National Grid have resulted in new information being available since 2020. The alternative placements for the eastern CSE in the Stour Valley which could reduce the harm to the grade II* listed Sawyers Farm and the northern options for the eastern Dedham Vale CSE which would reduce the possibility of harm to the Polstead Conservation Area.

We remain concerned as to the impact of the second power line in the setting of Grade I listed Hintlesham Hall through development within its setting.

The proposed reinforcement route, including both new overground and underground cabling has the potential to impact ancient woodland. Impacts may be avoidable or mitigation may be possible to prevent deterioration or loss of ancient woodland from occurring. However, current plans indicate that some points of the route cross ancient woodland which will likely result in the loss or deterioration of ancient woodland. Most notably The Dollops (CWS and ancient woodland), through which underground cables appear to be planned and a CSE compound planned adjacent.

Further assessments by National Grid have resulted in new information being available since 2020. The alternative placements for the eastern CSE in the Stour Valley which could reduce the

National Grid and its technical specialists have explored options to relocate Dedham Vale East CSE compound further away from the AONB boundary and reduce any potential effect on the setting of the AONB and the Conservation Area at Polstead. A location approximately 1km east of the AONB boundary between two existing blocks of woodland at Millfield Wood has been taken forward. The existing woodland will be retained, and this will provide visual screening for the CSE compound.

In terms of the design near Hintlesham Hall, detailed discussions have taken place with Historic England to discuss the location of pylons in relation to the setting of Hintlesham Hall and other mitigation such as additional planting. These discussions are ongoing, and the outcome will inform the mitigation presented within the ES at this location.

The proposed reinforcement route, including both new overground and underground cabling has the potential to impact ancient woodland. Impacts may be avoidable or mitigation may be

> Elsewhere on the route, the project interacts with ancient woodland at Hintlesham Wood and Ramsey Woods, close to Hintlesham. Following feedback on the landscape and visual impact of the proposed alignment to the north of Hintlesham Woods, National Grid has undertaken a back check and review of previously discounted options in this area. Hintlesham Woods is designated as a Site of Special Scientific Interest (SSSI), ancient woodland and is also an RSPB reserve. This review has identified an additional option which will be the subject of consultation. These are presented as Hintlesham Woods Option 1 and Hintlesham Woods Option 2 in consultation material (the Project Development Options Report and the Preliminary Environmental Information Report). Further details on each of the options is provided in Section 4.3 of the Preliminary Environmental Information Report:

- Option 1 (as consulted on during the non-statutory consultation) the proposed 400kV overhead would use the existing alignment and pylons of the exiting 400kV overhead line through the woods, and the existing 400kV overhead line would be re-routed around to the north and west of the woods on newly constructed pylons.
- Option 2 (being explored due to feedback received during and following non-statutory consultation) the proposed 400kV overhead line would parallel the existing 400kV overhead line to the south, with pylons located outside of the woodland and the conductors oversailing the woods. National Grid is seeking feedback on both options as part of its statutory consultation, with a view to identifying the most appropriate solution which strikes the right balance.

4.0 Next Steps

- 4.0.1 The information presented at the 2021 non-statutory consultation is published on National Grid's consultation pages. These pages have been updated with further details about the proposals at the start of the statutory consultation.
- 4.0.2 National Grid has considered the feedback from the 2021 non-statutory consultation to inform the proposals that are presented within the statutory consultation material. The feedback from the statutory consultation 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 Winter 2022/2023.
- 4.0.3 The path through the Development Consent Order (DCO) process is shown in Figure 0.1. The Secretary of State for Business, Energy and Industrial Strategy (BEIS), 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, <u>visit the Planning Inspectorate's website</u>.



Figure 0.1 - Development Consent Order process

Appendix A Consultation Summary Report

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LAMARSH

Bramford to Twinstead Reinforcement

Consultation Summary Report

Thank you for taking part

National Grid would like to thank everyone that took the time to attend our public consultation events and provide feedback on our proposals for Bramford to Twinstead. Non-statutory Consultation has now closed.

This document contains a summary of the non-statutory consultation and the feedback received, together with information on next steps. As part of our statutory consultation towards the end of the year, we will provide further detail on how this feedback has helped inform the development of the proposals.

If you have any questions, please do not hesitate to contact the project team using the details provided.

The Consultation in numbers

Non-statutory consultation took place between 25 March and 6 May 2021. During this time:

8 local and national papers advertised the consultation, comprising 10 published notices and 134,000 online views	537 feedback responses were received from stakeholders and members of the local community	Number of feedback forms received: Online: 36.2% Hard copy: 63.8%	A diverse age range of respondents 18-24: 1.1% 25-34: 4.2% 35-44: 13.6% 45-54: 17.4% 55-64: 24.3% 65-74: 25.3% 75-84: 11.7%
4,564 users visited the project website	4 Deposit locations were in operation where	Our social media advertising across Facebook, Twitter,	87 people attended our virtual events (webinars, telephone

the consultation documents were available



to 1,149,878 times

surgeries, Live chats)

Feedback from the Consultation

On this page we have provided a summary of some of the key themes across all feedback received during the consultation period. Please note that isn't an exhaustive breakdown of all issues raised, and we are analysing and considering all feedback received (including that not mentioned below).



Undersea Cabling

Responses indicated a desire for National Grid to explore alternative solutions for reinforcing the network in East Anglia, including offshore cabling to create an offshore ring main, and underwater cables linking East Anglia with London



Underground Cables

A number of responses indicated a desire to see further use of underground cable technology beyond the sections in which it is already being proposed, whilst some respondents also expressed a desire to see superconducting cables used



Overhead Lines

Approximately half of all responses indicated a desire to see a reduction in the use of overhead lines technology used within the proposals, with a portion of respondents in favour of switching the entire route from Bramford to Twinstead from overhead lines to underground cabling



Visual Impact

The visual impact of the proposed overhead lines was also raised as a major consideration, with a sizeable number of individuals noting that these would cause harm to the landscape and the heritage of the countryside



Environmental Impact

Several comments were received regarding the potential for potential impacts on the local environment and wildlife, including from the installation of the cable sealing end compounds and new substation



AONB

A number of individuals expressed their concern at the potential negative impacts of the project on the Dedham Vale AONB, and expressed their views that the route should be undergrounded within the proposed extension to the AONB

{	2
\int	7

Net Zero

74% of people responded that they are concerned about the UK meeting its target of net zero carbon emissions by 2050



Need for Reinforcement

60% of people recognised the need for the reinforcement

|--|

Information presented

Several respondents expressed a desire to learn more about the detail of what is proposed, including the impacts of possible future projects in the area

Next steps & anticipated project timeline

For further information about the DCO planning process, please visit the Planning Inspectorate's website: **infrastructure.planninginspectorate.gov.uk**





Contact us

examination.

If you would like to contact the project team, please get in touch via:

- **%** 0808 196 1515
- ➡ FREEPOST B TO T REINFORCEMENT
- contact@bramford-twinstead.nationalgrid.com
- www.nationalgrid.com/bramford-twinstead



Appendix B Consultation Response Form

nationalgrid

Bramford to Twinstead Consultation Response Fo

Bramford to Twinstead Reinforcement March 2021

National Grid Electricity Transmission is consulting on proposals to add much needed capability to the electricity transmission network between Bramford substation in Suffolk and Twinstead Tee in Essex.

The proposed reinforcement is around 27 km and includes building new pylons, some underground cables and a substation. We started to develop the project in 2009 and carried out extensive public consultation. Work on the project was paused in November 2013 after the timings of some electricity generation projects in the region were delayed.

Since then, the UK has made great leaps in moving towards cleaner, greener energy consumption. The Government has set ambitious targets to achieve net zero by 2050 and expects 40 GW of electricity to be generated from offshore wind by 2030.

These ambitions, coupled with increased demand for interconnection and new nuclear power, mean that generation in East Anglia is set to significantly increase. Our network studies show that we will need the reinforcement to be in place before the end of the decade, and we now need to start work again to take the proposals forward. The feedback we receive at both non-statutory (March 2021) and statutory consultation (in late 2021), where more detailed proposals and the findings from this stage of consultation will be presented, will form part of our application to the Planning Inspectorate. We will publish a Consultation Report. It will set out how we have had considered your consultation responses.

LAMARSH

You are welcome to answer all or only some of the questions in this response form, depending on the issues that are most important to you. There is also an opportunity to comment generally on the project and this consultation.

We have published a set of consultation documents that will provide you with information on the Bramford to Twinstead Reinforcement:

- Project Background Document
- Project Development Options Report

If you wish to receive paper copies or need them in another format, please get in touch.

Please submit your response to this consultation by Thursday 6 May 2021. We cannot guarantee that responses received after this time will be considered. To return this feedback form free of charge, please write **Freepost B TO T REINFORCEMENT** on an envelope.

We are seeking your views as part of **non-statutory consultation**. The feedback we receive, together with information from surveys and other work we are conducting, will inform our design and shape the development of the proposals.

Contact us

www.nationalgrid.com/bramford-twinstead contact@bramford-twinstead.nationalgrid.com 0808 196 1515

Call us to request paper copies of the materials

Data protection

BECG acts on behalf of National Grid to run public consultation activities.

By submitting your personal data as part of the consultation process you are agreeing that BECG can hold and process your personal data in relation to this public consultation exercise.

BECG may share personal data with National Grid and its consultant team for planning evaluation and land referencing purposes only.

Copies may also be made available, in due course, to statutory authorities so that your comments can be noted.

Your identifiable, personal data will not be used for any other purposes without your consent.

BECG, on behalf of National Grid, will use your data to:

- send you updates about the project (where you provide us with your contact details)
- develop a Consultation Report (or similar document) about this public consultation that

will be submitted to the planning authority or similar body. This will be a publicly available document. If you are submitting feedback as a private individual, your comments will be anonymous, and we will only identify you in these reports with your express permission.

If you provide us with your contact details, we might also contact you to ask you more about the comments you've made.

We hold all personal data in accordance with the retained EU law version of the General Data Protection Regulation ((EU) 2016/679) (the "UK GDPR"), as it forms part of the law of England and Wales, Scotland, and Northern Ireland by virtue of section 3 of the European Union (Withdrawal) Act 2018, the Data Protection Act 2018, the Privacy and Electronic Communications Regulations 2003 as amended, and any successor legislation. Your personal data will not be transferred outside of the EU. You can see our full Privacy Statement, Data Protection Policy, Data Retention Policy and find out how to make a Subject Access Request at the following website address becg. com/dp or by contacting us on 01962 893 893 / dataprotection@becg.com.

Have your say

We encourage you to provide further feedback around the reasoning behind your answers to the below questions in the freetext sections provided. Throughout this feedback form, you will find boxes referencing page numbers. The corresponding page of the Project Background document will provide more information on the content featured within this document.

About you

Your details

We would be grateful if you could please provide your details so that the location and age range of respondents can be captured as part of our consultation.

Please tick here if you would like us to use your contact details to keep you updated about our proposals.

Age group (please circle):

Under 13	□ 13-17	18-24	
25-34	35-44	45-54	
55-64	65-74	□ 75-84	85+

Your contact details

We will only use these details to contact you and update you on the proposals. You don't have to fill in this section if you'd rather we didn't contact you.

Title:
First Name:
Surname:
Address:
Postcode:

Policy context

1. How concerned are you about:

	1 Very concerned	2	3 Neutral	4	5 Not at all concerned
The effect of climate change/global warming on your life					
The effect of climate change/global warming on the lives of future generations					
The UK meeting its target of net zero carbon emissions by 2050					

2. To what extent do you agree or disagree with each of the following statements?

	1 Strongly agree	2	3 Neither agree nor disagree	4	5 Strongly disagree
With the growth of renewable energy connecting in East Anglia, by the end of this decade, more power will be generated than the existing electricity network is capable of transporting.					
It is important to reinforce the network between Bramford and Twinstead to accommodate the level of generation and demand in electricity.					



Routeing options

3. To what extent do you support our proposed route?

□ Strongly support □ Support □ Neutral □ Oppose □ Strongly oppose

4. Are there any other matters regarding the Bramford to Twinstead reinforcement that you wish to raise?



Section AB – Bramford to Hintlesham 36					Project Background Document page number
5.	Do you agree wit	h the route	e chosen in this section?		
	Strongly agree	□ Agree	□ Neither agree nor disagree	Disagree	Strongly disagree
6.			e that our proposals in this lo of overhead lines and the higl		
	Strongly agree	🗆 Agree	□ Neither agree nor disagree	Disagree	Strongly disagree

7. Are there particular features or considerations in this location that you would like us to take into account as we develop our proposals further?


Sec	ction C – Brett Valley	37	Project Background Document page number
8.	Do you agree with the route chosen in this section?		
	□ Strongly agree □ Agree □ Neither agree nor disagree □ I	Disagree	Strongly disagree
9.	To what extent do you agree that our proposals in this location between the visual impact of overhead lines and the high cos		
	□ Strongly agree □ Agree □ Neither agree nor disagree □ I	Disagree	Strongly disagree
10.	Are there particular features or considerations in this location into account as we develop our proposals further?	n that yo	u would like us to take



Sec	tion D – Polstead 38	Project Background Document page number
11.	Do you agree with the route chosen in this section?	
	Strongly agree Agree Neither agree nor disagree Disagree	Strongly disagree
12.	To what extent do you agree that our proposals in this location strike between the visual impact of overhead lines and the high cost of und	the right balance lerground cables?
	Strongly agree Agree Neither agree nor disagree Disagree	Strongly disagree
13.	Are there particular features or considerations in this location that yo into account as we develop our proposals further?	ou would like us to take
Ke	proposed 400 kV overhead line	
_	 proposed options for 400 kV underground cable proposed 400 kV cable sealing end 	
_	removal of existing 132 kV overhead line existing 400 kV overhead line	
	Polstead Heath	La
	Green	5
e	Green	
		~~~
	Polstead	Shelle
		Offend

#### Section E – Dedham Vale AONB



#### Previously, we selected Dollops Wood as the preferred location for the eastern Cable Sealing End compound, based on the use of Horizontal Directional Drilling (HDD).

However, the variation in topography in this area could make the use of HDD challenging, and we are investigating the feasibility of this.

We are considering an alternative route for underground cables in this area. The alternative route would travel northwards past Sprotts Farm and down in a south westerly direction between Broom Hill Wood and Bushy Park Wood.

14.	To what extent do you agree that our proposals in this location strike the right balance
	between the visual impact of overhead lines and the high cost of underground cables?

Strongly agree	Agree	Neither agree no	or disagree	Disagree	Strongly disa	agree

### 15. Are there particular features or considerations in this location that you would like us to take into account as we develop our proposals further?





Sec	tion F – Leavenho	Project Background Document page number				
16.	Do you agree with	the route	e chosen in this se	ction?		
	Strongly agree	Agree	□ Neither agree no	or disagree	Disagree	Strongly disagree
17.	To what extent do y between the visual					
	Strongly agree	Agree	□ Neither agree no	or disagree	Disagree	Strongly disagree
18.	Are there particular into account as we				ation that yo	u would like us to take



Section G – Stour Valley 41					41	Project Background Document page number
19.	Do you agree wit	th the route	e chosen in this sect	tion?		
	Strongly agree	□ Agree	□ Neither agree nor	^r disagree	Disagree	Strongly disagree
20.			e that our proposals of overhead lines ar			
	Strongly agree	□ Agree	Neither agree nor	⁻ disagree	Disagree	Strongly disagree
21.			s or considerations our proposals furth		ation that yo	u would like us to take





### **Offsetting impacts**

22. Alongside developing our proposals, we are considering how we could reduce the impacts of construction and operation on the local community, and to ensure that local communities benefit from the project's development.

Do you have any ideas regarding how the Bramford to Twinstead reinforcement can deliver benefits and offset impact for residents?

(For example, community organisations and charities can apply to National Grid's Community Grant Programme for grants toward community projects in areas where our work is impacting on local people.)

### How are we doing?

Other (please state): _

24.

25.

23. Please let us know your views on the quality of our consultation materials, the accessibility of our online consultation and webinars, how we have notified people about our proposals, and anything else related to this consultation.

How did you hear about our consultation?

$\Box$ Informed by a local representative	Social media
Communication (letter, email etc) from National Grid	□ Word of mouth
□ Information from a local authority	□ Other (Please state):
Advert/story in local media	
it was presented and how easy it was to u	
□ Very good □ Good □ Average □ Po	oor 🗆 Very poor 🗀 Unsure
 <ul> <li>□ Very good</li> <li>□ Good</li> <li>□ Average</li> <li>□ Pool</li> <li>Which consultation documents have you</li> <li>Please tick all that apply.</li> </ul>	
Which consultation documents have you	viewed during the consultation process?

#### 26. In what capacity are you responding to the consultation?

- □ Local resident
- Business
- Community representative
- □ Local organisation

- □ Local supplier/contractor
- □ Affected landowner or occupier
- □ Prescribed consultee
- $\Box$  Other (Please state):

### 27. In our next stage of consultation, we will be sharing more information about our proposals, including:

- detailed route alignment for overhead lines and underground cables
- site layouts for the substation and cable sealing end compounds
- work required to construct and maintain the proposed reinforcement, including construction compounds, access routes and working areas
- the environmental information we have collected
- tree planting and landscaping proposals.

### Please rate the information included as part of this consultation in terms of how clearly it was presented and how easy it was to understand:

□ Very good □ Good □ Average □ Poor □ Very poor □ Unsure



### **Inclusion and diversity**

National Grid would be grateful if you could answer the following questions. We will use the information to help understand whether our consultation has been useful to people from different backgrounds and with special requirements.

We may publish a summary of the results, but no information about an individual will be revealed.

The answers you provide to these questions are defined as 'special category data'. If you agree to provide Inclusion and Diversity Information, you can withdraw your permission at any time. To withdraw your details, please contact us via email at **contact@bramford-twinstead.nationalgrid.com** or **Freephone 0808 196 1515**.

28.	What is your gender?	
	🗆 Male 🗆 Female 🗌 Non-binary 🗌 Pre	efer not to say
29.	Do you consider yourself a person with a	disability?
	□ Yes □ No □ Prefer not to say	
30.	How would you describe your ethnic bac	kground?
	□ White	Black, Black British, Caribbean or African
	□ Mixed or Multiple ethnic groups	Other ethnic group
	Asian or Asian British	



### **Contact us**

If you have any difficulties completing this feedback form or accessing the consultation documents, or require the documents in an alternative format, please contact the project team using the contact details below.

#### contact@bramford-twinstead.nationalgrid.com 0808 196 1515 FREEPOST B TO T REINFORCEMENT

Our Freephone line is available 9am-5:30pm Monday to Friday.

If you have any questions, please get in touch.



National Grid plc National Grid House Warwick Technology Park Gallows Hill Warwick CV34 6DA United Kingdom

nationalgrid.com

### Appendix C Consultation Summary Newsletter

### nationalgrid

## Bramford to Twinstead Reinforcement

**Community Newsletter** March 2021

#### National Grid Electricity Transmission is consulting on proposals to add much needed capability to the electricity transmission network between Bramford substation in Suffolk and Twinstead Tee in Essex.

The proposed reinforcement is around 27km and includes building new pylons, some underground cables and a substation. We started to develop the project in 2009 and carried out extensive public consultation. Work on the project was paused in November 2013 after the timings of some electricity generation projects in the region were delayed.

Since then, the UK has made great leaps in moving towards cleaner, greener energy consumption. The Government has set ambitious targets to achieve net zero by 2050 and expects 40 GW of electricity to be generated from offshore wind by 2030.

These ambitions, coupled with increased demand for interconnection and new nuclear power, mean that generation in East Anglia is set to significantly increase. Our network studies show that we will need the reinforcement to be in place before the end of the decade and we now need to start work again to take the proposals forward.

TWINSTEAD

LAMARSH

It is important that we hear the views of local people. Knowing what matters to you, matters to us. Our consultation opens on Thursday 25 March 2021 and the deadline for feedback is Thursday 6 May 2021. More information on how to get involved in the consultation can be found on the back of this newsletter.

#### **About National Grid**

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.

National Grid Electricity Transmission owns, builds and maintains the electricity transmission network in England and Wales. It is National Grid Electricity Transmission that is developing plans for the Bramford to Twinstead reinforcement.



#### Why is this reinforcement needed?

The existing transmission network in East Anglia was developed in the 1960s. Until today it has been able to meet demand and provides around 3.5 GW of power carrying capability out of the region. By 2030, the amount of renewable and low carbon energy connecting to the network will increase and the System Operator anticipates that up to 17.9 GW of power carrying capability is needed to carry cleaner greener energy to homes and businesses beyond the region by 2030.

In the first half of the decade, we will maximise the capability of our existing network by installing power control equipment in our substations and rewiring pylons with bigger cables to carry more power. This will increase the transfer capability of the network to around 6 GW. But this is still not enough. Only by reinforcing the network can we deliver the transfer capability that is needed.

Building this reinforcement between Bramford and Twinstead would allow us to reconfigure the network and create two separate lines out of Bramford - one to Pelham and the other to Braintree/Rayleigh/Tilbury.

#### **Section AB – Bramford to Hintlesham** We would build a new overhead line from Bramford substation to the south of the existing 400 kV line.

We would build a new section of overhead line to the north of Ramsey Wood and divert the wires from the existing 400 kV line onto these pylons. The new reinforcement would use the existing pylons through Hintlesham Wood.

We chose this approach because we felt it would have less impact on landscape, visual amenity and heritage than other alignment options. It also allows for the greater paralleling of new and existing lines.

This area of the route includes the Grade I listed Hintlesham Hall, the ancient woodland in Hintlesham Little and Great Woods and Ramsey Wood, which are also designated as Sites of Special Scientific Interest (SSSI).

#### Section C – Brett Valley We would build a new overhead line

in this section.

The line would pass to the south of Kate's Hill and follow the alignment of the existing 132 kV pylons.

The line would deviate directly to the south of Pipkin Lodge to the east of Benton Street. The pylons would be screened by trees in views from Benton Street, approaching from the Layham direction.

We would remove the existing 132 kV overhead line.

#### Section D – Polstead We would build a new overhead line in this section.

The alignment would run to the south of the existing 400 kV power line, roughly following the alignment of the existing 132 kV overhead line.

When approaching the Dedham Vale AONB the proposed line would deviate slightly south west and connect into a cable sealing end compound near Dollops Wood.

We would remove the existing 132 kV overhead line.



#### **Section E – Dedham Vale AONB** We would build approximately 4km of underground cables through the Dedham Vale Area of Outstanding Natural Beauty (AONB).

We are considering two options at Dollops Wood as shown on the map:

- horizontal directional drilling underneath the wood (which may present engineering challenges)
- direct buried cables avoiding the wood to the north of Sprotts Hall

At each end of the underground cables section, we would need to build a cable sealing end compound.

We are proposing to build the eastern cable sealing end compound to the south east of Sprott's Farm, east of the boundary of the AONB. This location provides an opportunity to screen the compound next to Dollops Wood. We would increase screening through additional planting and landscaping.

We are proposing to build the western cable sealing end compound to the immediate west of Boxford Fruit Farm. This location offers separation from the AONB to the east and is next to existing tree planting along the boundary of the orchard.

We would remove the existing 132 kV overhead line.



#### Key

	proposed 400 kV overhead line
	proposed 400 kV underground cable
	proposed options for 400 kV underground cable
	existing 400 kV overhead line to be retained
	existing 132 kV overhead line to be retained
XXXXXXXX	proposed removal of existing 132 kV overhead line
xxxxxxx	proposed removal of existing 400 kV overhead line
	proposed 132 kV underground cable
	proposed substation
	proposed 400 kV cable sealing end
	existing 400 kV substation to be retained

#### Section F - Leavenheath and Assington We would build a new overhead line in this section.

The alignment would continue through Leavenheath to the south of the existing 400 kV line, south of Assington and Sudbury before crossing the B1508 and the railway.

We would remove the existing 132 kV overhead line.

#### **Section G – Stour Valley**

Your previous feedback told us how important the landscape in the Stour Valley is. The area is managed by the AONB and is suggested as an extension to the AONB. It also has cultural associations with Gainsborough, Constable and Nash.

We came to the view previously that there was a case for placing approximately 4km of the new 400 kV line below ground, from west of Sawyers Farm through the Stour Valley Project Area, to where it would connect to the existing network. We would welcome your views on this, particularly as the Stour Valley Project Area has not yet been designated as an AONB.

We are proposing to build a cable sealing end compound to transfer the power from overhead line to underground cable south of Sawyers Farm. There is natural screening from existing vegetation, reducing the visual impact to the surrounding landscape.

Feedback from our previous consultation about the location for the western cable sealing end compound informed the selection of our preferred site. We selected a location south west of Ansells Farm. It benefits from existing mature screening and avoids Alphamstone Complex Local Wildlife Site.

Siting the cable sealing end compound here also means that the underground cable would be routed further south. This would allow us to remove approximately 1.5km of the existing 400 kV line between here and Twinstead Tee.

We would remove the existing 132 kV line overhead line up to the diamond crossing to the south west of Sparrows Farm.

#### Proposed substation between Butler's Wood and Waldegrave Wood Our proposals include taking down 26km

of existing UKPN 132 kV pylons, between Burstall Bridge and the diamond crossing south of Twinstead Tee.

To do that, we must first build a substation to keep the local area supplied with electricity.

Following feedback from the previous consultation we have selected a site between Butler's Wood and Waldegrave Wood, off the A131 south of Sudbury.

We would remove the existing 132 kV overhead line.

#### Our commitment to you

The aim of our non-statutory consultation is to:

- re-introduce the project and explain our proposals at the time we paused work in 2013
- explain our recent activity and next steps hear your views on our current proposals

The feedback we receive from this consultation, together with information from environmental and technical studies, will inform our detailed project design.

We will carry out a further statutory consultation, where you will be able to see how we have taken your views into account and you will be able to provide further feedback before we submit our application for development consent to the Planning Inspectorate.

#### Take part in our consultation



Online www.nationalgrid.com/ bramford-twinstead

Webinars Sign up for our webinars

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Team call back Call us to book a telephone consultation

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Please sign up via the project website, or call the project team on the number provided.

To join a project live chat, just visit our website during one of the times listed below:

Date	Time
Friday 9 April	2pm - 4pm
Monday 19 April	6pm - 8pm

#### **Deposit locations**

- Braintree LibraryHalstead Library
- Sible Hedingham
   Library
- Sudbury Library

Documents will be available at these deposit locations from 13 April subject to any changes in coronavirus restrictions that may impact planned re-opening dates of these venues. Please get in touch using the contact details provided for information on opening times.

#### Contact us

www.nationalgrid.com/bramford-twinstead contact@bramford-twinstead.nationalgrid.com 0808 196 1515

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# Appendix D Consultation Flyers

### nationalgrid Bramford to Twinstead Reinforcement Consultation

# National Grid is consulting on proposals to build a new 400,000-volt transmission reinforcement between Bramford substation in Suffolk and Twinstead, south of Sudbury in Essex.

Our consultation is running from **Thursday 25 March until Thursday 6 May 2021** to allow members of the public to have their say on the proposals for the Bramford to Twinstead reinforcement.

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# Appendix E Newspaper Adverts Printed and Online

### nationalgrid

# Bramford to Twinstead 400kV Reinforcement

Consultation

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Webinars Sign up for our webinars



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# First-time home buyers face challenge as house prices rise

First-time buyers are finding it increasingly difficult to get a foot on the property ladder as house prices rise to more than 10 times the average salary in parts of Suffolk.

The latest housing affordability figures look at the average salary in area versus the average house price and show buyers in Babergh, where the average property cost is £302,000, can expect to shell out 10.5 times their salary.

Meanwhile, in Ipswich - the only place to fall below the national average - buyers face shelling out 7.2 times their salary for a home with the average house costing £208,000.

Four years ago, the respective rates were 11.3 for Babergh and 5.8 for Ipswich.

In north Essex, buyers in Uttlesford can expect to pay as TOM POTTER tom.potter@archant.co.uk

much as 12.6 times the average salary for a home with the averahe house costing £418,000. While buyers in Tendring are paying 8.5 times their salary to get a property.

In 2016, the rates were 12.3 in Uttlesford and 7.8 in Tendring. According to the Office for National Statistics, only Ipswich finished below the national average affordability ratio of 7.8

at the start of the year. Across Suffolk, the average house price increased by 5.94% to £264,000.



House prices outstrip salaries by a rate of up to 13 to one in some areas. Left; Richard Norrington, Ipswich Building Society chief executive Pictures: GETTY IMAGES / ARCHANT

Commenting on the latest figures, Richard Norrington, chief executive of Ipswich Building Society, said: "With young people disproportionately affected by the pandemic financially, and with fewer high LTV (loan-to-value) mortgages in the market to choose from, it's a challenging time for first time

buyers. "Whilst in England last year, full-time employees could typically expect to spend about 7.8 times their annual earnings on purchasing a home, for younger generations this number rises. "The average age of a first time buyer in the UK in 2020 was 34, and when taking into consideration the average income for someone in their 30s,

purchasing a house in mid-Suffolk with a 10% deposit, this would be more than 8.7 times their salary. For a person in their 20s, this figure rises to almost 10.9 times their annual wage.

"Those looking to get a foot on

the property ladder would be well advised to remain realistic in their expectations of what their first home might look like – potentially considering buying a smaller property or one in a cheaper location, over holding out for their dream home on their first purchase.

"For those lucky enough to have family members eager to contribute to their pot, a gifted deposit could be an ideal way to supplement what the wannabe homeowner has already saved up."

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# **Cancer patients have received \$66k in grants from charity** to help meet 'hidden costs'

Cancer patients have spoken of the hidden costs of the disease after charity Macmillan handed out £66,000 in grants in Suffolk to help stop sufferers being left out of pocket.

The grants - which totalled £66,569 for Suffolk and £150,380 in Essex in 2020 - have helped to cover costs such as hospital parking, travel for treatment and specialist equipment.

One of those to benefit was Barham resident Ruth Bennett, who was diagnosed with breast cancer in December, 2019.

She began a long journey of chemotherapy, radiotherapy and acid infusions at West Suffolk Hospital shortly afterwards.

The 55-year-old didn't qualify for much help, as she still held down a full-time job at the Shaw Trust Charity.

However, the Macmillan hardship grant is not means tested - meaning she got a muchneeded injection of cash during her treatment. "First, you get hit

HOLLY HUME HollyHume@archant.co.uk

with the impact of your diagnosis, then you get the impact of thinking: 'Oh my goodness, what's going to happen to me?' Then there's the surgeries and then chemotherapy," Ruth said. "Then you start to realise the

cost of everything.

"I was travelling to the hospital so much for blood tests and treatment, so there's the fuel, then the parking charges at the hospital.

When you're suddenly spending a lot of time at hospital, and then faced with costs like buying wigs and picc line covers, it all adds up.'

Cathy Cunningham-Elliott, manager of the Macmillan Benefits Advice Service for the region, said: "A Macmillan grant can help pay for the little things that make a big difference to the lives of people with cancer

paying for replacement washing machines, covering the heating bill, buying a blender for someone whose treatment makes it hard to eat normally – and in this way have become a vital safety net for people receiving a diagnosis, especially during the pandemic.

The sad truth is that more than a third of people with cancer (39%) are severely financially impacted by their diagnosis, with many now having to deal with the double blow of being diagnosed during the Covid-19 pandemic.

"It's a devastating reality to contend with and many are simply unaware of the support that exists."

To find out more about Macmillan grants and the other financial support you might be eligible for, call the team on 0345 600 6257 Monday to Friday, 9.30am to 4.30pm. Alternatively, email

macmillanbenefits@suffolk.gov. uk



Ruth Bennett said the Macmillan grant made a huge difference to her at a time she needed it Picture: RUTH BENNETT

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# Woman found in water is named as police quiz suspect

Detectives were continuing to question a man on suspicion of murder last night - after naming the woman found dead in a Suffolk country park.

Officers were called shortly before 7am on Friday, April 9, following reports a body had been found in the water at Brandon County Park.



Tributes left at Brandon Country Park after the body of a woman was discovered

EMILY THOMSON emily.thomson@archant.co.uk

A 46-year-old man was arrested on suspicion of murder and was taken to Bury St Edmunds Police Investigation Centre for questioning, where he remained last night.

Police have been granted an additional time to question him. Last night, police said the woman had been identified as

Egle Vengaliene, 35, of Bury Road, Brandon. A Home Office post-mortem

examination was conducted on Saturday, and additional tests are required.

Investigations are ongoing, but officers believe the woman and the suspect were known to each other and that the incident poses



Brandon Country Park has remained closed to the public while police investigations continue into the death of Egle Vengaliene Pictures: EMILY THOMSON

no threat to the wider public. The death is being treated as an isolated incident and police are particularly keen to see any CCTV footage from doorbell cameras or similar devices in the area, Bury Road and surrounding streets.

Anyone with information is asked to contact the Major Investigation Team either by using the online portal: https:// mipp.police.uk/ operation/363718M87-PO1 or by calling 101 and quoting

#### reference 37/17570/21

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Alternatively contact the charity Crimestoppers anonymously on 0800 555 111, through their anonymous online form at www. crimestoppers-uk.org.

## nationalgrid Bramford to Twinstead Reinforcement

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News

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# Appendix F Social Media Adverts

#### Appendix F: Social media adverts



# Appendix G S42(1)(a) Responses

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#### Appendix G: Section 42(1)(a) Consultee Responses

1.1.1 Although Appendix G only includes reference to those prescribed consultees who provided a response to the consultation, National Grid continues to engage with all other section 42(1)(a) consultees not listed here. It is split into two tables, Table G.1 covers themes contained in more than one response, which are given a reference number. Table G.2 contains specific comments raised by the organisation along with the National Grid response.

#### Table G.1: Thematic Responses Raised by Section 42(1)(a) Consultees

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
G01	Timing and adequacy of the consultation: Concerns regarding the timing of the consultation, during the Covid-19 pandemic, including a period of lockdown. This raises concerns regarding the potential adequacy of consultation in respect of hard to reach and hard to hear groups, such as the digitally and physically isolated. The consultation should be postponed or extended.	Alphamstone and Lamarsh Parish Council, Assington Parish Council, Hennys, Middleton and Twinstead Parish Council, Little Cornard Parish Council, Polstead Parish Council	The consultation was carried out in full compliance with all applicable legislation and non-statutory guidance. This included guidance on pre-application consultation and community engagement issued specifically as a result of the Covid-19 pandemic. The consultation period was in excess of the required 28 days, giving more opportunity for interested parties to comment on the proposals, mindful of the additional complexities posed as a result of the Covid-19 pandemic.
			As set out in the Consultation Strategy, National Grid used a blend of traditional and digital approaches to ensure the widest possible reach to all sectors of the local community in line with Government guidelines relating to the control of the spread of coronavirus. Paper copies of consultation materials, including newsletters were sent to more than 3,164 residential and business addresses within 1km of the proposals, together will other identified stakeholders including elected representatives and representatives of third-party and community interest groups. This included details of how to get involved in the consultation, including through telephone surgeries and call backs and how to request paper copies of the project material. A website that people could easily access and download project information as well as other relevant documents.
G02	Timing and adequacy of the consultation: National Grid has assumed that there is a widely held understanding of their proposals within the affected communities. In reality, many members of the community have come and gone in the last 8 years.	Hennys, Middleton and Twinstead Parish Council, Little Cornard Parish Council	The purpose of the 2021 non-statutory consultation was to reintroduce the project to people, particularly those who may be new to the area and were not involved in the previous consultation events. There were also some changes

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
	Developing an understanding of the implications of National Grid's proposals, such that community members can respond to the consultation, is not possible in so short a consultation period, particularly if they are new to the issue.		and new opinions sought on the Indicative Alignment following the back check and review undertaken following recommencement of the project. The consultation period was in excess of the required 28 days, giving more opportunity for interested parties to comment on the proposals, mindful of the additional complexities posed as a result of the Covid-19 pandemic.
G03	Timing and adequacy of the consultation: Only those living within 1km of the project were contacted with a direct text based approach and consultation feedback form. However, the project will have an impact on people living outside this area. The consultation area should be wider.	Assington Parish Council, Hennys, Middleton and Twinstead Parish Council, Little Cornard Parish Council, Polstead Parish Council	Two consultation zones have been developed to assist engagement with the local community. The Primary Consultation Zone (PCZ), which extends 1km from the proposed draft Order Limits for the project and the Secondary Consultation Zone (SCZ), which extends to at least 5km from the draft Order Limits for the project (including the PCZ).
			National Grid used a blend of traditional and digital approaches to ensure the widest possible reach to all sectors of the local community in line with Government guidelines relating to the control of the spread of coronavirus.
G04	Available information: The proposals presented during the non-statutory consultation are high level, particularly regarding the GSP substation. The lack of information makes it hard to comment.	Hennys, Middleton and	The pre-application design process is an iterative one, and National Grid did not have detailed design information available at the point at which non- statutory consultation was undertaken. The design continues to be developed and refined in order to take account of feedback received in the non-statutory engagement as well as further engagement with UKPN. The consultation process is designed to obtain early feedback. Details of the latest proposals, including details of the proposed GSP substation, will be presented within the statutory consultation materials.
G05	The entire line should be undergrounded. The additional cost does not adequately consider the substantial indirect costs of overhead lines, such as landscape and visual effects and effects on tourism and the rural economy.	Burstall Parish Council, Hintlesham and Chattisham Parish Council, Polstead Parish Council	As part of its option appraisal process, National Grid has considered whether the use of underground cables, rather than overhead lines, is an appropriate approach in the context of national policy and National Grid's various statutory duties. The project proposes underground cable within the Dedham Vale AONB and an area of the Stour Valley. Elsewhere along the route, the higher cost of cables to bill-paying consumers, and the environmental implications of installing underground cables and maintaining them, are not considered to be justifiable in the context of national policy or National Grid's statutory duties, which include the need to be economic and efficient.

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
G06	Potential for undergrounding in Section F: Assington and Leavenheath	Assington Parish Council, Stoke By Nayland Parish Council, Dedham Vale Areas of Outstanding Natural Beauty (AONB) and Stour Valley Partnership	The extent of undergrounding is proposed following careful consideration of the feedback received during earlier consultations, the alternatives available and other factors which need to be taken into account, including National Grid's duties and obligations. That includes balancing the need to be economic and efficient and a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality.
			Following feedback, National Grid has undertaken a back check and review of the proposed extent of undergrounding in Section F, taking account of its statutory duties and other obligations. In summary, the proposed 400kV overhead line would parallel the existing 400kV overhead line through Section F, whilst the existing 132kV overhead line would be removed, leaving the same number of overhead lines in the landscape. The proposed 400kV overhead line would be slightly taller than the existing. This would result in a low magnitude of change from the baseline in this section.
			National Grid has concluded that, when taking into account all of its duties and the baseline environment in this section, overhead lines should remain the preferred approach in Section F. It is considered that the current proposals strike an appropriate balance.
G07	Underground the existing 400kV overhead line: The existing overhead line should be undergrounded as part of the project, particularly in Dedham Vale AONB.	Bures St Mary Parish Council, East Bergholt Parish Council, Stoke By Nayland Parish Council, Dedham Vale Areas of Outstanding Natural Beauty (AONB) and Stour Valley Partnership	The need case and funding for the Bramford to Twinstead project is to deliver the network reinforcement needed, rather than to work on existing overhead lines other than where this is required to facilitate the proposed works.
			While underground cable is proposed through the Dedham Vale AONB and part of the Stour Valley as part of the reinforcement, no stretches of existing line will be put underground. As part of the project approx. 25km of existing 132kV line and 2.5km of existing 400kV line will be removed, 3km of which will be from the Dedham Vale AONB and 5km from the Stour Valley Project Area.

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
			Undergrounding of the existing line is not required to mitigate the impacts of the reinforcement, and therefore the substantial cost to bill payers, as well as the environmental impacts of construction, would not be justified.
			Although National Grid has a Visual Impact Provision (VIP) project, which makes use of Ofgem funding to reduce the impact of existing transmission lines in AONBs and National Parks in England and Wales, this is a separate initiative and does not apply to the Bramford to Twinstead project.
G08	Undergrounding in the Stour Valley: The project should be undergrounded in the Stour Valley.	Alphamstone and Lamarsh Parish Council, Bures St Mary Parish Council, Little Cornard Parish Council, Dedham Vale Areas of Outstanding Natural Beauty (AONB) and Stour Valley Partnership	National Grid recognises that parts of the Stour Valley form an important part of the setting of Dedham Vale AONB. National Grid has undertaken a back check and review of the project bearing in mind all of its statutory duties in the context of impacts on the setting of the AONB to see if this would change project decisions. It is considered that the undergrounding proposed is appropriate and in the most highly valued parts of the Stour Valley.
			Following feedback from key stakeholders during the 2021 non-statutory consultation, National Grid can confirm its intention to underground the new 400kV transmission line through the most highly valued parts of the Stour Valley (parts of Section G), between the Stour Valley East CSE compound to the east of St Edmunds Hill, and the Stour Valley West CSE compound off Henny Back Road, alongside the removal of the existing 132kV overhead line and 400kV overhead line between Stour Valley West and Twinstead Tee.
G09	Future extension of Dedham Vale AONB: The Dedham Vale AONB and Stour Valley partnership has submitted an application to extend the Dedham Vale AONB to Natural England- treat the Stour Valley as if designated as an AONB.	Alphamstone and Lamarsh Parish Council, Hennys, Middleton and Twinstead Parish Council, Little Cornard Parish Council, Dedham Vale Areas of Outstanding Natural Beauty (AONB) and Stour Valley Partnership	At this time, Dedham Vale AONB has not been extended and there is no defined boundary of what any future extension (if determined) would look like as it is too early in the process (the determination of a boundary would be the decision of Natural England).
			Natural England has advised National Grid that decisions should be based on the effects on the Dedham Vale AONB as currently designated and its setting (in line with the current NPS). Natural England also advised that parts of the Stour Valley will have a role as part of the setting of the AONB.

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
			As the status of the request to extend the AONB remains undecided and based on discussions with Natural England, National Grid is not proposing to treat any area outside of the existing Dedham Vale AONB boundary as designated within its application for development consent but will be considering the setting of the AONB, including the contribution that the Stour Valley makes to this.
			National Grid will have regard to any designation made by Natural England in the period before application submission and during the Examination.
G10	Alternative location for Dedham Vale East CSE compound: Proposed this should be moved to Layham Quarry with a consequential extension of the underground cable.	Polstead Parish Council, Stoke By Nayland Parish Council	Following feedback from the 2021 non-statutory consultation, National Grid reviewed the location of Dedham Vale East CSE compound to see whether this can be moved to Layham Quarry. This was considered in the context of National Grid's statutory duties. It was not taken forward, due to the costs associated with the additional c.2km of underground cable required. However, during this exercise, an alternative location for this CSE compound has been identified at Millfield Wood, approximately 1km from the AONB boundary, where the existing woodland will provide visual screening for the CSE compound.
G11	Coordinated working with other projects: There should be a coordinated onshore / offshore grid to reduce the risk of cumulative effects.	Alphamstone and Lamarsh Parish Council, Assington Parish Council, Bulmer Parish Council, Burstall Parish Council, East Bergholt Parish Council,	Discussions are currently taking place about how connections from offshore windfarms can be coordinated – a review by the Department for Business Energy and Industrial Strategy (BEIS). The governments Energy White Paper is looking to incentivise coordination to minimise social, environmental and economic costs.
		Hennys, Middleton and Twinstead Parish Council, Hintlesham and Chattisham Parish Council, Little Cornard Parish Council, Stoke By Nayland Parish Council	However, viable offshore options will not displace the need for onshore reinforcements including Bramford to Twinstead, which needs to be in place by 2028. This is a vital piece of infrastructure, covering a bottleneck on the network, which the System Operator has identified as being critical. Any offshore options do not displace the need for onshore reinforcements and National Grid needs to take the Bramford to Twinstead reinforcement forward.

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
G12	Coordination with East Anglia Green (ATNC): The Network Options Assessment (NOA) 2020/21 report identifies a large number of other significant energy infrastructure projects that are expected to be delivered within the next decade within East Anglia. Details of any further planned network reinforcement projects should be made available to provide a comprehensive overview and ensure schemes are considered in a joined up, holistic way and not in isolation. There is also the potential for cumulative effects between the project and the proposed developments if they are within the same timeframe and similar geographical area.	Alphamstone and Lamarsh Parish Council, Assington Parish Council, Bulmer Parish Council, Hennys, Middleton and Twinstead Parish Council, Hintlesham and Chattisham Parish Council, Little Cornard Parish Council, Polstead Parish Council, Stoke By Nayland Parish Council	AENC and ATNC identified by the System Operator in the NOA (National Grid, 2021) report are still at an early stage. Routeing and substation siting options identification and appraisal is currently being undertaken, informed by National Grid's statutory and licence obligations, relevant National Policy Statements (EN-1 and EN-5) and National Grid's 'Approach to Options Appraisal'. This assessment will give thorough consideration to a range of technical, socio-economic, environmental, cost, and programme issues. Engagement with key prescribed stakeholders is anticipated to take place in January 2022 with non-statutory public consultation in late Spring 2022 on a preferred route corridor, substation site and preliminary route.
			At present (subject to the outcome of the routing and siting study), AENC and

At present (subject to the outcome of the routing and siting study), AENC and ATNC are anticipated to comprise a new 400kV double circuit connection from Norwich Main Substation to Bramford Substation, and a new 400kV double circuit connection from Bramford Substation to Tilbury substation via a new connection substation in Tendring District.

In the meantime, Bramford to Twinstead has been described by the System Operator as critical in all future energy scenarios. The emergence of new proposals is not a reason to suspend work on the project.

The Environmental Impact Assessment for the proposals includes a cumulative effects assessment, which considers the cumulative effects between the project and other proposed developments.

At the point of preparation of the Environmental Impact Assessment to support the Bramford to Twinstead Reinforcement application for development consent the environmental technical specialists will consider the latest information available on AENC and ATNC for the Cumulative Effects Assessment in accordance with legislation and PINS Advice Note 17.

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
			The cumulative effects assessment will be presented as part of the Environmental Statement.
G13	Coordination with East Anglia Green: The business case for combining the Bramford to Twinstead project and East Anglia Green as a single undergrounding project would unquestionably narrow the differential between the costs of overhead transmission and undergrounding for them individually, while reducing the visual impact considerably.	Assington Parish Council, Bulmer Parish Council	The reinforcement between Bramford and Twinstead is one of a number of network reinforcements needed to deliver 40GW of offshore wind by 2030. Additional onshore reinforcements identified in the region in the NOA (National Grid, 2021) are needed in addition to the Bramford to Twinstead project. The Bramford to Twinstead project has been described by the System Operator as critical in all future energy scenarios. Separate reinforcements
			identified in the NOA (e.g. the AENC/ ATNC reinforcements), do not remove the needs case for reinforcing the bottleneck between Bramford Substation and Twinstead Tee.
G14	If National Grid is intent on proceeding to seek consent for reinforcement of the transmission network onshore, it must do so in light of the High Court's judgment on the Norfolk Vanguard offshore wind farm project in February 2021, which emphasised the	Assington Parish Council, Burstall Parish Council, Hintlesham and Chattisham Parish Council	National Grid acknowledges the High Court's decision regarding the Vanguard DCO and recognises the importance of that judgement as a reminder that all possible significant cumulative environmental impacts must be considered at the early stages.
	importance of the cumulative effects of different infrastructure projects on affected communities.		The Environmental Impact Assessment for the proposals includes a cumulative effects assessment, which considers the cumulative effects between the project and other proposed developments. The cumulative effects assessment will be presented as part of the Environmental Statement.
G15	Stour Valley Underground's 2012 proposal estimated that the cost of adding capacity at the existing Braintree Substation and connecting it to the UKPN network in this area via an underground cable was broadly comparable to the cost of a two transformer substation.	Alphamstone and Lamarsh Parish Council, Hennys, Middleton and Twinstead Parish Council	Various options have been considered by UKPN and National Grid to maintain the local electricity connection and the current security of supply to local homes and businesses. Of the options considered, the development of a new grid supply point west of Twinstead was deemed the most appropriate distribution network reinforcement, and represents the most efficient, coordinated and economic option. Since restarting the project in 2020, National Grid has recommenced discussions with UKPN to ensure the previous proposals are still appropriate. In the view of UKPN and National Grid, the current proposals remain the most appropriate solution.

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
G16	Alternatives: National Grid should consider underground high temperature superconducting cables.	Hennys, Middleton and Twinstead Parish Council	At the present time, superconducting 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 by this project. While National Grid is monitoring how this technology develops in future, for the moment it is not a deployable technology that could be considered for any current projects.
			National Grid has considered alternative technologies. Further information is provided in the Project Development Options Report, 2022 (provided as part of the statutory consultation material).
G17	National Grid's should consider all available technological solutions. This means that National Grid and the Government will need to facilitate the funding of research, development and testing of new transmission technologies.	Little Cornard Parish Council, Hennys, Middleton and Twinstead Parish Council	National Grid is committed to using proven up-to-date technology and is involved in researching new technology for designing and managing the network. Transmission lines (including overhead lines) are still the most efficient way of transmitting electricity around the UK in many cases.
G18	Health Concerns and electric and magnetic fields (EMF): We are concerned about the risk to health from the project with regards to EMF. National Grid should comply with policy from Public Health England (PHE) and observe minimum safe distance in line with agreed standards.	Polstead Parish Council, Little Cornard Parish Council	National Grid's equipment is designed to comply with the Government Guidelines and policies for EMF. National Grid relies on authoritative and independent scientific organisations such as the World Health Organization (WHO) and the UK Health Protection Agency (HPA) to review the worldwide body of scientific evidence on EMFs and health. National Grid's network complies with all appropriate independent safety standards, i.e. the exposure limits advised by the HPA and adopted by Government. A certificate of compliance will be submitted with the application for development consent.
			UK law does not prescribe any minimum distance between overhead lines and homes. National Grid complies with guidelines set by the government regarding exposure to electric and magnetic fields. National Grid regards compliance with these as a key part of ensuring the health and safety of the public. Both electric and magnetic fields diminish rapidly with distance from the source and National Grid is committed to openly documenting compliance with these guideline levels to ensure that exposure levels at local properties are within the guideline levels.
## Table G.2: Additional Responses Raised by Section 42(1)(a) Consultees

## Summary of Matters Raised to Feedback

National Grid's Response

#### Cadent Gas Limited

Cadent has a number of pipelines and associated apparatus located within the Order Limits and will require appropriate protection including compliance with relevant standards for works proposed within close proximity of its apparatus. Where diversions of apparatus are required to facilitate the scheme, discussions between parties should be started at the earliest opportunity. It is essential that adequate temporary and permanent land take, land rights and consents are included within the Order to enable works to proceed without delay and to provide appropriate rights for Cadent to access, maintain and protect apparatus in future. If diversions of Cadent apparatus are required, Cadent will require adequate timescales prior to the submission of the DCO to undertake essential feasibility studies to provide National Grid with the necessary information to consider as part of their application. Please be aware that diversions for high pressure apparatus can take in excess of two years to plan and procure materials. Where the Promoter intends to acquire land, extinguish rights, or interfere with any of Cadent's apparatus, Cadent will require appropriate protection and further discussion on the impact to its apparatus and rights including adequate Protective Provisions. Key Considerations:

- Cadent has a Deed of Grant of Easement for each pipeline, which prevents the erection of permanent/ temporary buildings, or structures, change to existing ground levels, storage of materials etc.
- Please be aware that written permission is required before any works commence within the Cadent easement strip.

Cadent provide general notes on Pipeline Safety, requirements for pipeline crossings and new service crossings but note that guidance is not exhaustive and all works in the vicinity of Cadent's asset shall be subject to review and approval from Cadent's plant protection team in advance of commencement of works on site.

Dedham Vale Areas of Outstanding Natural Beauty (AONB) and Stour Valley Partnership

National Grid are in dialogue with Cadent and working on a Statement of Common Ground. National Grid will engage with Cadent in respect of Protective provisions, these will be included in the draft Development Consent Order.

### **National Grid's Response**

The Dedham Vale AONB and Stour Valley Partnership provides a review of those policies they consider to be key in developing proposals and note the following:

- National Policy Statement for Energy (EN-1): The AONB Partnership concur with National Grid that any new 400kV line should be put underground where it crosses or negatively impacts the nationally designated landscape as overhead lines do not contribute to the statutory purpose of AONBs.
- National Policy Statement for Electricity Networks Infrastructure (EN-5): As undergrounding in the AONB and Stour Valley project area was already considered as appropriate before the project was paused, the AONB Partnership does not consider there has been any material change to alter that decision, indeed further evidence has emerged of part of the Stour Valley project area meeting the criteria for AONB status.
- The Electricity Act (1989): The Dedham Vale AONB and Stour Valley Partnership consider that the applicant should consider preserving the natural beauty of the nationally designated AONB and the Stour Valley project area.
- Section 85 of the Countryside and Rights of Way Act (2000): The Dedham Vale AONB and Stour Valley Partnership consider that the applicant should pay regard to the purpose of the AONB when developing the proposals for the application. Furthermore, the applicant should provide evidence demonstrating how the Duty of Regard has been met.
- National Planning Policy Framework: The Dedham Vale AONB and Stour Valley Partnership consider that the applicant should seek to conserve and enhance landscape and scenic beauty when developing its proposals for the application.
- *Planning Practice Guidance:* The Dedham Vale AONB and Stour Valley Partnership consider that the applicant should consider the full impacts on land within the setting to the AONB when developing its proposals for the application.
- The Dedham Vale AONB and Stour Valley Management Plan 2016-21: The Dedham Vale AONB and Stour Valley Partnership consider that the applicant should give great weight to the objectives of the management

National Grid can confirm its intention to underground the new 400kV transmission line through the Dedham Vale AONB (Section E).

Following feedback from key stakeholders, National Grid can confirm its intention to underground the new 400kV transmission line through parts of the Stour Valley (Section G).

Following feedback from key stakeholders and having regard to legislative and policy requirements, National Grid and its technical specialists have explored options to relocate Dedham Vale East CSE compound further away from the AONB boundary and reduce any potential effect on the setting of the AONB and the Conservation Area at Polstead. A number of development scenarios have been considered following the non-statutory consultation feedback bearing in mind all of National Grid's statutory duties. A location approximately 1km from the AONB boundary between two existing blocks of woodland at Millfield Wood has been taken forward. The existing woodland will be retained and will provide visual screening for the CSE compound.

The project will be subject to an Environmental Impact Assessment (both positive and negative effects), the results of which will be presented in an Environmental Statement. This will include an assessment of impacts on land within the setting to the AONB. The Environmental Statement will include the details of any mitigation measures that will be put in place to reduce the significance of environmental effects.

National Grid has given weight to the Dedham Vale AONB and Stour Valley Management Plan. Further details can be found in the Preliminary Environmental Information Report (provided as part of the statutory consultation material).

#### **National Grid's Response**

plan, which is a material consideration, when developing proposals for its application.

#### AONB Crossing:

Undergrounding of this section is welcomed due to the minimisation of the impacts on the nationally designated AONB and its defined natural beauty characteristics, including:

- Landscape quality
- Scenic quality
- Relative wildness
- Relative tranquillity
- Natural heritage features However, it would expect that the applicant takes appropriate measure to avoid, minimise, mitigate and compensate negative impacts to its defined natural beauty characteristic:
- Cultural heritage. Including archaeology

Furthermore, transitions between underground cable and overhead lines in the setting of the AONB should not negatively impact on the purpose of the AONB. The applicant, as a statutory undertaker and subject to section 85 of the Countryside and Rights of Way Act 2000, should make decisions that pay regard to the purpose of the nationally designated landscape and development in the setting of an AONB can negatively impact its statutory purpose.

## Stour Valley Crossing:

Partial undergrounding of this section is welcomed due to the minimisation of the impacts on the Stour Valley project area. However, the Partnership consider that the undergrounding should go further to avoid negative impacts as defined in the Alison Farmer Associates report in 2016 that evaluated the qualities of the landscape on Stour Valley project area.

Noted. National Grid can confirm its intention to underground the new 400kV transmission line through the Dedham Vale AONB (Section E).

Following feedback from key stakeholders and having regard to legislative and policy requirements, National Grid and its technical specialists have explored options to relocate Dedham Vale East CSE compound further away from the AONB boundary and reduce any potential effect on the setting of the AONB and the Conservation Area at Polstead. A number of development scenarios have been considered following the non-statutory consultation feedback bearing in mind all of National Grid's statutory duties. A location approximately 1km from the AONB boundary between two existing blocks of woodland at Millfield Wood has been taken forward. The existing woodland will be retained and will provide visual screening for the CSE compound.

Further information is provided in the Project Development Options Report, 2022 (provided as part of the statutory consultation material).

National Grid recognises that parts of the Stour Valley form an important part of the setting of Dedham Vale AONB. National Grid has undertaken a back check and review of the likely impacts of the project on the setting of the AONB taking account of its statutory duties and obligations. It is considered that the undergrounding proposed is appropriate in the most highly valued parts of the Stour Valley.

Following feedback from key stakeholders during the 2021 non-statutory consultation, National Grid can confirm its intention to underground the new 400kV transmission line through the most highly valued parts of the Stour Valley (parts of Section G), between the Stour Valley East CSE compound to the east of St Edmunds Hill, and the Stour Valley West CSE compound off Henny Back

Summary of Matters Raised to Feedback	National Grid's Response
	Road, alongside the removal of the existing 132kV overhead line and 400kV overhead line between Stour Valley West and Twinstead Tee.
	Those parts of the Stour Valley considered to be within the setting of the AONB will be considered in the Environmental Impact Assessment for the proposals (both positive and negative effects) as part of the wider setting of the existing AONB designated area. Further details can be found in the Preliminary Environmental Information Report (provided as part of the statutory consultation material).
While the Partnership welcome the ambition to minimise impacts on the defined qualities of the AONB and Stour Valley project area (as a Valued Landscape) from the transition infrastructure, it considers that these impacts should be fully assessed, in terms of landscape and visual impacts and impacts on the purpose of the AONB.	The project will be subject to an Environmental Impact Assessment, the results of which will be presented in an Environmental Statement. This will include an assessment of impacts on the AONB and its setting (both positive and negative effects). Further details can be found in the Preliminary Environmental Information Report (provided as part of the statutory consultation material).
If transitions are required, then they should be designed and located to minimise impacts on the AONB, Stour Valley project area and other areas of countryside to meet with section 85 of Countryside and Rights of Way Act (2000) responsibilities and the draft National Planning Policy Framework (2021)	National Grid has undertaken a back check and review of the likely impacts of the project on the setting of the AONB taking account of its statutory duties and obligations.
	The back check and review included looking at the potential effects that the CSE compounds would have on the setting of Dedham Vale AONB (see Section 5.4 of the Project Development Options Report, 2022). The study coupled with non-statutory consultation feedback concluded a move of the proposed Dedham Vale East CSE compound. In its new location, CSE compounds are considered to have limited effects on the setting of the AONB or key views at its proposed location and it is not likely to significantly impact on the special qualities of the AONB.
<ul> <li>The Dedham Vale AONB and Stour Valley Partnership consider that several additional variations are required to enable a fuller assessment of the impacts from the proposals:</li> <li>Assessment of project impacts on the Natural Beauty and Special qualities of the AONB and Stour Valley project area</li> <li>Visualisations of transitions and towers to improve understanding of visual impacts</li> </ul>	The project will be subject to an Environmental Impact Assessment (both positive and negative effects) in accordance with the scoping opinion received, the results of which will be presented in an Environmental Statement. This will include an assessment of impacts on the Dedham Vale AONB and the Stour Valley Project Area. The Environmental Statement will include the details of any mitigation measures that will be put in place to reduce the significance of environmental effects. Further details can be found in the Preliminary Environmental Information Report (provided as part of the statutory consultation material).

## **National Grid's Response**

- Assessment of how National Grid meets section 85 of Countryside and Rights of Way Act 2000 responsibilities
- Assessment of how national Grid have treated the Stour Valley 'Valued Landscape'
- Assessment and opportunity mapping of impacts on cultural heritage
- Assessment of how the proposals will support delivery of Dedham Vale AONB and Stour Valley Management Plan
- Assessment of desirability or otherwise of undergrounding the existing 400kV line that crosses the AONB and Stour Valley project area at the same time as delivering the Bramford to Twinstead project

The application for development consent will be supported by visualisations. A number of photomontages have been prepared for the statutory consultation in 2022.

The duties on National Grid under Section 85 of the Countryside and Rights of Way Act 2000 have been considered throughout project design and has been part of the decision making around undergrounding within the AONB and siting of cable sealing end compounds. Further details can be found in the Preliminary Environmental Information Report (provided as part of the statutory consultation material).

As part of the Bramford to Twinstead project approx. 25km of existing 132kV overhead line and 2.5km of existing 400kV overhead line will be removed, 3km of which will be from the Dedham Vale AONB and 5km from the Stour Valley Project Area. The proposed reinforcement will be placed underground in the AONB and parts of the Stour Valley meaning there will be one less overhead line in the landscape. Undergrounding of the existing line is therefore not required to mitigate the impacts of the reinforcement, and therefore the substantial cost to bill payers, as well as the environmental impacts of construction, would not be justified.

Although National Grid has a Visual Impact Provision (VIP) project, which makes use of Ofgem funding to reduce the impact of existing transmission lines in AONBs and National Parks in England and Wales, this is a separate initiative and does not apply to the Bramford to Twinstead project.

National Grid should provide information on:
 An assessment of the desirability of transmitting energy generated on and off the east coast being required to cross nationally designated landscapes.
 As part of developing a project, National Grid uses a process of options appraisal to consider potential options in a robust and transparent manner. This process, alongside extensive public consultation, informed the decision to route the Bramford to Twinstead project though the Dedham Vale AONB. Each stage of the options appraisal process has been informed by robust assessment. Further information is provided in the Project Development Options Report, 2022 (provided as part of the statutory consultation material).

Summary of Matters Raised to Feedback	National Grid's Response
<ul> <li>An assessment of a co-ordinated approach to the transmission of energy from where it is generated to where it is required, including factors relating to distance, cost and environmental impacts.</li> </ul>	The National Grid Electricity System Operator (ESO) is responsible for producing the future energy scenarios, and the Network Options Assessment (NOA), identifying the need for network reinforcements. The Bramford to Twinstead project is critical in all energy scenarios considered by the ESO. National Grid Electricity Transmission (NGET) then considers strategic options, including consideration of environmental, socio-economic, engineering and cost factors, to identify the most appropriate means of delivering the required reinforcements. Notwithstanding this, National Grid recognises and supports the ambitions for a more coordinated offshore and onshore transmission network. National Grid is inputting into the Government's Offshore Transmission Network Review.
<ul> <li>Assessment of desirability or otherwise of undergrounding the existing 400kV line that crosses the AONB and Stour Valley project area at the same time as delivering the Bramford to Twinstead project.</li> </ul>	As part of the Bramford to Twinstead project approx. 25km of existing 132kV overhead line and 2.5km of existing 400kV overhead line will be removed, 3km of which will be from the Dedham Vale AONB and 5km from the Stour Valley Project Area. The proposed reinforcement will be placed underground in the AONB and parts of the Stour Valley meaning there will be one less overhead line in the landscape. Undergrounding of the existing line is therefore not required to mitigate the impacts of the reinforcement, and therefore the substantial cost to bill payers, as well as the environmental impacts of construction, would not be justified.
	Although National Grid has a Visual Impact Provision (VIP) project, which makes use of Ofgem funding to reduce the impact of existing transmission lines in AONBs and National Parks in England and Wales, this is a separate initiative and does not apply to the Bramford to Twinstead project.
<ul> <li>An assessment of the relative merits of overhead lines versus underground cables</li> </ul>	National Grid has carefully considered the feedback received during earlier consultations, the alternatives available, and other factors including National Grid's 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.

Summary of Matters Raised to Feedback	National Grid's Response
	As part of its project development process, National Grid carefully considers whether the use of underground cables, rather than overhead lines, is an appropriate approach in the context of national policy and National Grid's various statutory duties. The Bramford to Twinstead reinforcement proposes underground cable within the Dedham Vale AONB and parts of the Stour Valley. Further information is provided on underground versus overhead in Section 3.4 of the Project Development Options Report, 2022 (provided as part of the statutory consultation material).
An assessment of what impacts on visitor economy	Amongst National Grid's duties is to have regard to the desirability of (amongst other things) preserving natural beauty, and to do what it reasonably can to mitigate any effects. Key embedded measures which will mitigate impacts in the areas of highest amenity value, the Dedham Vale AONB and the Stour Valley, is the undergrounding of the new line, alongside the removal of the existing 132kV line along the entire route.
	Once the new line is built and reinstatement planting has matured, it is not anticipated that there will be any effects on visitor attractions. Construction-phase amenity effects are anticipated to be localised and short in
	duration, although these will be reduced through good practice measures.
An assessment of the suitability of new technologies available for energy transition at this scale.	National Grid had previously considered different routes and technology options as part of the strategic options stage and has reviewed this as part of the back check and review exercise. All alternatives to the proposed project had greater environmental effects due to their length, did not achieve the requirements to reinforce, or were substantially more expensive. National Grid has considered alternative technologies including low height pylons, T-pylons, gas insulated lines and full undergrounding. Further information is provided in the Project Development Options Report, 2022 (provided as part of the statutory consultation material).
• An assessment of how the project has met the Holford rules as summarised in points 1 and 2 of optioneering report 3.3.4, Box 1. (avoiding AONBs and areas of High Amenity value).	While the Holford Rules suggest that designated landscapes should be avoided, the proposed route was identified as an 'opportunity corridor' during the optioneering process. This is because it uses an existing overhead line corridor, which would mean a reduced scale of effect on landscape and views when

Summary of Matters Raised to Feedback	National Grid's Response
	compared to introducing a new overhead line into a landscape where there is presently no infrastructure. The route through the AONB also presents the opportunity to remove the existing 132kV overhead line, further reducing the scale of change. During consultation on the corridor options, this was an approach supported by several statutory consultees. Furthermore, National Grid has duties under the Countryside and Rights of Way Act 2000 to conserve and enhance AONBs. Accordingly, underground cable is proposed through the AONB which, in combination with the removal of the existing 132kV line, will result in a betterment to the AONB and compatibility with the Holford Rules.
<ul> <li>An indication of how proposals in Glover review of designated landscapes have been recognised in the proposals.</li> </ul>	The Glover Review final report was published in September 2019 and included 27 proposals. At the time of writing the Government has still not made their formal response to the review. However, on 24 June 2021 a Ministerial Statement was made, which noted that the Government is currently considering the designation of four new AONB's. None of these are in the study area of the project. National Grid notes that the Minister also said 'We are also considering options to strengthen the status and support given to AONB and the recommendation to possibly change their name' and look forward to hearing more about the additional support for AONBs and if they will change their name. (https://hansard.parliament.uk/commons/2021-06-24/debates/21062452000014/LandscapesReviewGovernmentResponse). As part of the Bramford to Twinstead project approx. 25km of existing 132kV overhead line and 2.5km of existing 400kV overhead line will be removed, 3km of which will be from the Dedham Vale AONB and 5km from the Stour Valley Project Area. The proposed reinforcement will be placed underground in the AONB and parts of the Stour Valley meaning there will be one less overhead line in the landscape in these locations.
References relate to paragraph numbers from Options report: 1.1.4: What is National Grid's expectation of the magnitude of continued electricity generation on and off the east coast and how long would the Bramford to Twinstead project be fit to accommodate this expansion?	The Prime Minister's Ten Point Plan for a Green Industrial Revolution and the Energy White Paper set a Government ambition to see 40GW of offshore wind connected by 2030 and an expectation that increased interconnection with other countries will play also play a role in meeting the UK's future energy needs. The Electricity System Operator explained in the Network Options Assessment in 2021 that reinforcing the network between Bramford to Twinstead is critical in all future energy scenarios, but that additional network reinforcements are also

Summary of Matters Raised to Feedback	National Grid's Response
	needed in East Anglia – a HVDC subsea link (SEA Link or SCD2 in NOA 2021) and a reinforcement between Norwich and Tilbury via Bramford (East Anglia GREEN or ATNC and AENC in NOA 2021). Together with upgrades to the existing network in the first half of this decade, Bramford to Twinstead and those other reinforcements are all necessary to deliver the transmission capability that is needed in the region by 2030.
	With regard to what may be required to deliver on the UK commitment to net zero carbon emissions by 2050, the long term work that the Government is conducting through the BEIS Offshore Transmission Network Review (OTNR) should help inform thinking around that. The OTNR output is expected in 2022. Of course any significant onshore transmission network reinforcement would require the consent from the Secretary of State or (in the case fo standalone substations) planning permission from the local planning authority.
1.1.5 Why are connection points issued where there are known problems of limited physical routes and ability to upgrade?	When new sources of electricity apply to connect to the network, National Grid Electricity System Operator (ESO) is required under its licence obligations to offer terms to connect. All of those offers, which have to be made within 90-days, are subject to consents. Where it is necessary to add to the existing network, the precise location, shape and nature of new transmission reinforcement proposals is something that develops through routeing, siting, detailed design and public consultation at the pre-application stage. Government and the regulator expect the planning process to determine whether a proposal is acceptable in planning and environmental terms. Pre-application consultation is an important part of that process.
3.1.3 How has the duty of regard to the AONB from statutory undertakers been met in the Strategic Optioneering work?	The strategic options stage identifies high-level options to deliver the required reinforcement and does not propose specific route corridors, although does identify and consider high-level constraints including the location of designated landscapes, which will need to be appropriately addressed.
	The corridor was identified as an 'opportunity corridor' during further stages of the optioneering process. This is because it uses an existing overhead line corridor, which would mean a reduced scale of effect on landscape and views when compared to introducing a new overhead line into a landscape where there is

Summary of Matters Raised to Feedback	National Grid's Response
	presently no infrastructure. The route through the AONB also presents the opportunity to remove the existing 132kV overhead line, further reducing the scale of change. During consultation on the corridor options, this was an approach supported by several statutory consultees. Furthermore, National Grid has duties under the Countryside and Rights of Way Act 2000 to conserve and enhance AONBs, which are also reflected in National Grid's Stakeholder and Amenity Policy 'National Grid's commitments when undertaking works in the UK' (available online). Accordingly, underground cable is proposed through the AONB which, in combination with132kV overhead line removal, (3km of which will be from the Dedham Vale AONB) will reduce the amount of overhead line infrastructure present in this nationally designated landscape. This would likely result in betterment to the AONB.
3.1.4 Notes that decision making has been undertaken by prescribed bodies, who are these prescribed bodies and how have they met their duty of regard obligations to the AONB?	The reference in 3.1.4 of the Project Development Options Report at non- statutory consultation, is about National Grid's decision making at stages in our project development process being informed in part by feedback from prescribed bodies. In the context of the AONB, that is Natural England and the relevant local authorities.
3.3.5 Do the Horlock Rules include the siting of Cable Sealing End Compounds	Not explicitly, but regard has been had to them. The CSE locations are dictated to a large extent by the extant of undergrounding, albeit optioneering tis undertaken to identify the most suitable locations. The Project Development Options Report outlines the considerations that have been taken into account in siting proposed sealing end compounds.
6.2.6 National Grid request for understanding views on the landscape and cultural value of the Stour Valley	Further details can be found in Section 6 (Landscape and Visual) the Preliminary Environmental Information Report (provided as part of the statutory consultation material).
In Appendix 2 of its feedback, The Dedham Vale AONB and Stour Valley Partnership provide a list of matters that they consider will need to be considered as part of any future assessment of the impacts of the proposed Bramford to Twinstead project on the AONB and the Stour Valley project area.	The project will be subject to an Environmental Impact Assessment, the content of which will be guided by the scoping opinion received from the Planning Inspectorate; the results of the Environmental Impact Assessment will be presented in an Environmental Statement. This will include an assessment of impacts on the AONB and its setting (both positive and negative effects). Further details can be found in the Preliminary Environmental Information Report (provided as part of the statutory consultation material).

## **National Grid's Response**

## **Environment Agency**

The Environment Agency provide advisory comments in relation to Flood Risk:

- The Environment Agency agree that a flood risk assessment will be required.
- Dedham Vale is an AONB
- We assume this development will be classed as Essential infrastructure so currently the upper end allowance should be assessed for climate change in the fluvial Flood zone 3a. However, please note that there will be an update to these allowances which is due in July 2021 please contact us before beginning any detailed flood risk work to ensure that you have the most up to date information.
- We are pleased to see that you have already been advised to remove spoil from the floodplain and confirmed there will be no land raising in flood zone 3
- An Ordinary watercourse consent may be required from the local council in addition to permits from us (further information below)

Comments are noted and we can confirm that the project will be using the upper end allowance for climate change in fluvial Flood zone 3a in the Flood Risk Assessment. The Environmental Impact Assessment will consider the potential for significant effects to surface and groundwater (including SPZs) from trenchless crossings and cable joint bays.

The preliminary results of the assessment can be found in the Preliminary Environmental Information Report which is published as part of the statutory consultation material.

mind the sensitivity of the watercourse, engineering requirements and

The Environment Agency note that the project may need an environmental permit for flood risk activities for works in, under, over or within 8m from a fluvial main river and from any flood defence structure or culvert or 16m from a tidal main rive and from any flood defence structure or culvert. Belstead Brook, River Brett, Rive Box, and the River Stour are designated as 'main rivers'. Anyone carrying out these activities without a permit where one is required, is breaking the law	Crossings once detailed engineering information is available.
The Environment Agency note that the indicative location in Section D appears to go over Layham Quarry Authorised Inert Landfill –The project should consider the location of the overheads in relation to pollution risk from this landfill. The proposal also traverses source protection zones – (mostly within a SPZ 3, and crossing SPZ 2 in two locations). Directional drilling should consider the risk to both surface water and groundwater. Cable jointing should also consider the above.	C I
The Environment Agency note the following key watercourse crossing issues if trenching (rather than using HDD) for the underground section (which would	As part of the ongoing design of the project, watercourse crossing methods are being explored to determine the most suitable construction method bearing in

Summary of Matters Raised to Feedback	National Grid's Response
<ul> <li>nvolve damming the watercourse to create a dry working area and use of flume pipes or over-pumping to maintain flows):</li> <li>Appropriate surveys would need to be undertaken, including fish surveys, to understand the baseline.</li> <li>The Environment Agency want to see/agree the method statement,</li> </ul>	complexities and the potential impacts of such a watercourse crossing method. Potential crossing methods, aquatic survey requirements, mitigation (such as timing restrictions), and enhancement will be discussed with the Environment Agency.
<ul> <li>including the proposed mitigation, for completing the works.</li> <li>Timing of works is significant, avoid the coarse fish spawning season (March –June), and periods of high-flows (pumps to maintain flows may not be able to cope).</li> </ul>	Existing good practice measures are set out in the Code of Construction Practice. Further details will be set out in the Outline Construction Environment Management Plan.
<ul> <li>Ensure that flows are maintained during the works, for downstream ecology and abstractors.</li> <li>Ensure that adequate pollution control (including sediment management) and emergency procedures are in place.</li> </ul>	Watercourses would be reinstated following construction. Some watercourses are included within the Environmental Areas, where there are opportunities to enhance the aquatic habitats.
<ul> <li>Agree a plan for re-instatement –as was or opportunities to improve habitat for fish, water voles etc.</li> </ul>	The Environmental Impact Assessment will include an assessment of the proposals on the water environment and hydrogeology. The preliminary results of the assessment can be found in the Preliminary Environmental Information Report published as part of the statutory consultation material. The potential for likely significant effects documented in the ES.
	Flood Risk Activity Permits will be sought for all Main River Crossings once detailed engineering information is available.

#### **Historic England**

Historic England note that extensive consultation was undertaken with Historic England prior to project pause which resulted in changes to the scheme around the grade I listed Hintlesham Hall and the grade II* listed stable block at Hintlesham Hall. Much of the information remains the same as in 2013, in particular that corridor 2b (southern) remains the preferred route for the new line. This proposal would see the removal of a large section of 132kV power line and associated pylons leaving the new 400kV line to run parallel with the existing 400kV line around Hintlesham Hall.

Historic England expressed concerns in 2013 relating to this proposed route and its impact upon the setting of the grade I listed building, however they accepted that undergrounding the cable in this area could cause damage to potentially

National Grid is working with Historic England regarding Hintlesham Hall and the positions of pylons within key views. National Grid is in early discussions to agree a mitigation strategy for the Hall including additional planting proposals that would further reduce the effects on the setting from key views. National Grid will also discuss any proposed mitigation strategy with the owners of Hintlesham Hall.

Summary of Matters Raised to Feedback	National Grid's Response
important nature habitats. Historic England stated that should the pylons be placed adjacent to the existing line, and key views from Hintlesham Hall respected, then corridor 2b (southern) would be the most appropriate route for the new power cable. Historic England note that as the project has now restarted it is their view that the proposed line would be dominating in the view to the north from Hintlesham Hall and we suggest that key views from the Hintlesham Hall should be reconsidered. This would aid in the best placement of the second line of pylons to minimise the visual harm. Landscape mitigation measures to screen the pylons from view, should be considered which should work with elements of the known historic landscape and aim to restore these elements where possible. Historic England note that they would not support the artificial placement of hedges and hard screening where they would themselves cause harm to the setting of the building. Perhaps a collaboration with the owners of Hintlesham Hall would be best to achieve best results.	
It is heartening to note that the cable in the area of the Dedham Vale AONB still meets the National Grid test for undergrounding and that the existing 132kV cable line would be removed from this area.	Following feedback from key stakeholders, National Grid can confirm its intention to underground the new 400kV transmission line through the Dedham Vale AONB.
The location of the eastern Cable Sealing Ends has still to be agreed and further discussion with regards to the proposed options would be appreciated. Historic England note that Polstead is designated as a Conservation Area by Babergh Mid Suffolk Council and one of the locations for the CSE would be on the edge of Dollops Wood which borders the conservation area at its southern end. Dollops Wood and the surrounding farmland to the north of Polstead contributes to its rural character and the final position of the CSE should respect this. Consideration should be given to the placement of the CSE further away from Polstead Conservation Area and with this in mind, further consideration should be given to the north CSE.	setting of the AONB and the Conservation Area at Polstead. A number of development scenarios have been considered following the non-statutory consultation feedback bearing in mind all of National Grid's statutory duties. A location approximately 1km from the AONB boundary between two existing blocks of woodland at Millfield Wood has been taken forward. The existing woodland will
The western CSE is proposed to the west of Boxford Fruit Farms. This landscape is undulating and although placed on a piece of flat land it has the potential to be visible within a wider area. The exact location of the compound is not able to be ascertained from the plans, but Historic England consider that mitigation could be necessary to screen the compound in long views to the north and to the south.	Further details of the proposed CSE compound will be provided in the statutory consultation material. The proposals will be subject to an Environmental Impact Assessment, the results of which will be presented in an Environmental Statement. This will include the details of any mitigation measures that will be put in place to reduce the significance of environmental effects.

### **National Grid's Response**

Historic England note that further discussion around the position of this CSE would be appreciated.

The Stour Valley eastern CSE has undergone some further assessment and we would like to see some of the appraisals for the other options available. Option 5 and option 4 in particular would seem to represent the schemes that cause less harm to this historic environment and lie outside of the Stour Project Area. The impact upon the grade II* listed Sawyers Farm would also be reduced through the undergrounding of cable and the removal of the existing 132kv line. It would also remove the CSE from what, from historic maps, would seem to indicate, of been one of the main routes to the farmyard from the agricultural lands it farmed.

regard to assessing the landscape quality and character. The Stour Valley is a sensitive landscape as established by the Dedham Vale AONB and Stour Valley Project Management Plan.

Historic England have been provided with a Geophysics report as part of ongoing dialogue between National Grid and Historic England. The report presented the results of the geophysical survey work, where magnetometry had been used to investigate the study area. It was noted that the survey identified a number of anomalies, particularly in the areas of river terrace gravels, but that it may have been less successful on the areas of alluvium. It is therefore possible that the survey has not identified the archaeological remains that may be present in these areas. Alternative geophysical survey techniques, such as resistivity or electomagnetism may be able to identify remains within alluvium and so should be considered as part of the ongoing evaluation work.

We would advise early consultation with the relevant local authority archaeological services to ensure the appropriate evaluation techniques are used.

Historic England support an expert topic group approach for going forward with this application and we would welcome the opportunity to comment on the future scope and approach to the forthcoming Environmental Statement.

The Stour Valley East CSE compound is relatively well screened in terms of views from Sawyers Farm, as the farm is surrounded by existing planting and the CSE compound has been positioned to make use of the natural topography. In addition, further planting is proposed within the design to further screen the CSE compound from surrounding viewpoints. National Grid consider this to be a suitable site for the CSE compound and do not consider it to have significant effects on the setting of Sawyer's Farm Grade II listed building.

In reviewing the options for the Stour Valley area, National Grid should pay robust The Environmental Impact Assessment will consider and assess the proposals on landscape quality and character, including an assessment of effects on the Dedham Vale AONB and the Stour Valley drawing on baseline information given in the Dedham Vale AONB and Stour Valley Management Plan 2021-26.

> National Grid is undertaking discussions with the appropriate County Archaeologist and thematic group meetings on cultural heritage, and a strategy for archaeological evaluation trenching is being agreed. Further information is provided in the archaeological framework strategy (AFS) which forms part of the Preliminary Environmental Information Report (2022 statutory consultation).

National Grid look forward to continuous engagement and working with Historic England as the scheme progress. The project team has set up a heritage thematic group with the relevant planning authorities and Historic England.

#### **Natural England**

#### **National Grid's Response**

Hintlesham Woods Site of Special Scientific Interest (SSSI): Natural England considers that the works on-site, and nearby new section of overhead line, could damage or destroy the site's interest features if avoidance and mitigation measures are not suitably adopted, both during and post-construction. It will be important to establish early any impacts which could occur to the SSSI and follow the mitigation hierarchy, considering the sites status as a both a SSSI and as an Ancient Woodland.

Following feedback on the landscape and visual impact of the proposed alignment to the north of Hintlesham Woods, National Grid has undertaken a back check and review of previously discounted options in this area. Hintlesham Woods is designated as a Site of Special Scientific Interest (SSSI), ancient woodland and is also an RSPB reserve. This review has identified an additional option which is the subject of consultation. These are presented as Hintlesham Woods Option 1 and Hintlesham Woods Option 2 in consultation material (the Project Development Options Report and the Preliminary Environmental Information Report). Further details on each of the options is provided in Section 4.3 of the Preliminary Environmental Information Report:

- Option 1 (as consulted on during the non-statutory consultation) the proposed 400kV overhead would use the existing alignment and pylons of the exiting 400kV overhead line through the woods, and the existing 400kV overhead line would be re-routed around to the north and west of the woods on newly constructed pylons.
- Option 2 (being explored due to feedback received during and following non-statutory consultation) the proposed 400kV overhead line would parallel the existing 400kV overhead line to the south, with pylons located outside of the woodland and the conductors oversailing the woods.

National Grid is seeking feedback on both options as part of its statutory consultation, with a view to identifying the most appropriate solution which strikes the right balance bearing in mind all of its statutory duties.

An Environmental Impact Assessment is being undertaken which will identify potential effects on Hintlesham Woods and any required mitigation.

Due to Hintlesham Woods SSSIs notified interest feature of the assemblages of breeding birds, Natural England would like to raise early the importance of scheduling works outside of the nesting bird season. The Indicative Alignment presented at the non-statutory consultation 2021 (Hintlesham Woods Option 1 in the statutory consultation, 2022) requires works to the existing 400kV overhead line. The proposed 400kV overhead line would use the route and existing pylons of the existing 400kV overhead line through the woods, and the existing 400kV overhead line would be re-routed around to the north and west of the woods on newly constructed pylons.

Summary of Matters Raised to Feedback	National Grid's Response
	Works to the existing 400kV overhead line can only take place during planned electricity outage periods. Outage periods are agreed periods of time when a live electricity line can be taken out of service so that works can be safely undertaken Outages are typically in spring and summer when electricity demand is lower and therefore could coincide with bird nesting season. National Grid will undertake as much of the works outside of the bird nesting season as possible. Should works during the bird breeding season be unavoidable then alternative mitigation would be identified and implemented. In response to feedback seeking to avoid works in the bird nesting season, National Grid has identified Option 2 at Hintlesham Woods which does not require works to the existing 400kV overhead line or works within outage windows. Option 2 can therefore be constructed outside of bird nesting season and over a shorter construction period. National Grid is seeking feedback on both options as part of the statutory consultation.
Natural England notes that the proposed reinforcement route, including both new overground and underground cabling has the potential to impact ancient woodland identified by the Ancient Woodland Inventory. Notably, many of these woodlands are also designated as County Wildlife Sites (CWS) or nationally designated (SSSI) in the case of Hintlesham Woods SSSI. In the majority of instances, the proposed route is planned to come within close proximity to ancient woodland (outside the footprint of the woodland), in these circumstances' impacts may be avoidable or mitigation may be possible to prevent deterioration or loss of ancient woodland from occurring. However, current plans indicate that some points of the route cross ancient woodland which will likely result in the loss or	The option National Grid intends to take forward at Dollops Wood is the alternative cable route presented at the non-statutory consultation 2021, to the north of the woods. Whilst an option was explored to undertake a trenchless crossing beneath this sensitive woodland, ground conditions were deemed to be unfavourable for this construction technique which brought about a level of environmental risk. The alternative route to the north will avoid Dollops Wood, prevent the need for a trenchless crossing beneath the woodland, and remove this section of the cable from the woodland and the AONB boundary.
deterioration of ancient woodland. Most notably The Dollops (CWS and ancient woodland), through which underground cables appear to be planned and a cable sealing end (CSE) planned adjacent. You should consider any impacts on ancient	Please see comment above regarding Hintlesham Woods.
woodland and ancient and veteran trees in line with paragraph 175 of the NPPF. Natural England and the Forestry Commission have produced standing advice for planning authorities in relation to ancient woodland and ancient and veteran trees. Natural England highly recommends that the applicant reads this standing advice and applies this information to the design of their scheme. Further advice	Ancient Woodland is being carefully considered as part of the ongoing design evolution. The effects of the project on ancient woodland and ancient and veteran trees will be assessed as part of the Environmental Impact Assessment.

### **National Grid's Response**

regarding ancient woodland can be found on page 71 (para 5.3.14) of the NPS EN-1 5. Natural England maintains the Ancient Woodland Inventory which can help identify ancient woodland.

Natural England notes that the proposed cable route crosses or lies near to a range of CWS, local nature reserves (LNR) and priority habitats. National Grid should consider the impacts of the proposed development on any local wildlife or geodiversity sites, in line with paragraphs 171 and 174 of the NPPF and any relevant development plan policy. There may also be opportunities to enhance local sites and improve their connectivity. Natural England does not hold locally specific information and recommends further information is obtained from appropriate bodies such as the local records centre, wildlife trust, geoconservation groups or recording societies.

Priority habitats and species are considered as of particular importance for nature conservation and included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. Most priority habitats will be mapped either as Sites of Special Scientific Interest, on the Magic website or as Local Wildlife Sites; Natural England provide a list of priority habitats and species. Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land, Natural England provide a link to further information including the open mosaic habitats inventory.

Natural England strongly advise that, for each protected species likely to be affected by the project, National Grid obtain additional pre-licensing species advice from Natural England prior to the application submission to further reduce uncertainty and risk of delay at the formal application stage. Natural England recommend they review draft protected species licence applications and (if agreed) provide Letters of No Impediment (LoNI) ideally with or shortly after the Development Consent Order (DCO) application is made to ensure the Examining Authority (ExA) has the required certainty. During a prior meeting with National Grids consultants, it was mentioned that the applicant is considering only carrying out new protected species surveys (previous surveys c. 2013) in instances where satellite imagery showed significant habitat change. Regarding the use of prior survey data when apply for protected species licences (and project impact

Amongst National Grid's duties is to have regard to the desirability of (amongst other things) conserving flora and fauna, and to do what it reasonably can to mitigate any effects. Indeed, the ongoing process of route design takes account of ecology and, where possible, seeks to reduce impacts on areas of ecological sensitivity, through avoidance or mitigation. An Environmental Impact Assessment is being undertaken which will identify effects and mitigations, and National Grid is working closely with the relevant statutory bodies, for example RSPB and the Wildlife Trust.

Following Natural England's feedback, National Grid has been in detailed consultation with Natural England to determine the most appropriate scope for investigating and recording the presence of habitats and protected species potentially affected by the project. National Grid wish to take a proportionate but robust approach to protected species surveys bearing in mind the wealth of information which is held by the project from prior to project pause.

National Grid has undertaken a habitat survey for the draft Order Limits.

#### National Grid | January 2022 | Bramford to Twinstead Reinforcement

#### Summary of Matters Raised to Feedback

assessments), Natural England offers the following advice: all baseline survey data for the project, covering all habitats and species likely to be affected, should be acceptable in terms of methodologies, coverage and age. The Chartered Institute of Ecology and Environmental Management (CIEEM) Advice note on the Lifespan of Ecological Reports and Surveys states that, for surveys which are more than three years old, "*The report is unlikely to still be valid and most, if not all, of the surveys are likely to need to be updated*". Where the ecological survey data to inform the various project impact assessments are not in line with this, we advise that clear justification must be provided on how the data remain valid and robust enough to inform conclusions.

Natural England advise that it is imperative that the project as a whole avoids, mitigates and/or compensates for impacts on habitats and species of high biodiversity value including designated sites, protected species and ancient woodland. As a first principle, the project should therefore represent no 'biodiversity net loss' in these regards. However, it should be noted that a significant amount of other valuable and sensitive habitats and species are likely to be affected by the project, including priority habitats and species, CWS and LNR. Priority habitats and species listed under section 41 of the NERC Act are, in the Secretary of State's opinion, of principal national importance for the purpose of conserving biodiversity. The avoidance mitigation-compensation hierarchy should also be clearly followed with respect to these habitats and species where they may be affected by this application. In this regard, Natural England advises that a project of this scale has the potential to provide a positive environmental legacy for the area within which it is proposed, with considerable long-term benefits to people and wildlife. Natural England welcome National Grids commitment to providing Biodiversity Net Gain (BNG) in advance of it being a statutory requirement in the relevant National Policy Statements (NPS EN-1 and NPS EN-5) for NSIPs and Natural England would be keen to work with National Grids in order to help realise any such ambition. BNG calculations should (ideally using the recently released Defra biodiversity net gain metric 3.0) compare the current biodiversity value of the habitats within the project red line boundary to be lost (excluding designated sites and ancient woodland) with the biodiversity value of the habitats forecast to be created following development, with the intention being to demonstrate an overall increase in biodiversity (minimum 10 %). Natural

National Grid has developed its Environmental Action Plan (2021-2026), which sets firm targets for the five-year period. These are focused on four priority areas:

- net zero carbon emissions;
- minimising waste and sustainable use of materials;
- caring for the natural environment; and
- leading the way.

With regard to the natural environment, National Grid will value nature, and will protect and enhance it where possible using 'natural capital' and 'net gain' principles. In line with National Grids own internal policies, The Environment Act 2021, and the consultation draft of NPS EN-1, National Grid has made a commitment to delivering a 10% BNG on this project. Therefore, National Grid is working with appointed technical specialists, environmental organisations and landowners to identify potential opportunities for delivering areas of BNG, and where practicable also linked to wider environmental gains such as recreation improvement.

Preliminary areas identified for potential mitigation and BNG (called 'Environmental Areas') have been identified through a desk-based search and habitat condition survey site visits- these will be presented in the Preliminary Environmental Information Report as part of the Statutory Consultation. These have been the topic of discussion with key stakeholders at a Biodiversity Net Gain Woking Group established by the project to help facilitate its commitments.

## **National Grid's Response**

Summary of Matters Raised to Feedback	National Grid's Response
England consider that such an approach could, following completion of the project, provide significant benefits (Natural England Feedback lists where benefits of BNG could be achieved). This should include enhancement of public access where practical (i.e. where it would not compromise the biodiversity interest, for example) and could also involve local stewardship of any new habitat creation; Natural England advise the National Policy and advice that this such an approach would be in line with.	As further baseline data is collected, and further discussions take place with consultees and landowners, the Environmental Areas will be refined. In addition, the biodiversity baseline will be quantified during the Environmental Impact Assessment and design process using the Biodiversity Metric 3.0 (Defra). This information will be used to calculate the loss in biodiversity units as a result of construction of the project, as well as the number of biodiversity units which will need to be created to achieve a 10% BNG. This will also determine the land required to achieve those gains on the project. Therefore, some of the Environmental Areas may not be taken forward and others may only require mino enhancements such as hedgerow improvements rather than works to the whole Environmental Area. Final proposals will be included as part of the application for development consent.
Natural England notes that the proposed cabling route crosses various public rights of way (PRoW), including the Stour Valley Way (St Edmund Way). Paragraphs 98 and 170 of the NPPF highlights the important of public rights of way and access. Further advice is provided on this topic within NPS EN-1 (pg. 102, para 5.10.24). Development should consider potential impacts on access land, common land, rights of way and the scope to mitigate any adverse impacts. Consideration should also be given to the potential impacts on any nearby National Trails. The National Trails website www.nationaltrail.co.uk provides information including contact details for the National Trail Officer.	National Grid has identified a number of PRoW that would be affected by construction of the project. PRoWs are discussed in Section 4.4 of the Preliminary Environmental Information Report which is presented as part of this Statutory Consultation.
If you consider the proposal has significant implications for further loss of 'best and most versatile' agricultural land, we would be pleased to discuss the matter further. Guidance on soil protection is available in the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, and we recommend its use in the design and construction of development, including any planning conditions. Should the development proceed, we advise that the developer uses an appropriately experienced soil specialist to advise on, and supervise soil handling, including identifying when soils are dry enough to be handled and how to make the best use of soils on site.	Noted. Agriculture and soils is discussed in Chapter 11 of the Preliminary Environmental Information Report which is presented as part of this Statutory Consultation.
Natural England welcomes the intention to underground the line through the Dedham Vale AONB, although they would prefer a route which avoided this nationally designated area. Natural England note that, if there is no practical and	A summary of the Route Corridor Study (RCS) published in October 2009 is presented as part of this Statutory Consultation (Project Development Options Report 2022). At the time of the Route Corridor Study, National Grid received a

Summary of Matters Raised to Feedback	National Grid's Response
deliverable alternative route then the undergrounding option, and the additional costs involved, is fully commensurate with and justified by the national importance of this landscape. Natural England also very much welcome the intention to remove existing lower voltage overhead line.	significant number of consultation responses against the selection of Corridor 3 or 4 (which avoided the AONB). This was because the areas to the north of Dedham Vale AONB are currently without existing electricity transmission infrastructure and introducing a new overhead line in this area was considered to have a greater magnitude of impact than within the existing corridor (Corridor 2). Although Corridor 2 passes through parts of the Dedham Vale AONB, it also presented an opportunity to remove the existing 132kV overhead line. This would minimise the scale of change on the landscape and was a view supported by a number of statutory consultees. National Grid has back checked and reviewed the previous work and decisions made during the Route Corridor Study. The back check and review work undertaken following the non-statutory consultation has concluded that the decisions made during the Route Corridor Study, including that Corridor 2 was preferred over Corridors 3 and 4 outside of the AONB, remain valid. It is National Grids intention to underground the 400kV in the Dedham Vale AONB.
The undergrounding option does not however mean that all significant effects on the AONB will be avoided. Natural England note that there will be significant impacts from the undergrounding construction phase. This underlines the importance of completing those operations as quickly as possible and ensuring full restoration of the route. We know from other schemes that this can usually be achieved very effectively through arable farmland and improved pasture i.e. where more sensitive soils and habitats are not affected. The precise alignment of the route will need to take full account of this.	It is National Grid's intention to underground the 400kV in the Dedham Vale AONB. However, it is recognised that the proposals have the potential for effects on the landscape character of the AONB and these are being considered within the Environmental Impact Assessment, in particular the landscape and visual impact assessment. Further details can be found in the Preliminary Environmental Information Report which is presented as part of this Statutory Consultation.
	National Grid is proposing to construct both sections of underground cables using a ducted solution (with the cable laid within conduits). This will allow the construction teams to pull the cables through ducts laid in the ground. There are engineering advantages to utilising this method, but it will also reduce the length of time that open trenches are required meaning that reinstatement can commence sooner than could happen with a standard open trenching technique.
Natural England in their feedback note their greater concern is the siting of sealing end compounds within the immediate setting of the AONB. The compounds may be able to take advantage of topography just outside the AONB boundary to largely screen their visibility from within the designated landscape. However, if this is not possible then the undergrounded section of the route	National Grid has undertaken a back check and review of the likely impacts of the project on the setting of the AONB taking account taking account of all of its statutory duties and obligations. The backcheck and review included looking at the potential effects that the CSE compounds would have on the setting of

Summary of Matters Raised to Feedback	National Grid's Response
across the AONB should be extended into the adjacent countryside so that the compounds can be visually removed from the AONB (or reduced visually to a below significant level) either by distance and/or allowing better topographical	Dedham Vale AONB (see Section 5.4 of the Project Development Options Report, 2022).
screening to be used.	Following feedback from key stakeholders and having regard to legislative and policy requirements, National Grid and its technical specialists have explored options to relocate Dedham Vale East CSE compound further away from the AONB boundary and reduce any potential effect on the setting of the AONB and the Conservation Area at Polstead. A number of development scenarios have been considered following the non-statutory consultation feedback bearing in mind all of National Grid's statutory duties. A location approximately 1km from the AONB boundary between two existing blocks of woodland at Millfield Wood has been taken forward. The existing woodland will be retained and will provide visual screening for the CSE compound.
	In addition, following feedback received during the non-statutory consultation, Stour Valley West CSE compound will be relocated further south, on the southern side of Henny Back Road. The relocation of this CSE compound will increase the amount of overhead line removal in the Stour Valley between Stour Valley West CSE compound and Twinstead Tee.
	The project will be subject to an Environmental Impact Assessment (both positive and negative effects), the results of which will be presented in an Environmental Statement. This will include an assessment of impacts on land within the setting to the AONB. The Environmental Statement will include the details of any mitigation measures that will be put in place to reduce the significance of environmental effects.
The section of the Stour Valley affected by this scheme falls within the 'setting' of the Dedham Vale AONB. The area's landscape character complements that of the adjacent designated area and therefore supports the delivery of the AONB's statutory purpose. This is recognised locally with the AONB and Stour Valley Project Area being subject to joint management arrangements. That the area has not so far been formally assessed for possible inclusion within the AONB designation does not detract from the very important, mutually supportive	the setting of Dedham Vale AONB. National Grid has undertaken a back check and review of the likely impacts of the project on the setting of the AONB taking account of all of its statutory duties and obligations. It is considered that the

relationship between the AONB and Stour Valley. Natural England therefore strongly advises that, subject to any other overriding environmental hindrances, this section is fully undergrounded. Justification for this is provided by both the quality of the landscape and its relationship to the AONB, together with a combination of legal duties and national planning guidance. The latter are set out by Natural England in its feedback.

National Grid, like all public bodies and utility providers, has a statutory duty under Section 85 of the Countryside and Rights of Way Act 2000 which states that in exercising or performing any functions in relation to, or so as to affect, land in and AONB, authorities "shall have regard" to their purposes. This 'duty of regard' applies to developments outside the AONB which will nonetheless affect their statutory purpose. This is confirmed by the government's on-line Planning Practice Guidance https://www.gov.uk/guidance/natural-environment. That same planning guidance also deals with the 'settings' issue in the context of development management policy. Development within the settings of these areas will therefore need sensitive handling that takes these potential impacts into account. The approval and delivery of extensions to the National Grid are guided by the relevant National Policy Statements (NPS); a detailed policy review with regard to designated landscapes is provided by Natural England in its feedback. Natural England note that 'We hope that, particularly in terms of a very clear steer from statute and planning policy, this helps to make a solid case for undergrounding across the Stour Valley'.

#### National Grid's Response

Following feedback from key stakeholders during the 2021 non-statutory consultation, National Grid can confirm its intention to underground the new 400kV transmission line through the most highly valued parts of the Stour Valley (parts of Section G), between the Stour Valley East CSE compound to the east of St Edmunds Hill, and the Stour Valley West CSE compound off Henny Back Road, alongside the removal of the existing 132kV overhead line and 400kV overhead line between Stour Valley West and Twinstead Tee.

See above comment regarding CSE compounds.

Those parts of the Stour Valley considered to be within the setting of the AONB will be agreed with Natural England and considered in the Environmental Impact Assessment of for the proposals (both positive and negative effects) as part of the wider setting of the existing AONB designated area. Further details can be found in the Preliminary Environmental Information Report (provided as part of the statutory consultation material).

Bulmer Parish Council	

# Parish Councils

**Summary of Matters Raised to Feedback** 

#### Alphamstone and Lamarsh Parish Council

We are concerned that National Grid has neither factored the setting of the Grade I listed church at Lamarsh into their proposals nor consulted English Heritage about it. Why has this building been completely overlooked?

National Grid has considered all grades of listed buildings in the assessment. There are over 1,100 listed buildings (including 26 grade I listed) within the 3km study area. The ones listed in non-statutory consultation documentation were particularly pertinent to an aspect of the consultation. The Preliminary Environmental Information Report includes details, including plans showing the location of listed buildings within the study area. National Grid is discussing the project (and all potentially affected listed buildings) with Historic England (formerly English Heritage).

## **Assington Parish Council**

The community of Assington and its Parish Council support the government's drive towards renewable energy sources to meet its legally-binding carbon emissions targets, and recognise the need for National Grid's transmission network to be reinforced, both to meet future demand and to accommodate changes to the geography of power generation as offshore wind ramps up over the coming decades.	Noted.
Assington is registering its opposition to National Grid's current consultation on the project, which in its current form would have a significant effect on the people and landscape of the village.	Noted. The project will be subject to an Environmental Impact Assessment, the results of which will be presented in an Environmental Statement. This will include the details of any mitigation measures that will be put in place to reduce the significance of environmental effects.
Ofgem's 'Willingness to Pay' (WTP) report in 2011 established the amenity of undergrounding for local communities, and this is crucial throughout the Bramford to Twinstead corridor, and not just in the Dedham Vale AONB and the Stour Valley Project Area: not only would the overhead sections of the line feature prominently within valued views from both, but the economy for the whole area is defined as tourism-led by Babergh District Council, and the value of visual amenity through the whole area must be taken into account.	The Government and the Regulator (Ofgem) expect National Grid to find a balance when developing proposals, taking account of the duties set out in the Electricity Act 1989 to be efficient, coordinated and economical and to have regard to the desirability of preserving amenity. Government address that and the question of overhead or underground in the relevant NPS (EN-5). The willingness to pay the additional cost for undergrounding cables is a decision for society and Government, not National Grid. When looking at the costs of a new connection, National Grid is guided by the laws, policies and regulations that have been set by Government on behalf of electricity consumers and society. National Grid is required through those to balance affordability to the electricity bill-payer with the impact of the proposals on the landscape. It is for the Government, through the planning process, to judge whether the balance is right.

**National Grid's Response** 

Summary of Matters Raised to Feedback	National Grid's Response		
Councillors were disappointed that there was no tailoring of the presentation to reflect the specific geographical impact of the project to the Bulmer and neighbouring community.	The non-statutory consultation was designed to re-engage with local residents and communities regarding the project and to gain feedback on the overall proposals.		
Councillors were left with the impression that every element of the proposals is "critical" leaving no room for adjustment or compromise in light of public opinion. It therefore seems that this consultation will not ultimately affect the outcome of National Grid plans.	The outcome of consultation is not pre-determined, and views expressed can and do make a difference to the development of the project proposals. Consultation forms an important part of how the development and design is progressed, National Grid is also required to have genuine regard to the consultation responses received and to demonstrate effective consultation. This document demonstrates how feedback received has been taken on board on the project.		
Bures St Mary Parish Council			
We support undersea cabling in that it reduces significantly the onshore environmental footprint and is less expensive to deliver, however we would like to see an independent scientific assessment carried out, detailing the implications for the sea bed and marine life, with a response showing what approaches will be taken to mitigate any concerns raised.	Undersea cabling is not proposed on the Bramford to Twinstead project.		
National Grid should have a clear medium / long term plan to prevent the subject of overhead lines in the Stour Valley needing to be re-visited time and again.	Following feedback received at the 2021 non-statutory consultation, National Grid can confirm that it intends to proceed with an underground cable through parts of Section G: Stour Valley.		
Access to the proposed undergrounding site near the historically important Sawyers Farm will need careful examination and agreement, since the current infrastructure is unable to support heavy vehicles. We would like to see details of the proposals in this regard, mindful that an alternate site nearer an existing road may be a better solution.	During construction, temporary haul routes would be constructed to accommodate construction vehicles, including heavy goods vehicles. The CSE compounds would require a permanent access track for maintenance visits; this would be a single access track. The site selection process takes into account aspects from engineering, environmental, planning and lands including access.		
Burstall Parish Council			
NSIP applications are also required to consider visual mitigation where appropriate. As demonstrated by the EA1 and related lines from offshore windfarms to the Bramford substation, undergrounding is the only effective form of mitigation available and is essential in nationally designated landscapes and as a means of avoiding cumulative impact.	As part of its option appraisal process, National Grid has considered whether the use of underground cables, rather than overhead lines, is an appropriate approach in the context of national policy and National Grid's various statutory duties. The project proposes underground cable within the nationally designated landscape of the Dedham Vale AONB and parts of the Stour Valley. Elsewhere along the route, the higher cost of cables to bill-paying consumers, and the environmental implications of installing and maintaining them,		

Summary of Matters Raised to Feedback	National Grid's Response
	are not considered to be justifiable in the context of national policy or National Grid's statutory duties, which include the need to be economic and efficient.
	As part of the Bramford to Twinstead project approx. 25km of existing 132kV overhead line and 2.5km of existing 400kV overhead line will be removed, 3km of which will be from the Dedham Vale AONB and 5km from the Stour Valley Project Area. The proposed reinforcement will be placed underground in the AONB and parts of the Stour Valley meaning there will be one less overhead line in these landscapes.
	The project will be subject to an Environmental Impact Assessment (both positive and negative effects), the results of which will be presented in an Environmental Statement. This will include an assessment of landscape and visual effects. The Environmental Statement will include the details of any mitigation measures that will be put in place to reduce the significance of environmental effects. Further details can be found in the Preliminary Environmental Information Report (provided as part of the statutory consultation material).
East Bergholt Parish Council	
The proposals as presented by National Grid will be harmful to the environment and does nothing to secure the income and jobs of local people working in other industries, such as tourism, and it does not enhance the well-being of local people.	The Environmental Impact Assessment assesses the likely significant effects of the proposals on the environment, including local people (in accordance with the scoping opinion received from the Planning Inspectorate). Further details can be found in the Preliminary Environmental Information Report (provided as part of the statutory consultation material).
Despoiling the AONB and rural areas with industrial scale infrastructure is simply not negotiable when alternatives exist. Any extra cost of extending the power grid is in effect the cost that has to be paid to mitigate the loss in income and jobs in the tourist industry and it is the cost our society must bear to save the beauty of these areas for future generations.	of national policy and National Grid's various statutory duties. National Grid can confirm

As part of the Bramford to Twinstead project approx. 25km of existing 132kV overhead line and 2.5km of existing 400kV overhead line will be removed, 3km of which will be from

Summary of Matters Raised to Feedback	National Grid's Response		
	the Dedham Vale AONB and 5km from the Stour Valley Project Area. The proposed reinforcement will be placed underground in the AONB and parts of the Stour Valley		
	meaning there will be one less overhead line in these landscapes.		
	The project will be subject to an Environmental Impact Assessment (both positive and		
	negative effects), the results of which will be presented in an Environmental Statement.		
	This will include an assessment of impacts on land within the AONB and its setting. The		
	Environmental Statement will include the details of any mitigation measures that will be		
	put in place to reduce the significance of environmental effects.		
Hennys, Middleton and Twinstead Parish Council			
The information provided within the Community Newsletter was wholly	National Grid has made every attempt to make sure the consultation materials were eas		

The information provided within the Community Newsletter was wholly inadequate to ensuring that residents contacted were appropriately enabled to answer the question on the Consultation Feedback Form. The questions within that form were leading and designed to bias responses of consultees in the interests of providing support for National Grid's proposals.

National Grid has refused to provide the specification of the proposed development, a matter of significant importance in judging the potential impacts of the substation and of any further development it might facilitate. National Grid stated in their 2021 documents it would now need to two transformers. But when questioned about this in their webinars, they rowed back on this stating that substation specification was a matter for UKPN and not them.

It is our understanding, that there is no further capacity at Bramford substation for more connections than those currently planned. This means that solar farm developers will have to look elsewhere for locations and connections to the grid. The worry is that an unspecified substation could at UKPN's demand include additional energy infrastructure that an appropriately configured substation could facilitate. National Grid's assertion that they do not plan such a substation at this time provides no reassurance because by their own admission, it is not they but UKPN who will determine this. It is therefore impossible to gauge the cumulative impact on our National Grid has made every attempt to make sure the consultation materials were easy to understand and accessible. National Grid is of the view that the consultation was effective and robust in order to inform consultees and seek their views on the proposals. This is evidenced by the strong response received to the consultation, with over 330 completed feedback forms in addition to written responses.

Since restarting the project in 2020, National Grid has recommenced discussions with UKPN to ensure the previous proposals are still appropriate. UKPN has now confirmed a requirement for two transformers at the GSP substation site (the original 2012 work assumed one transformer). This would require a larger footprint than assumed within the Substation Options Appraisal Study. National Grid has undertaken a back check and review of the previous options appraisal work. This has confirmed that the preferred substation site is still Butler's Wood and that this site can accommodate the larger footprint associated with the two transformers.

The substation is a 'grid supply point' (GSP), the function of which would be to draw power from National Grid's network and step this down from 400kV to 132kV, before feeding the power into the lower voltage network owned by UKPN, the distribution network operator in this area. The specific role of the GSP substation would be to facilitate the removal of approximately 25km of existing 132kV overhead line which runs from Burstall Bridge (Suffolk) to Twinstead (Essex).

The GSP substation is not being designed for the purpose of connecting tertiary connections. Should any separate applications be brought forward in the future, these would be considered on their own merit by the appropriate determining authority. It would

Summary of Matters Raised to Feedback	National Grid's Response
landscapes and amenity that could flow from this aspect of the proposed project.	be the responsibility of the determining authority to consider any such application in accordance with national and local planning policy and other material considerations. Nonetheless, the Environmental Impact Assessment being undertaken for the proposals will include an assessment of the cumulative effects between the project and other known proposed developments.
National Grid confirmed that any expansion of capability to facilitate tertiary connections would encroach into the high value ancient woodlands that they seek to use to screen the GSP substation.	See above. National Grid has back checked the options appraisal work, which confirmed that the proposed site at Butler's Wood can accommodate the larger footprint associated with the two transformers between the existing woodlands.
National Grid say they do not intend to remove the 132kV pylons and overhead lines between Twinstead Tee and the point at which the UKPN owned overhead line is re-energised near Waldegrave Wood. The length of overhead line and the pylons from there to the Twinstead Tee will become redundant under the proposals.	The 132kV overhead line is owned and operated by UKPN. National Grid is proposing to remove 25km of existing 132kV overhead line between Burstall Bridge and Twinstead Tee, as the proposed 400kV overhead line would generally use the same alignment. National Grid is currently in discussions with UKPN about the future status of this section of line.
Hintlesham and Chattisham Parish Council	
Responses to comments are addressed in thematic table above.	
Little Cornard Parish Council	
UKPN has, over the last decade or so undergrounded a significant number of existing power lines in Little Cornard. The cost benefit of undergrounding new lines is very positive, taking into account a growing tourist industry and the financial implications of improving the well-being of our residents and visitors.	The cost of placing cables underground is considerably higher than building overhead lines and National Grid would need to justify this additional spend to Ofgem. National Grid's statutory duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers. Furthermore, the relevant NPS (EN-5), makes clear that pylons are often the appropriate means of delivering high voltage transmission infrastructure, except in particularly sensitive landscapes where mitigation, e.g. underground cables, may be used instead. National Grid proposes underground cable within the Dedham Vale AONB and an area of the Stour Valley because these areas are identified as being particularly sensitive.

Underground cables have been used in other parts of the country for at least ten years; what is the evidence regarding environmental impact of growth and habitats above these lines?

National Grid cables will be a minimum of 900mm deep to the protective tiles. Crops can be farmed over the top of the cables, though deep rooting trees may not be planted over the cables.

More broadly, the project will be subject to an Environmental Impact Assessment (both positive and negative effects) in accordance with the scoping opinion received, the results of which will be presented in an Environmental Statement. This will include an assessment of impacts on ecological receptors.

## **Pinewood Parish Council**

Responses to comments are addressed in thematic table above.

Concern about the CSE compound located on the boundary of the AONB	Following feedback from key stakeholders, National Grid and its technical specialists have
near Dollops Wood. Polstead's preferred option would be Option 2ai or	explored options to relocate Dedham Vale East CSE compound further away from the
Option 2aii (north of Dollops Wood) to mitigate the impact on the AONB and	AONB boundary and reduce any potential effect on the setting of the AONB and the
its setting, and as this would benefit the tranquillity of Polstead.	Conservation Area at Polstead. A location approximately 1km from the AONB boundary
	between two existing blocks of woodland at Millfield Wood has been taken forward. The
	existing woodland will be retained and will provide visual screening for the CSE
	compound.
	Following feedback, the option National Grid intends to take forward at Dollops Wood is
	the alternative cable route presented at the non-statutory consultation 2021, to the north
	of the woods.
Stoke By Nayland Parish Council	

The present proposals acknowledge that AONB status merits undergrounding but they confine this narrowly to the boundaries of the AONB. This completely misses the point about the adverse visual effects of the overhead lines on the AONB. Indeed, we submit that the topography is such that the pylons with the most damaging effects on the AONB are not necessarily located within it. National Grid has undertaken a back check and review of the likely impacts of the project on the setting of the AONB taking account of all of its statutory duties and obligations. The backcheck and review included looking at the potential effects that the CSE compounds would have on the setting of Dedham Vale AONB (see Section 5.4 of the Project Development Options Report, 2022). The study coupled with non-statutory consultation feedback concluded in a relocation of the proposed Dedham Vale East CSE compound. In its new location, CSE compounds are considered to have limited effects on the setting on the AONB or key views at its proposed location and it is not likely to significantly impact on the special qualities of the AONB.

We assume that National Grid will be required to produce a construction impact assessment, and to incorporate enforceable measures to mitigate adverse impacts.	The proposals will be subject to an Environmental Impact Assessment (both positive and negative effects), the results of which will be presented in an Environmental Statement. This will include an assessment of impacts during the construction phase. The Environmental Statement will include the details of any mitigation measures that will be put in place to reduce the significance of environmental effects.
Road closures of the A134 are to be avoided since they invariably result in high levels of traffic, including HGV's, diverting into Stoke by Nayland. There is also an 18-ton weight restriction on B1068 between the centre of Stoke by Nayland and the entrance to Konings factory.	National Grid will be undertaking a Transport Assessment, which will look at construction routing (including suitability of existing roads) and potential road closures as part of the assessment. National Grid is in discussion with the relevant Highway Authority regarding the need for any traffic management, such as temporary traffic lights during construction.

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# Appendix H S42(1)(b) Responses

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# Appendix H: Section 42(1)(b) Consultee Responses

1.1.1 Although Appendix H only includes reference to those prescribed consultees who provided a response to the consultation, National Grid continues to engage with all other section 42(1)(b) consultees not listed here. It is split into two tables, Table H.1 covers themes contained in more than one response, which are given a reference number. Table H.2 contains specific comments raised by the organisation along with the National Grid response.

# Table H.1: Thematic Responses Raised by Section 42(1)(b) Consultees

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
	Timing and adequacy of the consultation: Concerns regarding the timing of the consultation, during the Covid-19 pandemic, including a period of lockdown and coinciding with the pre-election moratorium for County Council elections have been identified. These factors compound concerns regarding the potential adequacy of consultation in respect of hard to reach and hard to hear groups such as the digitally and	Babergh and Mid Suffolk District Councils, Essex County Council, Suffolk County Council	The consultation was carried out in full compliance with all applicable legislation and non-statutory guidance. This included guidance on pre- application consultation and community engagement issued specifically as a result of the Covid-19 pandemic. The consultation period was in excess of the required 28 days, giving more opportunity for interested parties to comment on the proposals, mindful of the additional complexities posed as a result of the Covid-19 pandemic.
	physically isolated.		As set out in the Consultation Strategy, National Grid used a blend of traditional and digital approaches to ensure the widest possible reach to all sectors of the local community in line with Government guidelines relating to the control of the spread of coronavirus. Paper copies of consultation materials, including newsletters were sent to more than 3,164 residential and business addresses within 1km of the proposals, together will other identified stakeholders including elected representatives and representatives of third-party and community interest groups. This included details of how to get involved in the consultation, including through telephone surgeries and call backs and how to request paper copies of the project material. A website that people could easily access and download project information as well as other relevant documents.
H02	Available information: The proposals presented during the non-statutory consultation are high level, particularly concerning the grid supply point (GSP) substation.	Braintree District Council, Essex County Council, Suffolk County Council	The pre-application design process is an iterative one, and National Grid did not have detailed design information available at the point at which non- statutory consultation was undertaken. The design continues to be developed and refined in order to take account of feedback received in the non-statutory engagement as well as further engagement with UKPN. The consultation

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
	The plans presented as part of the non-statutory consultation do not show all environmental features such as grade II listed buildings, scheduled monuments and county wildlife sites.		process is designed to obtain early feedback. Details of the latest proposals, including details of the proposed GSP substation, are presented within the statutory consultation materials.
			National Grid has considered relevant environmental features. The features listed in the non-statutory consultation documentation were particularly pertinent to an aspect of the consultation. However, the Preliminary Environmental Information Report includes details, including plans showing the location of all relevant environmental features such as listed buildings, county Wildlife Sites and Schedule Monuments within a defined study area.
H03	Net zero: The Council's recognise the challenge of net zero and their roles in contributing to the government's climate change objectives.	Babergh and Mid Suffolk District Councils; Braintree District Council, Suffolk County Council	Noted. The Bramford to Twinstead project is an important step in facilitating the delivery of 40GW of offshore wind energy by 2030, a key Government commitment and a vital step towards the move towards cleaner, greener energy.
H04	Undergrounding in the Stour Valley: Although the Stour Valley Project Area is not formally designated as an Area of Outstanding Natural Beauty (AONB), it forms part of the Dedham Vale Management Plan in recognition of its natural beauty and special qualities. The project should be fully undergrounded in Section G Stour Valley.	Babergh and Mid Suffolk District Councils; Braintree District Council, Suffolk County Council	National Grid recognises that parts of the Stour Valley form an important part of the setting of Dedham Vale AONB. National Grid has undertaken a back check and review of the likely impacts of the project on the setting of the AONB taking account of its statutory duties and obligations. It is considered that the undergrounding proposed is appropriate and in the most highly valued parts of the Stour Valley.
			Following feedback from key stakeholders at the spring consultation 2021, National Grid can confirm its intention to underground the new 400kV transmission line through the most highly valued parts of the Stour Valley (parts of Section G), between the Stour Valley East CSE compound to the east of St Edmunds Hill, and the Stour Valley West CSE compound off Henny Back Road, alongside the removal of the existing 132kV overhead line and 400kV overhead line between Stour Valley West and Twinstead Tee.
H05	Future extension of Dedham Vale AONB: The Dedham Vale AONB and Stour Valley partnership has submitted an application to extend the Dedham Vale AONB has been submitted to Natural England. The	Babergh and Mid Suffolk District Councils; Braintree	At this time, Dedham Vale AONB has not been extended and there is no defined boundary of what any future extension (if determined) would look like as it is too early in the process (the determination of a boundary would be the decision of Natural England).

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
	project should treat the proposed extension as if it is designated.	District Council, Suffolk County Council	Natural England has advised the project that decisions should be based on the effects on the existing Dedham Vale AONB as currently designated and its setting (in line with the current NPS). Natural England also advised that parts of the Stour Valley will have a role as part of the setting of the AONB.
			As the status of the request to extend the AONB remains undecided and based on discussions with Natural England, National Grid is not proposing to treat any area outside of the existing Dedham Vale AONB boundary as designated within its application for development consent but will be considering the setting of the AONB, including the contribution that the Stour Valley makes to this.
			National Grid will have regard to any designation made by Natural England in the period before application submission and during the Examination.
H06	Coordinated working with other projects: The Networks Options Assessment (NOA) identifies that there are a large number of other significant energy	Babergh and Mid Suffolk District Councils; Braintree District Council, East	AENC and ATNC identified by the System Operator in the NOA (National Grid, 2021) report are still at an early stage.
	<ul> <li>infrastructure projects expected to be delivered within the next decade within East Anglia.</li> <li>Details of any further planned network reinforcement projects should be made available to provide a comprehensive overview and ensure schemes are considered in a joint up, holistic way and not in isolation.</li> <li>There is the potential for cumulative effects (including traffic and landscape) between the project and the proposed developments if they are within the same</li> </ul>	Suffolk Council, East County Council, Suffolk County Council	Routeing and substation siting options identification and appraisal is currently being undertaken, informed by National Grid's statutory and licence obligations, relevant National Policy Statements (EN-1 and EN-5) and National Grid's 'Approach to Options Appraisal'. This assessment will give thorough consideration to a range of technical, socio-economic, environmental, cost, and programme issues. Engagement with key prescribed stakeholders is anticipated to take place in January 2022 with non-statutory public consultation in late Spring 2022 on a preferred route corridor, substation site and preliminary route.
	proposed developments if they are within the same timeframe and similar geographical area.	At present (subject to the outcome of the routing and siting study), AENC and ATNC are anticipated to comprise a new 400kV double circuit connection from Norwich Main Substation to Bramford Substation, and a new 400kV double	

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
			circuit connection from Bramford Substation to Tilbury substation via a new connection substation in Tendring District.
			In the meantime, Bramford to Twinstead has been described by the System Operator as critical in all future energy scenarios. The emergence of new proposals is not a reason to suspend work on the project.
			The Environmental Impact Assessment for the proposals includes a cumulative effects assessment, which considers the cumulative effects between the project and other proposed developments.
			At the point of preparation of the Environmental Impact Assessment to support the Bramford to Twinstead Reinforcement application for development consent the environmental technical specialists will consider the latest information available on AENC and ATNC for the Cumulative Effects Assessment in accordance with legislation and PINS Advice Note 17.
			The cumulative effects assessment will be presented as part of the Environmental Statement.
H05	Skills and employment: There is a large amount of growth forecast in the energy sector within the region. This could provide positive economic benefits to the area through direct employment (such as creating local job opportunities), indirect employment through the supply chain and induced employment.	Babergh and Mid Suffolk District Councils, East Suffolk Council, Essex County Council, Suffolk County Council	National Grid continues to engage with the local and county planning authorities and others regarding employment and skills.
	National Grid needs to work with the councils and relevant parties to discuss coordination of project delivery and to maximise opportunities in respect of job creation, skills and education across the energy sector. This may include financial contributions to the council's to support local skills provision.		
Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
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H06	Tourism: The tourism industry is an important and substantial part of the area's overall economy. The rural landscape has significant value to the local economy as a tourist attraction. The development (and cumulative effects with other proposed developments) has the potential to have a negative impact on the attractiveness of the area for both visitors and investors which must be considered.	Babergh and Mid Suffolk District Councils, East Suffolk Council	The Scoping Report submitted to the Planning Inspectorate in May 2021, concluded that the project was unlikely to have significant effects on tourism and it was scoped out as standalone topic. The Planning Inspectorate agreed with this position in their Screening Opinion.
H07	Need for an Environmental Improvement Fund (EIF): The councils have previously suggested that National Grid should set up and financially support an EIF to be used on local initiatives, such as the provision of community woodlands and the enhancement of wildlife habitats. Community groups, parish councils and voluntary sector organisations would be encouraged to make applications to this fund.	Babergh and Mid Suffolk	National Grid has committed to delivering 10% biodiversity net gain on the project and is working with environmental organisations and landowners to identify potential opportunities for delivering areas of habitat creation and improvement. In addition, National Grid runs a Community Grant Programme which enables applications for funding from community organisations or charities affected by National Grid projects.
H08	Electromagnetic Fields (EMF) National Grid should have consideration to the ICNIRP Guidelines on Limiting Exposure to EMF. A valid ICNIRP certificate would be expected to be submitted with the consent application.	Babergh and Mid Suffolk, Essex County Council	National Grid's equipment is designed to comply with the Government Guidelines and policies for EMF. A certificate of compliance will be submitted with the application for development consent.
H09	Compensation to local communities/community fund: The project should include the provision of funding and/or compensation for the local communities hosting this infrastructure and the undoubted detrimental impacts that will arise from this development upon the local area.	East Suffolk Council, Suffolk County Council	National Grid runs a Community Grant Programme which enables applications for funding from community organisations or charities affected by National Grid projects.
H10	Archaeology: It is unclear whether undesignated heritage assets either in the form of below ground archaeology or grade II listed buildings have been	Essex County Council, Suffolk County Council	Because of the high level nature of the routing studies, the option appraisal was mainly focused on designated assets, including listed buildings and scheduled monuments. Undesignated assets are being considered as part of the more detailed alignment considerations.

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
	taken into consideration in the route corridor assessment.		
H11	Enhancement: Although NSIPs currently have an exemption from providing Biodiversity Net Gain (BNG), the situation is highly likely to be corrected when the Environment Bill gains Royal Assent. It is an Suffolk County Council requirement that all projects	Essex County Council, Suffolk County Council	The Environment Act 2021 has introduced the requirement for Nationally Significant Infrastructure Projects (NSIPs) to include BNG (although, at the time of writing, the relevant provisions which will modify the Planning Act 2008 for this purpose have yet to come into force).
	and developments deliver BNG and a Landscape Plan provided showing how BNG will be achieved. This should include full details of monitoring and maintenance.		National Grid has separately made a commitment to deliver 10% BNG on the project. The 10% will be calculated using the Defra Metric 3.0 compared to baseline levels. Initial locations where BNG could be implemented have been discussed with environment groups and further details (including monitoring and maintenance proposals) will be included within the application for development consent.
H12	Highways: Limited information has been presented in the non-statutory consultation materials regarding highway and transport matters. Although not primarily a transport scheme, the project is likely to result in transport-related issues, especially given the rural nature of the area. A Transport Assessment will be required.	Essex County Council, Suffolk County Council	The non-statutory consultation presented the overall project proposals in order to seek high level feedback on the approach and design. Current details on highway and transport assumptions and likely significant effects can be found in the Preliminary Environmental Information Report (provided as part of the statutory consultation material). In addition, National Grid is consulting the relevant Highways Authorities (including Essex and Suffolk County Council) through the traffic and transport thematic meetings.
	Both councils provided detailed comments on the aspects that should be included within the traffic assessment.		A Transport Assessment will be submitted as part of the application for development consent.
			The Outline Code of Construction Practice (CoCP) includes good practice commitments relating to construction traffic. An Outline Construction Traffic Management Plan (CTMP) will be submitted as part of the application for development consent and will contain details of the management controls that would be in place during construction along with any required mitigation.
H13	Archaeology: Underground cables routes may preserve the visible above-ground cultural heritage but		The Preliminary Environmental Information Report (provided as part of the statutory consultation material) contains details of the desk based data that has been collected to date. It also describes the programme of field surveys

Ref.	Thematic Comment	Organisations that Commented	National Grid's Response
	they can have a significant and irreversible impact on below-ground deposits. It will be important for the applicant to undertake appropriate archaeological assessment including updating the desk-based assessment and undertaking field evaluation to fully understand the archaeological implications for the scheme. This work should be undertaken prior to the submission of the DCO application so that it contains an informed assessment of the archaeological impact of the scheme. This will also facilitate the production of an appropriately detailed mitigation strategy that can be defined and agreed upon with all parties.		proposed both prior to application and post consent. These include archaeological geophysical surveys and trial trenching along for the cable sections the proposed CSE compounds. The Archaeological Framework Strategy (Appendix 8.2 of the Preliminary Environmental Information Report) sets out the overall strategy for managing risks to archaeology on the project.
H14	Ecological mitigation: The ecological mitigation hierarchy of avoid, mitigate, compensate, enhance should be employed. Mitigation proposals must be robust and likely to be effective. It is expected that detailed mitigation proposals will be secured through appropriate planning conditions e.g. a CEMP and the long-term management secured by way of a Landscape and Ecological Management Plan (LEMP).		The mitigation hierarchy is being employed and further details on this can be found in the Preliminary Environmental Information Report presented as part of the statutory consultation material. The Outline CoCP includes good practice commitments relating to habitats and species. An Outline CEMP and an Outline LEMP will be submitted as part of the application for development consent and will contain details of the management controls that would be in place during construction along with any required mitigation.

Summary of Matters Raised to Feedback	National Grid's Response
Babergh and Mid Suffolk District Councils (also see H01 above)	
Although Babergh and Mid Suffolk remain two separate sovereign councils, they are working together to deliver services. The comments below are submitted on behalf of both councils except where they are specifically attributed to a single council.	Noted.
<ul> <li>Babergh District Council has concerns regarding the potential impact of locating the CSE compounds on the margins of the AONB and adverse visual impacts associated with their construction.</li> <li>Particular consideration should be given to the following documents:</li> <li>Valued Landscape Assessment - Stour Valley Project Area;</li> <li>Dedham Vale AONB Natural Beauty and Special Qualities and Perceived and Anticipated Risks; and</li> <li>Special Qualities of the Dedham Vale AONB Evaluation of Area Between Bures and Sudbury.</li> </ul>	National Grid has undertaken a back check and review of the likely impacts of the project on the setting of the AONB taking account of its statutory duties and obligations. The backcheck and review included looking at the potential effects that the CSE compounds would have on the setting of Dedham Vale AONB (see Section 5.4 of the Project Development Options Report, 2022). The study coupled with non-statutory consultation feedback have resulted in the relocation of the proposed Dedham Vale East CSE compound to a location approximately 1km from the AONB boundary between two existing blocks of woodland at Millfield Wood, which will reduce the potential effects on the setting of the AONB. The existing woodland will be retained and will provide visual screening for the CSE Compound. In its new location, the CSE compound is considered to have limited effects on the setting on the AONB.
	Assessment. Further details can be found within the Preliminary Environmental Information Report, particularly Appendix 6.1: Landscape and Visual Baseline.
Biodiversity – expect the development to have regard to and align with the principles of the councils' Biodiversity Action Plan (BAP), which sets out how we aim to protect and strengthen plant life and local wildlife in the district.	The Environmental Impact Assessment is having regard to relevant documents including any local BAP. These are being considered during the development of the mitigation and enhancement proposals.
Heritage - the proposed 10km buffer to either side of the proposed pylon route is acceptable. Impacts on all heritage assets including scheduled monuments, listed buildings, Registered Parks and Gardens and non- designated heritage assets will need to be considered.	The Environmental Impact Assessment includes a heritage assessment, which includes scheduled monuments, listed buildings, Registered Parks and Gardens and non- designated heritage assets. Details of the preliminary assessment work, including assets scoped into the assessment, can be found in the Preliminary Environmental Information Report which is presented as part of the statutory consultation material.
Landscape – The visual impact of the development is likely to be a key issue in the assessment of the proposal. It is therefore important that receptors and	Noted. The Environmental Impact Assessment includes a Landscape and Visual Impact Assessment. Details of the preliminary assessment work can be found in the Preliminary

#### Table H.2: Additional Responses Raised by Section 42(1)(b) Consultees

Summary of Matters Raised to Feedback	National Grid's Response
viewpoints are discussed and agreed between the parties at the earliest opportunity.	Environmental Information Report. Viewpoint locations have been agreed with the relevant planning authorities.
Public health - noise, light and air quality concerns have previously been raised.	Noise, light and air quality are all covered within the Environmental Impact Assessment. Details of the preliminary assessment work can be found in the Preliminary Environmental Information Report.
Socio-economic – National Grid should assess the impact of the proposals upon people and provide a comprehensive assessment of the socio- economic impacts upon the local economy, ensuring that communities and individuals are properly compensated.	National Grid assessed the likely effects on socio-economics in the Scoping Report. This concluded that there were unlikely to be significant socio-economics but that there could be cumulative effects with other projects. The Planning Inspectorate agreed with this position in their Screening Opinion. The Environmental Impact Assessment includes an assessment of the cumulative effects of the project. Details of the preliminary assessment work can be found in the Preliminary Environmental Information Report.
Braintree District Council	
It is essential that considerations around ecology and arboriculture play a key role in informing the detailed project route and operations to reduce impacts upon trees, hedges and ecology as far as possible. Where the project will have an impact on ecology and arboriculture which cannot be avoided, substantial mitigation packages should be provided to offset any adverse impacts.	National Grid is undertaking a suite of ecological surveys and an arboricultural survey of the trees along the alignment. The results of these surveys are feeding into the design evolution and Environmental Impact Assessment process. In general, vegetation removed as part of the project would be reinstated, other than where there is an operational restriction such as over the top of the underground cables. The Environmental Statement will identify the need for any additional mitigation that is required to offset significant adverse effects.
The impacts of the GSP substation in terms of landscape and visual amenity in particular will be severe and concentrated on very rural parts of the District, away from any urban centres and in an important rural landscape valued for its beauty and its historical and cultural significance.	The project will be subject to an Environmental Impact Assessment, the results of which will be presented in an Environmental Statement. This will include a landscape and visual impact assessment. Further details can be found in the Preliminary Environmental Information Report (which is provided as part of the statutory consultation material). Viewpoint locations have been agreed with the relevant planning authorities.
With regards to the proposed GSP substation, the ecological impact will also be of particular importance as will the impact upon existing trees and hedgerows in arboricultural terms in addition to the impact upon existing residents in the locality.	The project will be subject to an Environmental Impact Assessment, the results of which will be presented in an Environmental Statement. This will include an ecological impact assessment and arboricultural assessment. Further details can be found in the Preliminary Environmental Information Report (which is provided as part of the statutory consultation material).

#### Summary of Matters Raised to Feedback

#### **National Grid's Response**

The Council also consider that the GSP substation element of the wider Bramford to Twinstead project should be progressed in a coordinated way within the Development Consent Order (DCO) process which will enable all impacts of the scheme to be considered alongside a full range of mitigation packages. As per the criteria set out in the Planning Act 2008, the overhead lines proposed between Bramford and Twinstead are a Nationally Significant Infrastructure Project, while the proposed GSP substation near Twinstead is not. However, due to the relationship between the proposed GSP substation and the overhead lines, National Grid has the option of including the GSP substation in the application for development consent as 'associated development'. Accordingly, the GSP substation is currently being progressed through the development consent pre-application process alongside the wider NSIP. The alternative consenting route available is to seek planning consent for the GSP substation separately via a planning application to Braintree District Council.

Irrespective of the consenting route used, the GSP substation will be brought forward in a coordinated manner with the wider NSIP. The Environmental Impact Assessment which will accompany the DCO will consider the GSP substation either as part of the NSIP application itself (as 'associated development') or as a cumulative development. Any discrete application for the GSP substation would similarly be accompanied by appropriate environmental assessment work. Both consenting routes provide the means to consider the GSP substation appropriately and to secure mitigation as required.

National Grid has an ambitious timetable for the project which will have a subsequent impact upon the resources of Braintree District Council as well as other stakeholders. National Grid's ambitious timetable should not be progressed at the expense of robust and meaningful input from stakeholders.

The project programme is driven by the Government's commitment to deliver 40GW of offshore wind energy by 2030.

National Grid is holding regular meetings with the Council and other stakeholders in order to obtain meaningful input into the proposals prior to the application for development consent. National Grid is committed to continuous engagement with the Council and its officers as well as other statutory consultees, stakeholders and the local community as the project design and development continues. Consultation periods relating to this project have exceeded the statutory minimum of 28 days.

Stakeholders should include the Host Authorities in their general Planning capacity, but also their relevant and interlinked specialisms including Heritage, Landscaping, Arboricultural, Archaeological, Highways, Contamination; Noise; Water, Ecology, Socio-economic and Health. Reports should be completed and submitted outlining the implications of the development on all of these specialisms and these should be informed in part by professional engagement between the relevant parties.

National Grid is engaging with the Host Authorities, both through general planning update meetings and is also holding more specific thematic meetings on topics such as landscape and visual, ecology, cultural heritage, water and traffic and transport.

#### East Suffolk Council

Summary of Matters Raised to Feedback	National Grid's Response
The non-statutory consultation material noted a high voltage subsea direct current link is required between East Anglia and Kent for 2029, which is also identified within the 2020/21 NOA. There is virtually no information known about the proposal.	The South East Anglia (SEA) Link project is at an early stage in the process. Further details on this project are anticipated to be available during 2022.
ESC would like to highlight the vital importance of the provision of appropriate and adequate mitigation and compensation in relation to all the impacts of the project both alone and in combination with other projects.	The Environmental Impact Assessment will identify the mitigation required to reduce the likely significant effects of the project, both alone and in combination with other proposed developments. Further details can be found in the Preliminary Environmental Information Report (which is provided as part of the statutory consultation material).
Essex County Council	
The response in relation to Strategic Options POS19 and 21 are noted and welcomed.	Noted.
It is noted that the as proposed route of this NSIP within Essex will be underground. Underground cables can particularly affect the ecology and buried archaeology. However, the majority of the impacts can be mitigated against with the proper consideration of the impact by the project and through sensitive routing. Overhead lines can have an immediate and lasting long term impact on historic landscapes, designated and non-designated heritage assets and their setting, local views and amenity, socio economics and the appreciation of these landscapes on individuals wellbeing.	The Environmental Impact Assessment will identify the likely significant effects that would arise from the project, including on ecology, cultural heritage and landscape. Further details can be found in the Preliminary Environmental Information Report (which is provided as part of the statutory consultation material).
location close to the existing 132kV overhead line. An additional consultation was undertaken by National Grid, which proposed a revised route and CSE compound further to the south. This included the removal of four spans of the 400kV overhead line south from Twinstead Tee, which would provide a significant benefit to the natural and historic environment. This was	National Grid does not construct CSE platform towers on 400kV infrastructure, however, i is assumed that Essex County Council's comment is in relation to the terminal pylon adjacent to or internal to a CSE compound.
	National Grid is proposing a CSE compound at Stour Valley West, to the south of Henny Back Road. National Grid has reviewed the CSE compounds to see whether the terminal pylon could be replaced with lower height full line tension gantries. Full line tension gantries are proposed at Stour Valley West, which will negate the need for a terminal pylon at the CSE compound.
Whilst the County Council acknowledges the impact of a CSE platform tower on local landscape and views, its potential impact would not be as significant as a CSE compound. Any additional `tower' at this location would partly negate the environmental improvements already secured in the Stour Valley,	A platform tower will be required on the existing 132kV overhead line in the vicinity of the GSP Substation, replacing an existing tower.

Summary of Matters Raised to Feedback	National Grid's Response
and indicated above. Consequently, the options requiring connection via a sealing end platform tower near Twinstead Tee are not supported by the County Council.	
Given that a considerable amount of time has elapsed since this project has been held in abeyance, it is welcomed that there is a commitment in this submission to re-engage with stakeholders fully, and to submit a new Scoping Opinion submission to the Planning Inspectorate prior to the eventual submission of this DCO.	Noted. National Grid submitted an updated Scoping Report to the Planning Inspectorate in May 2021. The Planning Inspectorate provided a new Scoping Opinion in respect of the project in June 2021, which forms the basis of the scope of the Environmental Impact Assessment. Further details can be found in the Preliminary Environmental Information Report.
There remains ongoing concerns that judgements on alternative options are being made with primary reference to cost and a number of options presented in the non-statutory consultation material are ruled out for this specific reason. The Secretary of State should be presented with sufficient information to understand the environmental impact of undergrounding the entire route and other options in this report.	The environmental assessment for the options appraisal work is presented within the relevant option development reports, including the Route Corridor Study (National Grid, 2009) and the Connection Options Report (National Grid, 2012). These studies present the justification for why certain options were taken forward or discounted, which was based on a balance of all of National Grid's duties. That includes balancing the need to be economic and efficient and a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality.
Socio economics and Tourism: National Grid has constrained its approach to considering the economic impacts of the proposal on existing tourist related facilities and businesses, or the proximity of the overhead line to such facilities. National Grid has not considered or factored in the appreciation of the natural and historic beauty of the area into any of their assessment. There is clearly links between the visual quality of the environment and the potential for tourism. The presence of tourist related facilities is considered more incidental than the actual quality of the landscape. It is noted that the Planning Inspectorate indicated that the impacts on tourism could be scoped out from consideration in their 2013 decision on the project. Tourism is playing an increasing part in the rural economy and Essex County Council will make the case that Tourism and the impact of this NSIP on it should be a material planning consideration going forward.	National Grid included an assessment on socio-economics, recreation and tourism within the 2021 Scoping Report. This concluded that the project was unlikely to have a significant effect on socio-economics and tourism and that it would be scoped out of the assessment as a standalone topic. The Planning Inspectorate agreed with this conclusion in their Scoping Opinion. Tourism will be considered, where applicable within the cumulative effects assessment. Further details can be found in the Preliminary Environmental Information Report (which is provided as part of the statutory consultation material).
National Grid has relied on 'judgement' to determine whether the social, environmental and economic impacts, measured qualitatively, of overhead lines warrant the use of undergrounding. Essex County Council considers that more work is required to actually 'quantify' the disbenefits of their scheme, and whether these exceed the additional cost of undergrounding	The Government and the Regulator (Ofgem) expect National Grid to find a balance when developing proposals, taking account of the duties set out in the Electricity Act 1989 to be efficient, coordinated and economical and to have regard to the desirability of preserving amenity. The Government addresses that and the question of overhead or underground in the relevant NPS (EN-5).

Summary of Matters Raised to Feedback	National Grid's Response
and other options. Furthermore, there are established techniques for measuring the impact of projects on more human issues such as health, wellbeing and visual amenity. One such means is the HM Treasury Guidance (the Green Book), Annex 2. This document would allow `the net value of a project to society as a whole' to be considered, taking account of impacts on health, wellbeing and visual amenity, and measured against capital costs of the project. These impacts are gaining more support from Ofgem and are already being implemented in other transmission infrastructure projects.	The project is undertaking an Environmental Impact Assessment, which will assess the impacts on the environment and will influence the project designs. Environmental Impact Assessment is a proven effective tool for assessing the impacts on the environment and is the required approach for demonstrating the impacts and any required mitigation to the decision making. As the project is typically a replacement line, where the new 400kV overhead line would replace the existing 132kV overhead line along most of the route, and as the land use and land management is unlikely to change as a result of the project, it is unlikely that there would be enough of a differential in the environmental economics to influence decisions. National Grid is not proposing to undertake a quantitative assessment of the impacts of the project to support the application.
The local authorities and amenity groups have been clear in their wish to see the willingness to pay studies considered in this project. Willingness to pay is an important and valid counterweight to National Grid's overriding cost arguments for, amongst other things, not considering an entirely undergrounded route. It allows consumers to express in monetary terms the perceived environmental and socio-economic disbenefits of overhead lines. The National Planning Policy Framework (NPPF) identifies three strands to sustainable development, namely economic, social and environmental, and these need to be considered appropriately.	The Government and the Regulator (Ofgem) expect National Grid to find a balance when developing proposals, taking account of the duties set out in the Electricity Act 1989 to be efficient, coordinated and economical and to have regard to the desirability of preserving amenity. The Government addresses that and the question of overhead or underground in the relevant NPS (EN-5). When looking at the costs of a new connection, National Grid is guided by these duties and obligations. National Grid is required to balance affordability to the electricity bill-payer with the impact of the proposals on the landscape. It is for the Government, through the planning process and via regulation (by Ofgem), to judge whether the balance is right.
Climate Change and Low Carbon. The carbon footprint of the construction of the project is, we assume, very significant so we seek to understand the carbon implications of construction from embodied in the materials being used, through to emissions from construction activity (transport and movement of goods, energy consumption in the construction process itself etc.). It is also noted that the previous Scoping Report did not include climate change, this is considered now to be out of date, with this important topic needing to be Scoped into the DCO proposals going forward	A proportionate carbon assessment will be included within the Environmental Statement, which will consider the carbon embodied within the construction materials and typical values associated with a similar sized construction project. The project is not anticipated to have significant effects on climate change, as it will not result in the creation of greenhouse gases during the operational phase. The Environmental Statement will include a good design section which will set out both how the project has reduced its carbon footprint and contribution to climate change and also how the project has been designed to be resilient to climate change.
Drainage and Flooding: Essex County Council is the Lead Local Flood Authority (LLFA) within the Essex area (Stour Valley and GSP substation). The non-statutory consultation is light on specific details as apply to drainage and flooding and ECC welcomes further engagement.	National Grid has been engaging with the LLFA and the Environment Agency through the thematic group for water. The Outline CoCP contains a commitment for the designs to comply with the SuDS Design Guide 2020 and a number of commitments to reduce impacts on watercourses and the water environment. A flood risk assessment will be submitted with the application for development consent and will assess the effects (and if

#### The applicant should carry out a LVIA based on recognised guidance. The LVIA should include reference to any landscape character assessment, it should also take account of any relevant policies based on these assessments in local development documents, it should include the effects during construction and operation on landscape components and landscape character and should include the visibility and conspicuousness of the project during construction and operation on views and visual amenity. This should National Grid | January 2022 | Bramford to Twinstead Reinforcement

The LLFA recommends the drainage proposal for the areas under Essex would need to comply with Sustainable Drainage Systems (SuDS) Design Guide 2020. The project should assess the areas susceptible to surface water flooding. Details submitted should include any temporary works (culverts) to ordinary water courses or drainage channels. The project should enlist the required mitigation to prevent onsite/offsite flooding and measures to prevent any pollutants entering surface water or ground water.

Built Heritage, Landscape and Visual Impact: It is unclear if the original data

Removal of overhead lines in the Twinstead area will likely be of high benefit

temporary and mitigation measures regarding this removal and protection of listed buildings during the process must be provided. Is there a strategy in

place and what will the impact be on the landscape following the removal of

the cables, to return it to its previous appearance (removal of access and

The Stour Valley is the boundary between Essex and Suffolk, providing an

It is part of the historic landscape and has an effect upon the way in which

the landscape has been used and adapted historically. An in-depth study of

how the topography influenced the built form in the area would be beneficial,

as well as the impact upon PRoW (The St Edmund Way/Stour Valley Path).

As a historically agrarian landscape, the removal of pylons and overhead

cabling will likely be beneficial to the built heritage in this area.

important setting and context to Sudbury, crucial to the town's development.

used to assess the preferred options has be reassessed for the current

to the above-ground visual quality of the area, information regarding the

iteration, clarification on this matter would be beneficial.

maintenance tracks etc)?

Summary of Matters Raised to Feedback

#### **National Grid's Response**

required identify mitigation) of the project on flood risk. The Outline Construction Environmental Management Plan will provide further details.

The non-statutory consultation presented the project largely as it was in 2013, prior to the project pause. The previous work had included landscape and heritage assessments. A back check and review was undertaken in 2020, after the project was un-paused to see if any new information had become available that would affect project decisions. This concluded that the overall project and key decisions were sound in light of current information. The ongoing Environmental Impact Assessment work will continue to shape project designs and decisions, including the need for mitigation for listed buildings. The preliminary assessment is presented within the Preliminary Environmental Information Report. Temporary construction features such as haul routes and compound areas would be removed, with land reinstated following construction.

The Environmental Impact Assessment includes an assessment of the project on the historic landscape. As underground cables are proposed within the most sensitive parts of the Stour Valley and approx. 5km of overhead line will be removed from the Stour Valley Project Area the overall long term effects of the project on the historic landscape are likely to be beneficial at this location and an in-depth study of the topography is not considered necessary. Impacts on PRoW are being considered as part of the Environmental Impact Assessment. The preliminary assessment on the historic landscape and PRoW is presented in the Preliminary Environmental Information Report.

The Environmental Impact Assessment includes a Landscape and Visual Impact Assessment (LVIA), which will identify the likely significant effects that would arise from the project on landscape character and views. Further details can be found in the Preliminary Environmental Information Report (which is provided as part of the statutory consultation material) including what is scoping into and out of the LVIA.

#### Summary of Matters Raised to Feedback

#### **National Grid's Response**

include light pollution effects, including on local amenity, and nature conservation.

### Given the proposal would be located within the Dedham Vale AONB, the application should include an assessment of:

- the need for the development, including in terms of national considerations, and the impact of consenting or not consenting it upon the local economy.
- the cost of, and scope for, developing elsewhere outside the designated area or meeting the need for it in some other way;
- any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

A summary of the needs case can be found in the Project Development Options Report 2022 along with a summary of the alternative corridors that were considered during the project development in the Route Corridor Study (RCS) published in October 2009.

Corridors 3 and 4 were considered, which lay outside of the AONB designated area. At the time of the Route Corridor Study, National Grid received a significant number of consultation responses against the selection of Corridor 3 or 4 (which avoided the AONB). This was because the areas to the north of Dedham Vale AONB are currently without existing electricity transmission infrastructure and introducing a new overhead line in this area was considered to have a greater magnitude of impact than within the existing corridor (Corridor 2). Although Corridor 2 passes through parts of the Dedham Vale AONB, it also presented an opportunity to remove the existing 132kV overhead line resulting in one less overhead line within the AONB. This would minimise the scale of change on the landscape and was a view supported by a number of statutory consultees. National Grid has back checked and reviewed the previous work and decisions made during the Route Corridor Study. The back check and review work undertaken following the non-statutory consultation has concluded that the decisions made during the Route Corridor Study, including that Corridor 2 was preferred over Corridors 3 and 4 outside of the AONB remain valid.

Arboriculture: Details for comprehensive protection and mitigation will be required.

The general approach to ensuring that existing information obtained previously for this project is used in order to inform an up-to-date assessment is welcomed. This should support up to date surveys using standard methodologies. We welcome sight of the new Environmental Impact Assessment Scoping Report and Preliminary Environmental It is National Grids intention to underground the 400kV in the Dedham Vale AONB.

An arboricultural survey is being undertaken for the project. The results of this and any protective measures for existing trees and woodlands will be included within the Outline Landscape and Ecological Management Plan submitted as part of the application for development consent.

The environmental desk-based data was refreshed during 2021 and site surveys have commenced as part of updating the understanding of the baseline environment. An updated Scoping Report was submitted to the Planning Inspectorate in May 2021, which set out the proposed survey and assessment methodologies. The Preliminary Environmental Information Report is published as part of this statutory consultation.

#### **Summary of Matters Raised to Feedback**

#### **National Grid's Response**

Noted.

Information Report, where we may wish to make a more comprehensive response.

In addition to the Environmental Impact Assessment, it will be necessary to also provide sufficient information on non-significant impacts to Protected and Priority species and habitats, either in a non- Environmental Impact Assessment chapter or separate documentation, and appropriate mitigation and compensation measures provided.

Safeguarding Mineral Resources: A significant proportion of the project area is located within land which is designated as a Mineral Safeguarding Area (MSA) and therefore any future application would be subject to Policy S8 of the Essex Minerals Local Plan 2014 (MLP). Policy S8 requires that a nonmineral proposal located within an MSA which exceeds defined thresholds must be supported by a minerals resource assessment (MRA) to establish the existence, or otherwise, of a mineral resource capable of having economic importance. This will ascertain whether there is an opportunity for the prior extraction of that mineral to avoid the sterilisation of the resource, as required by the National Planning Policy Framework.

A significant proportion of the project area lies within a MSA for sand and gravel. The project area within an MSA exceeds the 5ha threshold for this mineral as defined in Policy S8 of the MLP. Therefore, a MRA is required as part of the planning application to establish the viability of the prior extraction of mineral such that the resource is not sterilised where this can be avoided. Essex County Council provided further detail on what they expect the MRA to include.

Mineral Consultation Areas: The project area does not pass through a Mineral Consultation Area and therefore does not impact on mineral infrastructure.

Mineral Supply Audit: Essex County Council requests a Mineral Supply Audit to aid in demonstrating compliance with circular economy principles and the application of Policy S4 of the adopted Minerals Local Plan 2014 (MLP). A Minerals Supply Audit would feed into, or be considered alongside, a Site Waste Management Plan.

The project is consulting Natural England with regards to the survey requirements and need for European Protected Species licences. Any required mitigation for protected species will be included within the licences. Likely significant effects (and any required mitigation) will be reported within the Environmental Statement. The Environmental Statement will also include a Legislation Compliance Report showing how the project will comply with relevant legislation for protected and priority species.

The project is an NSIP and therefore is assessed against NPS EN-1 and EN-5 rather than against the NPPF and local policy, other than where this has been identified as a material consideration. A Mineral Resource Assessment is not a requirement for applications for development consent as outlined in the relevant NPS.

National Grid has undertaken a high level assessment of the project on minerals and the results will be presented within the Preliminary Environmental Information Report. This concludes that mineral extraction can continue beneath overhead lines (as demonstrated by the existing Layham Quarry). Underground cables are proposed in areas identified as sensitive for landscape, ecology and cultural heritage and are therefore are considered unlikely to be extracted for minerals during the project lifetime, and in any case represent a small proportion of the areas available for minerals extraction in the country. Therefore, the project is not anticipated to result in the sterilisation of minerals and a MRA is not considered to be necessary.

National Grid recognises that there is a balance between consumption of materials on a project and the waste produced. It therefore proposes to produce an Outline Materials and Waste Management Plan (MWMP) which will be submitted as part of the application for development consent. This will set out the materials required and opportunities to use

Summary of Matters Raised to Feedback	National Grid's Response
	secondary materials. It will also set out how the waste hierarchy would be employed to manage and reduce waste.
Waste Consultation Areas: The project area does not pass through a Waste Consultation Area and therefore does not impact on waste infrastructure.	Noted.
Waste management: Essex County Council requires the applicant to prepare an appropriately detailed waste management strategy through a Site Waste Management Plan. Essex County Council provided details as to what the Site Waste Management Plan should include.	National Grid recognises that there is a balance between consumption of materials on a project and the waste produced. It therefore proposes to produce an Outline Materials and Waste Management Plan (MWMP) which will be submitted as part of the application for development consent. This will set out the materials required and opportunities to use secondary materials. It will also set out how the waste hierarchy would be employed to manage and reduce waste.
Traffic surveys: The Transport Assessment should be informed by up to date data. Additional surveys may be required, and key junctions assessed to consider true impacts. This could include obtaining up to date traffic flow data on specified routes, up to date accident data on specified routes for a 5-year period and undertaking a condition survey for roads and PROW prior to commencement of development to ensure any deterioration can be mitigated appropriately.	National Grid is proposing to undertake traffic surveys in early 2022 following discussions with the relevant Highway Authorities about the scope of this work. In addition, up to date accident data will be obtained. New data will be compared to historical data collected prior to 2013, to inform the forecast of trends given the Covid-19 pandemic, which has affected traffic data. A condition survey of key roads and PRoW will be undertaken prior to construction.
PRoW: Temporary closures to PROW will need to be identified, and an effective communication strategy for closures and or temporary re-routing needs to be considered.	National Grid has identified a number of PRoW that would be affected by construction of the project. PRoWs are discussed in Section 4.4 of the Preliminary Environmental Information Report which is presented as part of this Statutory Consultation.
Protected Lanes: The project has the potential to impact on protected lanes, which are highly prevalent in the Stour Valley. The historic lanes of the District are a key element of the historic environment and include not only the banks, ditches and verges, but other natural features such as the hedgerows and other structural elements. Protected lanes are also designated for their tranquillity, consequently, ECC would seek reference to the impact of noise on protected lanes and their tranquillity in the GSP substation noise assessment.	Protected lanes are considered as part of the Environmental Impact Assessment, with the main assessment in the chapter on Historic Environment, but with cross references to other chapters such as landscape and visual and traffic and transport. As this receptor is affected by different aspects, it has also been identified as a receptor in the cumulative effects assessment, which will draw together the strands of the individual chapters into an overall summary to see whether further mitigation is required. Further details are available in the Preliminary Environmental Information Report which is published as part of this Statutory Consultation.

Medway Council

	the effects that have been identified. In some locations, natur preferred method for reinstatement (as requested by ecologic will be using the Defra Metric 3.0 to estimate loss and mitigat 3:1 ratio for tree planting.
Flooding: As a LLFA, Suffolk County Council would need details of the watercourse crossings (temporary and permanent) and to understand the impact of the project on existing drainage during construction and operation.	National Grid is consulting the LLFA and the Environment Ag thematic meetings. Temporary crossings will be required duri those associated with the haul route. Details of the watercour to the LLFA. A Flood Risk Assessment will be submitted as p development consent and the Environmental Impact Assess land drainage. The preliminary results of the assessment will Preliminary Environmental Information Report at the statutory
Traffic management and controls: Relevant controls, monitoring, and enforcement measures will need to be put in place to ensure that all heavy goods vehicle (HGV) movements do not exceed those assessed within the	The Outline Code of Construction Practice includes good pra to construction traffic. Proposed controls, monitoring and enfo
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#### Summary of Matters Raised to Feedback

Medway Council raises no objection to the consultation under Article 18 of Noted. the Town and Country Planning (Development Management Procedure (England) Order 2015

#### Suffolk County Council

Ecology: The Suffolk Biodiversity Information Service holds vital information and should be contacted (not just at the outset but from time to time throughout the life of the project as new data is added frequently). Surveys must be carried out within accepted guidelines and by suitably trained and qualified personnel. Suffolk County Council also listed a number of aspects that the ecological assessment should include.

The loss of any natural feature must be compensated for. This means that, for example, if there is no alternative to removal of a mature tree, at least three appropriate (suitable species and provenance) trees must be planted elsewhere, as close as possible to the removed feature, two such trees for an immature specimen and one-for-one for saplings.

**National Grid's Response** 

National Grid purchased the data from Suffolk Biodiversity Information Service at the start of 2021 and will update the data over the life of the project. The scope of the ecological surveys was set out within the Scoping Report and National Grid has been discussing the scope and preliminary results with Natural England. The surveys are being undertaken in accordance with accepted guidelines and by suitably trained and gualified staff. The ecological assessment includes the aspects requested by Suffolk County Council. Further details on surveys and the preliminary results can be found in the Preliminary Environmental Information Report will be published as part of the statutory consultation.

National Grid will be presenting the proposed mitigation planting within the Outline Landscape and Ecological Management Plan submitted with the application for development consent. It is anticipated that mitigation planting will be secured through the Landscape and Ecological Management Plan. The planting proposals will be produced by landscape architects with inputs from ecologists to make sure that the planting proposed is suitable for the landscape (rather than on a set ratio basis) and appropriately mitigates the effects that have been identified. In some locations, natural regeneration may be the ical consultees). National Grid ation rather than applying a gency through the water ring construction, such as

urse crossings will be provided part of the application for sment considers the effects on ill be presented in the ry consultation.

actice commitments relating forcement measures will be

Summary of Matters Raised to Feedback	National Grid's Response
relevant DCO submission and supporting documents such as the Transport Assessment and ES. This will need to include the ability to monitor HGV numbers and routeing to/from each site access through an appropriate delivery management system, such as through the use of GPS.	set out within the Outline Construction Traffic Management Plan which will be submitted as part of the application for development consent.
The submission should include relevant management documents in the form of CTMP, a Construction Worker Travel Plan and an Access Management Plan.	National Grid is proposing to submit the Outline Construction Traffic Management Plan with the application for development consent. This will contain an Outline Construction Worker Travel Plan as an appendix. Access details will be provided within the Construction Traffic Management Plan and a separate plan is not anticipated.
Existing highways network: The transportation network surrounding the site is rural in nature, with all roads single carriageway and at points narrow with limited opportunities for passing slow-moving vehicles. Suffolk County Council has provided a list (not aimed to be exhaustive) of locations within Suffolk where potential constraints may exist.	National Grid will consider the constraints provided by Suffolk County Council alongside its own surveys of the road network as part of identifying suitable routes for construction vehicles.
Assessment of traffic impacts: It is recognised that establishing a baseline for existing traffic movements is not possible during pandemic conditions, that it could be a significant period of time post-pandemic before traffic patterns return to 'normal' and that 'normal' might be very different to pre-pandemic conditions. Historic traffic flows may be able to be used to inform a baseline; assuming that relevant assessment has been undertaken looking at general traffic trends since those surveys were undertaken. We would look for the best available information to be used to determine traffic baselines.	<ul> <li>National Grid is proposing to undertake traffic surveys in early 2022 following discussions with the relevant Highway Authorities about the scope of this work. New data will be compared to historical data collected prior to 2013 to inform the forecast of trends.</li> </ul>
Construction Programme: Information should be provided on the expected programme for construction, including the length of construction activities. It should be made clear where any conclusions regarding impacts are based on the length of construction activities and their 'temporary' nature. This would include preparatory work such as utility diversions if applicable.	High level assumptions on the construction programme, such as phasing, are set out within the Preliminary Environmental Information Report which is published as part of the statutory consultation. Further details will be provided within the application for development consent.
Landscape: The location of the CSE compounds will be landscape driven although there will need to manage and reflect interactions with other topics.	Noted. The landscape assessment has informed the siting of the CSE compounds.
Pylon design: There is no benefit in a mixed approach - that is, the adoption of the new pylon design for the new line in close proximity to a line using the traditional design. This would add additional project costs which could be better spent elsewhere.	Noted. National Grid is proposing lattice pylons similar in style to the existing 400kV overhead line.

Summary of Matters Raised to Feedback	National Grid's Response
Public health: The impacts of the proposed development upon the health of local communities must be taken into account. This includes the choice of transmission line route, through minimising the impact on the natural environment and preserving access to green space. We also welcome the proposed use of woodland screening to minimise visual and noise impact.	Although the Scoping Report scoped out health as a standalone chapter, aspects of heath are considered within the Environmental Impact Assessment in the contributing topic chapters and as part of the landscape and traffic and transport chapters, which consider access to PRoW and green space. The preliminary assessment can be found in the Preliminary Environmental Information Report which is published as part of the statutory consultation material.
Engagement with the local population: We would encourage that engagement is undertaken over the coming months to ensure the location population are kept informed and feel they are able to comment on plans.	The statutory consultation provides an opportunity for the local population to engage with the project and to be informed of the latest proposals. The project website will also be updated at various intervals providing up to date details about the project.
Duration and intensity of work near population centres: It would be helpful to understand the expected duration of works taking place near the settlement and whether the proposed timings of 7am – 7pm for works will apply to all sections of the route including those near settlements. Given construction traffic would be likely to start before 7am, this may cause disruption to local residents.	The Preliminary Environmental Information Report contains details of the proposed core working hours, which would generally be between 0700 and 1900 Monday to Friday and between 0800 and 1700 on weekends and bank holidays. Section 4.4.12 of the Preliminary Information Report provides details of operations that may take place outside of these core working hours including third party requirements. The Outline Construction Traffic Management Plan will contain further details on measures to reduce impacts on local residents.
There appears to be limited detail on the methodologies used and no mention of a Health Impact Assessment.	The proposed assessment methodologies were presented within the Bramford to Twinstead Scoping Report submitted to the Planning Inspectorate in May 2021. This also set out that the project was unlikely to result in significant effects on health as a standalone topic and therefore a Health Impact Assessment was not required. The Planning Inspectorate supported this conclusion in the Screening Opinion (Planning Inspectorate, 2021). Further details can be found in the Preliminary Environmental Information Report.
It would be important to see further detail on the planned works over the duration of the project e.g. expectation duration of construction for each section (and whether work on each section will be concurrent) and technical detail on expected noise emissions etc.	High level assumptions on the construction programme, such as phasing, are set out within the Preliminary Environmental Information Report which is published as part of the statutory consultation material. Further details will be provided within the application for development consent.
Public rights of Way (PRoW): Impacts particularly during construction must be adequately mitigated. There has been increased use of the PROW network since the original assessments were undertaken. Enhancements to the network may be needed to offset impacts, particularly close to village centres, connecting settlements and within the AONB.	National Grid has obtained the Council's GIS data detailing the definitive PRoW within the study area. National Grid has undertaken surveys along some of the key PRoW within the draft Order Limits to inform the level of use and the mitigation strategy.

Summary of Matters Raised to Feedback	National Grid's Response		
	National Grid has identified a number of PRoW that would be affected by construction of the project. PRoWs are discussed in Section 4.4 of the Preliminary Environmental Information Report which is presented as part of this Statutory Consultation.		
DCO Requirements: Suffolk County Council will look to protect its role to enable it to discharge its legal duties and protect itself against future liabilities. This may be through a legal agreement with the applicant, planning obligations, DCO requirements, specific clauses of the management plans within the DCO, or by the inclusion of protective provisions. Suffolk County Council believes that it should be the discharging authority in respect of requirements where it has a statutory function including highways, PRoW, floods, and archaeology.	Noted, National Grid is in discussion with all planning authorities about the potential requirements and who would be responsible for discharging these.		
Thurrock Council			
Thurrock Council has no comments at this stage. However, the Council would wish to be consulted at further stages of the consultation process.	Noted.		

## Appendix I Project Background Document

# Bramford to Twinstead Reinforcement

STEAD

Project Background Document

March 2021





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## Introduction

This Project Background Document explains our proposals to add much needed capability to the electricity transmission network between Bramford substation in Suffolk and Twinstead Tee in Essex.

It has been prepared to support the first stage of consultations in Spring 2021 as work is re-started to develop detailed proposals.

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## **Executive summary**

#### This Project Background Document explains our proposals to add much needed capability to the electricity transmission network between Bramford substation in Suffolk and Twinstead Tee in Essex.

The energy we all use is increasingly coming from renewable and low carbon sources and the UK has set a clear ambition to be a global leader in clean energy. The Government is committed to reaching net zero greenhouse gas emissions by 2050 and has set out its ambition to connect 40 GW of offshore wind by 2030 – enough to power every home in the country by the end of this decade.

To help the move towards cleaner, greener energy, a large number of offshore wind projects are being developed by different companies around the UK coastline, 60 per cent of which are looking to come ashore up and down the East Coast.

In addition to new energy generated by offshore wind, new nuclear generation is planned at Sizewell C. We are also transporting more power with countries across the North Sea using interconnectors. New generation from wind, nuclear and interconnection means the amount of renewable and low carbon electricity sources expected to connect in East Anglia is set to significantly increase. The existing electricity transmission network in East Anglia was developed in the 1960s to make sure the area has the electricity it needs. Until today it has been able to meet that demand, as well as transporting around 3.5 GW of power from nuclear generators and the early offshore wind projects out of the region. However, the capacity of the network will soon be exceeded.

By 2030, the amount of renewable and low carbon energy connecting to the network will dramatically increase – around 24.5 GW is contracted to connect in East Anglia by the end of this decade. The existing network in East Anglia does not have the capability to reliably and securely transport all the energy that will be connected by 2030 while operating to the standards it is required to.

Feeding into Bramford substation from the north and east there are currently three electricity transmission lines carrying power from the existing Sizewell B nuclear power and offshore wind farms. West of Bramford out to Twinstead Tee, there is currently only one electricity transmission line taking that power out to the wider network, creating a bottleneck.

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This bottleneck significantly constrains the amount of power that can be carried westward on the network from Bramford when new sources of energy are connected. While additional network reinforcement will be needed elsewhere in East Anglia to carry the green energy that is coming in the next decade on to homes and businesses, it is essential we address this constraint on the network between Bramford and Twinstead Tee and provide the vital capacity needed. Other reinforcements will not take away the need to add capacity to this part of the network.

Between 2009 and 2013 work was undertaken to develop proposals to add this much needed network capability. Changes to when planned new generation would come online in East Anglia meant that work was put on hold at the end of 2013.

Now that the offshore wind developments have moved forward, backed by Government targets and legislation, it is clear that this reinforcement is needed. We will be taking forward the work required to ensure it is in place before the end of the decade so that we can use cleaner, greener electricity in our homes and businesses.

In Spring 2021 we are holding public consultations to explain why additional capability is needed on this part of the network, outline where we got to previously in developing proposals, and gather public feedback. That includes explaining the proposed route of the new line, and where it will be buried below ground, based on our previous assessment and feedback received from three rounds of consultation with local communities and stakeholders. We need fresh feedback on those previous proposals and we are outlining the next steps as we continue to develop our detailed plans.

A project of this type, scale and importance is considered a 'Nationally Significant Infrastructure Project' (NSIP) which requires a 'Development Consent Order' (DCO). We anticipate making an application for a Development Consent Order (DCO) for Bramford to Twinstead in late 2022. Before we do that, we will hold a further round of public consultation to set out our detailed proposals.

It is important that we hear the views of local people. Your feedback is important – it will help shape our plans. Knowing what matters to you, matters to us, so that we can take it into account where we can as we develop our plans.

Please therefore take time to give us your <u>feedback</u> as we restart work to develop our proposals to deliver a cleaner, greener future.



## **National Grid Electricity Transmission** Who we are

**National Grid Electricity** Transmission owns, builds and maintains the network in England and Wales. It is National Grid **Electricity Transmission that is** developing plans for the Bramford to Twinstead reinforcement.

National Grid sits at the heart of Britain's energy system, connecting millions of people and businesses to the energy they use every day. We bring energy to life - in the heat, light and power we bring to our customer's homes and businesses; in the way that we support our communities and help them to grow; and in the way we show up in the world. It is our vision to be at the heart of a clean, fair and affordable energy future.

Within the National Grid Group there are distinctly separate legal entities, each with their individual responsibilities and roles. These are shown in the following diagram.

> development of our clean energy future (eg, undersea electricity, interconnectors, with other countries and European transmission partners)



system in England and Wales

meets demand every second of every day

Each of the different entities within the National Grid Group are working to build a cleaner, fairer and more affordable energy system that serves everyone – powering the future of our homes, transport and industry.

When developing transmission network proposals, National Grid ESO and National Grid Electricity Transmission, must, under the Electricity Act 1989, do that in an efficient, coordinated, and economical way, and in a way which considers people and places. Options to deliver additional network capability and the options we take forward are evaluated against these statutory duties.

How we will go about doing that, meeting our amenity responsibilities and involving stakeholders and communities is outlined in our **commitments when undertaking works in the UK**¹:

#### 1. Establishing need

We only seek to build electricity lines along new routes or build new above-ground installations where existing infrastructure cannot be upgraded, where forecasted increases in demand cannot be met by other means, where customer connections are required, or where existing infrastructure has been identified for replacement.

#### 2. Involving stakeholders and communities

We promote genuine and meaningful engagement, meeting and, where appropriate, exceeding the requirements for consultation or engagement.

#### 3. Routeing networks and selecting sites

If we need to build new infrastructure we seek to avoid areas which are nationally or internationally designated for their landscape, wildlife or cultural significance.

#### 4. Minimising the effects of new infrastructure When we are developing new infrastructure we seek to reduce the effect of our work on communities by having regard to safety, noise and construction traffic.

#### 5. Mitigating adverse effects of works

We carry out relevant environmental investigations and report on these when we apply for consent for new works, and use best practice environmental impact assessment techniques to assess possible effects of our works and identify opportunities for mitigation measures.

- 6. Offsetting where mitigation is not practicable When we cannot mitigate the impacts of our proposals, we offset these impacts in practical and sustainable ways that are developed through engagement with local stakeholders.
- 7. Enhancing the environment around our works When undertaking works, we consider what practicable measures can be taken to enhance nearby and surrounding areas for the benefit of local communities and the natural and historic environment.

#### 8. Monitoring and learning for the future

We monitor, evaluate and review our engagement processes to learn from previous experiences to improve our working practices.

#### 9. Reviewing our commitments

We review these commitments at least every five years, and make additional revisions in response to new legislation, policy and guidance.

#### **10.** Working with others

We require other organisations working on our behalf to demonstrate these same commitments and continue to create an environment where we can share and deliver best practice.

¹ National Grid's commitments when undertaking works in the UK: Our stakeholder, community and amenity policy (National Grid, December 2019) – Available at https://www.nationalgrid.com/uk/electricity-transmission/document/81026/download

#### Many other organisations also have a key role to play in delivering a cleaner energy future.

Department for Business, Energy & Industrial Strategy

The Department for Business, Energy & Industrial Strategy (BEIS), is the ministerial department with primary responsibility for energy.

In November 2020, the Prime Minister set out a Ten Point Plan for a <u>Green Industrial Revolution</u>. This was followed by a White Paper, which sets out the Government's proposals for future law. The Energy White Paper, entitled <u>Powering our Net Zero Future</u>, sets out how, as a country, we will transform the way we produce and use energy to tackle climate change, meet net zero emissions by 2050, and build back greener. The White Paper focuses on the Government's ambitions to increase energy generation from offshore wind and interconnectors, as well as hydrogen, carbon capture utilisation and storage (CCUS), heat and transport decarbonisation.

BEIS, working with input from National Grid ESO, is also conducting a review of how offshore wind is connected, with the aim of removing barriers to achieving Government ambitions for offshore wind⁴.

The Secretary of State for BEIS is also the ultimate decision maker for new electricity transmission network proposals under <u>The Planning Act 2008</u> (as amended).⁵



The Planning Inspectorate is the Government agency responsible for examining proposals for Nationally Significant Infrastructure Projects. In energy terms, those include offshore wind farms, new nuclear power stations and new overhead lines greater than 2 km in length.

The Bramford to Twinstead reinforcement is a Nationally Significant Infrastructure Project.

## ofgem

Ofgem (the Office of Gas and Electricity Markets) is the government regulator for gas and electricity markets in Great Britain. Ofgem is a non-ministerial government department and an independent National Regulatory Authority, whose role is to protect consumers as a greener, fairer, energy system is delivered.

Ofgem works with Government, industry and consumer groups to help deliver net zero from an energy perspective at the lowest cost possible to consumers.

### national**gridESO**

National Grid ESO is the Electricity System Operator for the whole of Great Britain. National Grid ESO ensures electricity is always where it is needed and the network remains stable and secure in its operation. Generators apply to National Grid ESO when they wish to connect to the network and National Grid ESO leads the work to consider how the network may need to evolve to deliver a cleaner, greener future.

⁵ Planning Act 2008 (UK Government, December 2020) – Available at https://www.legislation.gov.uk/ukpga/2008/29/contents

² The ten point plan for a green industrial revolution (UK Government, November 2020) – Available at https://www.gov. uk/government/publications/the-ten-point-plan-for-a-greenindustrial-revolution

³ Energy white paper: Powering our net zero future (Department for Business, Energy and Industrial Strategy, December 2020) – Available at https://www.gov.uk/government/publications/ energy-white-paper-powering-our-net-zero-futuresmission/ document/81026/download

⁴ BEIS Offshore Transmission Network Review Available at https:// www.gov.uk/government/publications/offshore-transmissionnetwork-review'

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National Grid sits at the heart of Britain's energy system, connecting millions of people and businesses to the energy they use every day

## Moving towards net zero

The world we live in is changing, and the UK is at a turning point as we embrace the enormous opportunities a cleaner, greener future brings. Government has made it clear that a key part of recovery from the coronavirus pandemic is building back cleaner and greener.

The UK has set a world-leading target to tackle climate change, which is to achieve net zero by 2050. Put simply, this means that we will remove the same amount of greenhouse gas from the atmosphere as we produce.

As a country we are already making progress. The UK has the largest offshore wind capacity in the world, with some 8.5 GW operating and a further 1.9 GW under construction. 2020 was the greenest year on record for Britain's electricity system. Spring 2020 saw the longest run since the industrial revolution without burning coal, stretching almost 68 days. 2020 was also a record-breaking year for renewables. Wind generation records were broken several times during the year, peaking at 59.9 per cent of the electricity mix on August 26. Solar power too set new records with 9.7 GW of power being produced, and its highest share of the electricity mix reaching 34 per cent on several occasions in May.

But more needs to be done. A healthier, greener future for Britain requires significant upgrades to our energy infrastructure to deliver clean green energy from where it is produced to where it is needed. Decarbonising the energy system means replacing – as far as it is possible to do so – fossil fuels with clean energy technologies such as from wind turbines and nuclear power for electricity production. Growth in energy generated from offshore wind is a key part of achieving net zero and the Government's Energy White Paper sets an ambitious target to deliver 40 GW of offshore wind connected to the network by 2030 – enough to power every home in the UK. Growth in offshore wind also offers significant opportunities for economic growth and job creation. There are up to 60,000 jobs expected to be created in the offshore wind sector alone in this decade. Up to 250,000 jobs are also expected to be created by 2030 across the proposals in the Prime Minister's Ten Point Plan for a Green Industrial Revolution.

The <u>Climate Change Committee</u> anticipate that electricity demand will at least double by 2050 as we shift to clean energy to drive electric vehicles, heat our homes and power our industry . The Committee's <u>Sixth Carbon Budget</u>⁷ published in December 2020 recommends deployment of renewables at scale, including 40 GW of offshore wind by 2030 and sustaining that build rate to support deployment up to 140 GW of offshore wind by 2050, raising further opportunity for growth and job creation. By 2050, our own analysis indicates that the energy sector needs to fill around 400,000 jobs to <u>build the Net zero</u> <u>energy workforce</u>⁸.

Our mission at National Grid is to support these aims. We believe by acting now, the UK can become the world's first major clean economy, with net zero carbon emissions by 2050, creating growth and jobs for communities across Britain.





⁶ Net Zero – The UK's contribution to stopping global warming (Climate Change Committee, May 2019) – Available at https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/

⁷ The Sixth Carbon Budget: The UK's path to Net Zero Climate Change Committee, December 2020) – Available at https://www.theccc.org.uk/publication/sixth-carbon-budget/

⁸ Building the Net Zero Energy Workforce (National Grid, January 2020) – Available at https://www.nationalgrid.com/document/126256/download



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Our aim is to work with stakeholders and the communities who will host this infrastructure to find the best solution.

# Delivering a cleaner, greener future

To meet the 2030 target and 2050 legislation and move to a low carbon future using energy from offshore wind, nuclear power and interconnectors, we need to transport that energy from where it is produced or comes ashore, to where it is needed.

The electricity transmission network, which moves energy at scale around the country, will play a vital role in this.

The existing network was designed to connect and transport energy from coal, nuclear and gas-fired power stations. In many parts of the country those power stations were more closely located to the larger centres of population, with power flowing mostly north to south around the country.

With around 60 per cent of all offshore wind developments looking to bring their energy amount of energy from offshore wind around the East Coast, we need to rewire the network for a different low carbon future: one where we deliver offshore energy from the East Coast to the entire UK population. To achieve this it will be critical to strike the right balance between the need to connect the growing offshore wind, the cost to UK consumers and the impact to local communities and the environment. Our aim is to work with stakeholders and the communities who will host this infrastructure to find the best solution, balancing the needs of the UK, the environment and the regions we directly work in.

# How the need for network reinforcement is identified

#### National Grid ESO leads an annual cycle which looks at how much energy needs to be carried on the network in the future, and where network capability needs to be improved to accommodate that.

The overall effect of that process is to ensure that the right efficient, coordinated and economical proposals are brought forward to deliver what the country requires from the electricity transmission system, in a way that represents best value to electricity consumers.

- 1. A range of <u>Future Energy Scenarios</u>⁹ are discussed with stakeholders and are published each summer. Future Energy Scenarios represent different credible scenarios for how quickly we might make the transition to a cleaner, greener energy future as we strive towards net zero by 2050.
- 2. The Future Energy Scenarios inform the analysis in the <u>Electricity</u> <u>Ten Year Statement¹⁰</u> which is published each November, setting out the System Operator's view of future transmission requirements and where the capability of the transmission network might need to be addressed over the next decade.
- Transmission Owners respond with solutions to address the requirements identified in the Electricity Ten Year Statement. National Grid ESO assess and publish their recommendations as to which proposals should proceed in a <u>Network Options Assessment</u>¹¹ report each spring.
- National Grid Electricity Transmission responds to <u>Network Options</u> <u>Assessment</u> recommendations in its <u>Network Development</u> <u>Policy¹²</u> which is published each summer. The Network Development Policy sets out which network proposals National Grid Electricity Transmission will take forward.



In planning and operating the network, transmission licence holders – onshore and offshore – are required by their licences to comply with the <u>National</u> <u>Electricity Transmission Security and Quality</u> <u>of Supply Standard¹³</u>. These set out criteria and methodologies for planning and operating the network in Great Britain – in essence, minimum requirements designed to ensure secure and stable electricity supplies.

The need to reinforce the network between Bramford and Twinstead has been identified as necessary to take forward in the two most recent <u>Network</u> <u>Options Assessment</u> reports. National Grid Electricity Transmission confirmed it will be taking forward work to deliver the reinforcement in its <u>Network Development Policy</u> statement in 2020.

- ⁹ Future Energy Scenarios 2020 Report (National Grid ESO, July 2020) – Available at https://www.nationalgrideso.com/futureenergy/future-energy-scenarios/fes-2020-documents
- ¹⁰ Electricity Ten Year Statement 2020 (National Grid ESO, November 2020) – Available at https://www.nationalgrideso. com/node/1981
- ¹¹ Network Options Assessment 2020/21 (National Grid ESO, January 2021) – Available at https://www.nationalgrideso.com/ research-publications/network-options-assessment-noa
- ¹² Network Development Policy Decisions (National Grid, June 2020) – Available at https://www.nationalgrid.com/uk/electricitytransmission/document/134036/download
- ¹³ Security and Quality of Supply Standard (National GridESO, March 2021) – Available at https://www.nationalgrideso. com/industry-information/codes/security-and-quality-supplystandards

# The need for reinforcement in East Anglia

#### The network today in East Anglia

Like much of the high voltage electricity transmission network across the country, the network in East Anglia was largely developed in the 1960s. It was built to supply regional demand, centred around Norwich and Ipswich, fed from our Bramford substation.

A large loop runs from Walpole in the north to Pelham and Rayleigh/Tilbury in the south, via Norwich and Bramford. Two 400,000 volt (400 kV) overhead lines connect Sizewell B, and a decommissioned 132,000 volt (132 kV) overhead line used to connect the now decommissioned Bradwell A nuclear power station. Historically there was relatively limited generation and low consumer demand in East Anglia when compared to other parts of the country.



#### **Current generation and demand in East Anglia**

To understand current and future demands on the electricity network the concept of network boundaries is used. A boundary splits the system into two parts and shows where there are high-power flows between parts of the network. When flows across a network boundary are forecast to be above the capability of the network, there are two options to manage this:

- pay electricity generators on one side of the boundary to reduce the energy they produce. This then reduces the flows of electricity across the boundary. When National Grid ESO pay generators to do this they are called 'constraint payments'; and/or
- **2.** increase the capability of the network to allow more electricity to flow.

At present, generation in the region currently totals 4,100 MW. Most of this generation (3,160 MW) is directly connected to our network and 940 MW is connected via the UK Power Networks distribution network. We call that locally connected generation 'embedded'. This is shown in the table on the following page

Peak demand for electricity in the region has been falling slightly in recent years from a peak of 1,426 MW in 2019 to a forecast peak demand for 2021 of 1,346 MW.

Project name	Generator	Connection site	Contracted generation (MW)	Type of generation
Sizewell B	EDF Energy Nuclear Generation Ltd	Sizewell	1,230	Nuclear
Dudgeon	Dudgeon Offshore Wind Ltd	Necton	400	Offshore wind
Greater Gabbard	Greater Gabbard Offshore Wind Ltd	Leiston	500	Offshore wind
Galloper	Galloper Wind Farm Ltd	Leiston	350	Offshore wind
East Anglia 1	East Anglia One Ltd	Bramford	680	Offshore wind
Sheringham Shoal	Scira Offshore Energy Ltd	Norwich (embedded)	315	Offshore wind
Gunfleet Sands	Gunfleet Sands Ltd	Bramford (embedded)	99.9	Offshore wind
Gunfleet Sands II	Gunfleet Sands II Ltd	Bramford (embedded)	64	Offshore wind
Great Yarmouth	RWE Generation UK plc	Norwich (embedded)	420	Gas (CCGT)
Thetford	EPR Thetford Ltd	Bramford (embedded)	41	Biomass





#### 2021

Generation: Nuclear 1,230 MW, Offshore wind 2,409 MW, Gas 420 MW, Biomass 41 MW Generation (total): 4,100 MW Forecast demand: 1,346 MW

### How power is transported throughout the network

Each line of pylons on the network carries two electrical circuits. There are four circuits connecting to and from the region – two circuits on the overhead line between Walpole and Norwich to the north and two on the line running west out of Bramford to Twinstead Tee.

The network is planned and operated under a set of standards designed to ensure there are no widespread electricity supply interruptions, even if two circuits are out of service.

For example, if one circuit is switched out for planned maintenance and another is impacted by a fault at the same time, the Security and Quality of Supply Standard is designed to ensure:

- electricity system frequency is maintained within statutory limits
- no part of the network is overloaded beyond its capability
- voltage performance stays within acceptable statutory limits; and
- the system remains electrically stable.

National Grid ESO oversees the standards, however, they are approved by a Security and Quality of Supply Standard panel and Ofgem.

Taking the standards into account, the network today in East Anglia has around 3.5 GW of transfer capability out of the region, with two of the four circuits connecting the region to the wider network out of service.






## Future generation and demand

While the network in East Anglia can accommodate the level of generation and demand that there is today, this situation will change over the next decade with the increase in the amount of electricity set to come from offshore wind, interconnectors and nuclear power.

By the end of this decade, if everything contracted to connect in the region does connect, there will be significantly more generation than the current network is capable of accommodating. The table below shows the anticipated demand year on year and how the generation that is contracted to connect to the network is set to grow by the end of the decade.

While that is the contracted position, all of these new sources of electricity may not necessarily connect in the timescales they are contracted to connect in. Some may not be consented, or some may not proceed to financial final investment decisions. However, it is clear that the level of generation that will come into the region far exceeds the current network capability. From the analysis by the System Operator, some 17.4 GW of offshore wind can reasonably be expected within the eastern region off the East Anglia coast by 2030, if the Government's ambition to connect 40 GW of offshore wind in the UK by then is achieved¹⁴.

Taking that into consideration and basing their analysis on credible **Future Energy Scenarios**, the System Operator anticipates that as much as 17.9 GW of transfer capability is needed out of East Anglia by 2030, far in excess of the 3.5 GW of transfer capability in the existing network¹⁵.

- ¹⁴ Offshore Coordination Phase 1 Final Report, National Grid ESO, 16 December 2020, page 18. Available at https://www. nationalgrideso.com/news/final-phase-1-report-our-offshorecoordination-project
- ¹⁵ Leading the Way Required Transfer in 2030, National Grid ESO, Electricity Ten Year Statement 2020, East of England Boundary Flows and Base Capability graphs. Available at https://www. nationalgrideso.com/news/electricity-ten-year-statement-etys

Year	1	2	3	4	5	6	7	8	9	10
Year	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30
Demand (MW)	1,346	1,303	1,287	1,280	1,287	1,298	1,312	1,351	1,387	1,413
Generation cumulative total (MW)	4,100	4,448.5	5,748.5	10,015.5	13,215.5	13,215.5	16,775.5	19,175.5	21,193.5	24,459.5





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## Increasing the capability of the existing network

Before we consider building new parts of the network we first must consider whether we can achieve more capability by upgrading parts of the existing network. That can involve using thicker conductors/wires on some of our existing overhead lines and adding smart power control devices to control the flow of electricity on parts of the network to transport it to where it is needed.

And here in East Anglia in the first half of this decade, that is what we will be doing:

- installing power control devices at key substations in the region at Pelham, Rye House and Waltham Cross, to make more use of an existing route to the west of the region
- increasing the voltage of a section of line from Waltham Cross south into London to 400 kV to increase the capability of that part of the network on into the capital
- re-wiring existing overhead lines with larger diameter conductors that can carry more power – for example on the existing overhead lines from Bramford to Braintree to Rayleigh to Tilbury.

Making these improvements increases the capability of the existing network to around 6 GW, but it is still insufficient to deliver the capability that the National Grid ESO advises is required to deliver cleaner, greener energy to homes and businesses beyond the region in line with Government ambitions.

As National Grid ESO has outlined in **NOA** 2020/2, the reinforcement between Bramford and Twinstead is critical in all scenarios and needs to be in place by 2028. The System Operator has also explained in the NOA that other reinforcements are also needed in the region to deliver on the Government's ambition to see 40 GW of offshore wind connected by 2030.



The Network Options Assessment (NOA) is an annual report published by National Grid ESO which outlines their recommendations as to which reinforcement projects should be taken forward during the coming year.



The table below shows the work that is needed on the network in the region over the next decade as identified in the **Network Options Assessment**.

Option description	Earliest in Service Date (EISD)
Reconductor remainder of Rayleigh to Tilbury	2021
Power control devices at Burwell Main	2022
Reconductor remainder of Coryton South to Tilbury circuit	2022
Commercial solution for East Anglia – Stage 1	2024
Commercial solution for East Anglia – Stage 2	2024
Power control devices at Pelham	2024
Power control devices at Pelham	2024
Power control devices at Rye House	2024
Power control devices at Rye House	2024
Elstree to Sundon reconductoring	2024
Uprate Hackney, Tottenham and Waltham Cross 275 kV to 400 kV	2027
Reconductor the newly formed second Bramford to Braintree to Rayleigh Main Circuit	2028
New 400 kV double circuit between Bramford and Twinstead	2028
New offshore HVDC link between Suffolk and Kent option 1	2029
New 400 kV double circuit in north East Anglia	2030
New 400 kV double circuit in south East Anglia	2030
Thames Estuary reinforcement	2030

In addition to the network reinforcement between Bramford and Twinstead, a high voltage subsea DC link is required between East Anglia and Kent for 2029 and two 400 kV double circuit reinforcements are needed onshore for 2030 - one in North East Anglia and one in South East Anglia.

Each of those reinforcements, in addition to Bramford to Twinstead, are necessary to deliver the Government's ambition to see 40 GW of offshore wind connected by 2030. Additional work is needed to consider options for those further reinforcements. Each will be taken forward on slightly later timescales than Bramford to Twinstead.

## **Double circuit:**

Most overhead lines are double circuit, carrying an electrical circuit on each side of the line of pylons.





Network Options Assessment 2020/21, National Grid ESO, page 56

# Why Bramford to Twinstead Tee needs reinforcing

## We need to reinforce the network between Bramford and Twinstead Tee because that part of the network is a significant bottleneck or constraint to future power flows.

There are currently three double circuit overhead transmission lines carrying power into Bramford – one from Norwich and two from Sizewell. But to the west of Bramford, out to Twinstead Tee, there is currently only one double circuit line carrying power out of the region. With substantial new sources of energy connecting in the region by the end of the decade, the existing overhead line west of Bramford would be overloaded.

Beyond Twinstead Tee there are two routes out of the region – one west to Pelham and one south to Braintree-Rayleigh-Tilbury. Adding a double circuit route between Bramford to Twinstead will remove the current bottleneck on the network and make efficient use of the capacity available in those two routes – one west and one south of Twinstead Tee. Reinforcing the network between Bramford and Twinstead will create two independent double circuit transmission routes west of Bramford – one from Bramford to Pelham and one from Bramford to Braintree to Rayleigh to Tilbury.

The Bramford to Twinstead reinforcement is needed in addition to the other network reinforcements identified in the region, if as a country, we are going to secure the benefits of a cleaner greener future. Harnessing the power of offshore wind, greater interconnection with countries across the North Sea and new low carbon nuclear generation, alongside delivering Government ambitions for 40 GW of offshore wind by 2030, will also require the other network reinforcements in East Anglia.









## **Back-checking strategic options**

We have checked again to see whether there may be more appropriate strategic options to address the network bottleneck between Bramford and Twinstead Tee. You can read more about our review in the **Project Development Options Report**.

23 strategic options in and around Bramford that might achieve the required reinforcement have been examined, including the original options considered in 2009.

These included:

- doing no physical works
- re-directing proposed connections
- maximising existing connections
- reinforcing north of Bramford with new 400 kV network infrastructure
- reinforcing south of Bramford with new 400 kV network infrastructure
- bypassing Bramford with new 400 kV network infrastructure; and
- reinforcing west of Bramford with new 400 kV network infrastructure.

Those that would not fully address the constraint or meet the Security of Supply Standard were discounted. We also discounted others that would not offer some material benefit over another option, for example, more expensive options which would provide the same network capacity. An illustration of all Strategic Options considered is shown below.



Carefully considering our statutory duties and obligations to be efficient, coordinated and economical, and to have regard to the desirability of preserving amenity, reinforcing the network between Bramford and Twinstead Tee was identified as the most suitable option. Of the workable options, it requires the least new infrastructure and has less impact on communities and the environment compared to other options. It also has the lowest capital cost whilst addressing the constraint on the network efficiently.

# The BEIS review of offshore coordination

The Business Energy and Industrial Strategy (BEIS) department's Offshore Transmission Network Review is currently looking at how the offshore electricity transmission network can be delivered in a more coordinated way to deliver net zero emissions by 2050, and we fully support that work.

We will work closely with Government, stakeholders and coastal communities to ensure we play our part to deliver the infrastructure needed to achieve net zero in a way that reduces impacts on communities. In meeting that challenge there are two key considerations.

The first is the way in which we best connect and coordinate the growth of offshore wind farms and interconnectors to the electricity transmission network along the immediate coastline. The second is the network reinforcements required further inland to accommodate the increased demand on the network and to ensure we can effectively transport the power to where it is needed across Great Britain. That offshore coordination work by Government is ongoing. As explained in the **Energy White Paper**, Government will be looking to redesign the current regime to bring more extensive coordination and mitigate environmental, social and economic costs for the 2030s and beyond.¹⁶

While developers will be encouraged, where early opportunities for coordination exist, to consider becoming pathfinder projects, National Grid ESO explains in the latest **Network Options Assessment**, that onshore reinforcement is still needed. The System Operator's analysis found that the viable offshore options, in the scenario where 40 GW of offshore wind is achieved by 2030, do not displace any of the onshore reinforcement requirements that have been identified.¹⁷

Notwithstanding how offshore coordination is developed, major onshore development and electricity network reinforcement will therefore still be necessary. To put this into perspective, successfully delivering the Government's 40 GW of offshore wind ambition will require around 500 km of onshore and around 400 km of offshore electricity transmission network being consented and delivered within this decade across the east side of the country.

The network reinforcement between Bramford and Twinstead Tee is an integral part of that and is considered 'critical' for 2028 by National Grid ESO in all of the Future Energy Scenarios.

¹⁶ Energy White Paper, December 2020, page 80, BEIS – available at https://assets.publishing.service.gov.uk/government/uploads/ system/uploads/attachment_data/file/945899/201216_BEIS_EWP_Command_Paper_Accessible.pdf

¹⁷ Network Options Assessment, January 2020, page 69, National Grid ESO – available at https://www.nationalgrideso.com/ document/185881/download

The network reinforcement between Bramford and Twinstead Tee is considered 'critical' for 2028 by National Grid ESO in all of the Future Energy Scenarios.

# Our proposals – The story so far

## We first started to develop proposals to reinforce this part of the network between 2009 and 2013, when new generation planned in the region was expected to come online earlier.

Extensive work and several rounds of public consultation were carried out before changes to when planned new generation would come online meant that work was put on hold at the end of 2013.

The overall effect of that process is to ensure that the right efficient, coordinated and economical proposals are brought forward to deliver what the country requires from the electricity transmission system in a way that represents best value to electricity consumers.

## **Cable Sealing End:**

Where a high-voltage underground cable joins onto an overhead line, the transition from one to the other requires termination points, known as sealing end compounds. These sealing ends are also called 'terminations' or 'terminals'.

## **Stage 1 Consultation**

The first stage of consultation on our proposals started in October 2009. During the consultation we explained why the reinforcement was needed, how we had assessed the strategic options and set out in detail each of the four route corridor options under consideration.

We ask people to provide their views on the proposals and on each of the four route corridor options.

Over 3,000 individual consultation responses were received and we used that feedback to review against our corridor assessment work and to help identify a preferred corridor.

In July 2011 we confirmed our decision to take forward Route Corridor 2 as our preferred corridor option. It was selected as it followed the route of existing overhead lines and would enable a section of an existing 132 kV route to be removed. This corridor was also considered to give rise to a lower scale of effect on landscape and views than other options.

A summary of how we selected the preferred corridor and how consultation feedback influenced our decision is set out in our Project Development Options Report March 2021.

The detailed reports on strategic options and routeing which were presented during the first consultation can also be found in the document archive on our **consultation website**.

## **Stage 2 consultation**

Following the selection of our preferred corridor, we started to develop indicative alignments on the basis that the new overhead line would be close to the existing 400 kV overhead line.

In consideration of the feedback received during stage 1 consultation, we carried out further work to identify whether any specific sections should be partly or wholly undergrounded.

The views of local people were canvassed through a series of Community Forum meetings. Local authorities, environmental bodies and technical specialists gave feedback through several Thematic Group meetings.

In May 2012 we published details of our indicative alignment. It included two sections of the route where the high cost of putting the cables underground was considered justifiable, these were:

- around 4 km from Whitestreet Green to Leavenheath through Dedham Vale, where the landscape was highly valued locally and was designated nationally as an Area of Outstanding Natural Beauty
- approximately 4 km in the Stour Valley, where, after listening to feedback from the public and consultees, it was clear that location was important not just for its high-quality landscape, but also its cultural links with Gainsborough, Constable and Nash.

Each of the underground sections would require a **cable sealing end** compound at each end to connect to the overhead lines. A cable sealing end compound is the structure needed to make the transition from underground cable to overhead line. Further public consultations were held over the summer of 2012 and in October of that year, we confirmed our preferred alignment and announced the next steps in the detailed design of our proposals including:

- deciding on the preferred connection at the eastern end of the route around the villages of Hintlesham and Burstall and where English Heritage had asked for more information to help it consider how the proposals could affect the setting of Hintlesham Hall
- further consultation on the location of the connection point at the western end of the route where underground cables in the Stour Valley would connect to the existing 400 kV overhead line between Twinstead Tee and Braintree
- identifying a site for a grid supply substation west of Twinstead, to maintain local electricity supplies and enable the removal of UK Power Network's existing 132 kV line.

## Western cable sealing end compound

In November and December 2012 we consulted on location options for the cable sealing end compound needed at the western end of the route.

In January 2013, we confirmed our preferred location to the west of the village of Alphamstone. Selecting the southern site for the sealing end compound meant that more than a kilometre of overhead line and three pylons in the Stour Valley could be taken down in addition to the removal of the 132 kV line between Twinstead Tee and Bramford.



## Alignment around Hintlesham/Bramford

Following consultation feedback, we carried out further studies on any potential impacts on the Grade 1 listed Hintlesham Hall and the Hintlesham Woods Site of Special Scientific Interest. We considered a number of potential overhead alignments and an underground cable route.

After further discussions with statutory consultees, we developed an optimised alignment. This included changes in pylon positions and inclusion of specific mitigation measures. In August 2013 we confirmed our intention to take forward the optimised alignment, along with a proposed mitigation plan.

## Further details can be found in the **<u>Project</u>** <u>**Development Options Report**</u>.

## 132 kV substation west of Twinstead Tee

Our interim alignment incorporated part of the route of an existing 132 kV overhead line owned and operated by UK Power Network, the local distribution network operator. Our proposals included removing approximately 25 km of 132 kV overhead line from Burstall Bridge to Twinstead, to make space for the new 400 kV line and to help mitigate the visual impact of the new line.

To enable the removal of the 132 kV line, we would need to carry out additional work to maintain local electricity supplies. After consultation with UK Power Networks, we confirmed our preferred solution would be to build a new grid supply point substation to the west of Twinstead Tee. A review of the options considered can be found in the **Project Development Options Report 2021**.

In February 2013 we held a public consultation about the possible site options for the new electricity substation. In August 2013 we confirmed a site near Butler's Wood, directly off the A131, south of Sudbury, as our preferred location.

## **Project pause**

In November 2013 work was paused when it was apparent that some of the generation projects in the region were not going to come forward as quickly as previously expected. While the need for the reinforcement remained, it was apparent that it would not be needed in the timescales originally envisaged.





# Our proposals – Where we are now

Our network studies show that the reinforcement needs to be in place by 2028. In picking up the proposals again, we have carried out a thorough re-appraisal of the scope of the works and our decisions to date.

Through that review of the decision-making process and the decisions themselves, we have been able to reach a fully informed and up to date position on the project. We are confident that our 2013 proposals remain largely appropriate, but the review has identified some areas for further consideration. To address these, where possible at this stage, we have carried out additional work and that forms part of our consultations before confirming our final designs.

Further details of our review and the emerging proposals are set out in the Project Development Options Report and are summarised below.

In Spring 2021 we will hold a public consultation on the emerging proposals. We will set out the proposals as they stood when we paused work in 2013 and explain where we feel further consideration is needed. We will seek feedback on the proposals as a whole, where we need to carry out more work and ask whether there is anything else we should consider.

## **Project costs**

As part of our review, we have also reconsidered the costs of building the reinforcement. Market and material costs will change before we reach construction, but based on current information and designs, in today's (or equivalent) prices, the capital cost estimates rounded to the nearest £m, are as outlined as follows. The total estimated capital cost of the proposed scheme is approximately £363m. Of that, overhead line costs account for approximately £78m. Underground cables, including cable sealing ends at £5m each, account for approximately £245m. Substation works are £40m of which £27m is the new grid supply point at Butlers Wood.

The cost of putting high voltage cables underground is substantially higher than putting them overhead, and those extra costs ultimately fall on everyone's electricity bills. The duties placed on us by the Electricity Act 1989 require a balance to be struck between the visual impact on the landscape and the cost to electricity bill-payers, so we must consider every case for installing cables underground on its merits.

National Policy Statement EN5 explains that Government expects the need for new electricity lines to be often fulfilled through the development of overhead lines. Government does not see the development of overhead lines as inconsistent with our environmental duties, but Government recognises there may be instances where overhead lines may not be appropriate.

Cases for installing cables underground could include locations where it would be physically difficult to build an overhead line (such as in urban areas), wide river or estuary crossings, and highly valued landscapes. These may include National Parks and Areas of Outstanding Natural Beauty but could also include particularly sensitive landscapes, areas with iconic views or other places where the potential impact of a new electricity connection could only be mitigated by putting it underground.

The additional cost of undergrounding in this instance, for example, at the Stour Valley section compared to using overhead lines, is  $\pounds118m$ . The additional cost of undergrounding the Dedham Vale section compared to using overhead lines is  $\pounds107m$ . To use overhead lines throughout the route would cost  $\pounds142m$ , compared to the cost of a fully undergrounded scheme, which would cost  $\pounds694m$ .



Example of a sealing end compound



Example of reinstated hedge above underground cables

# **Emerging proposals**

## The proposals include the following components, which we would like your thoughts and views on during the consultation:



## We have broken the route down into various sections.



Кеу	proposed 400 kV overhead line
	proposed 400 kV underground cable
	proposed add kV underground cable existing 400 kV overhead line to be retained proposed 132 kV underground cable existing 132 kV overhead line to be retained proposed removal of existing 132 kV overhead line
XXXXXXXXX	
	proposed removal of existing 400 kV overhead line proposed substation proposed 400 kV cable sealing end existing 400 kV substation to be retained

## Section AB Bramford to Hintlesham

## **Our proposals**

We would build a new overhead line from Bramford substation to the south of the existing 400 kV line.

We would build a new section of overhead line to the north of Ramsey Wood and divert the existing 400 kV line onto these pylons. The new reinforcement would then be able to use the existing pylons through Hintlesham Wood. This approach was favoured over other alignment options due to the effects on landscape, visual and heritage. It would also allow for the greater paralleling of new and existing line and avoid impacting Hintlesham Wood.

We would remove the existing 132 kV overhead line from Burstall Bridge running to the south west of Hintlesham.

#### **Considerations**

This area of the route includes the Grade I listed Hintlesham Hall, the ancient woodland in Hintlesham Little and Great Woods and Ramsey Wood, which are also designated as Sites of Special Scientific Interest (SSSI).

We will continue to consult with Historic England to ensure our proposals strike the right balance between delivering the critical network reinforcement, whilst being mindful of the surrounding environmental, heritage and community context.







## **Our proposals**

We would build a new overhead line in this section.

The alignment would pass to the south of Kate's Hill and follow the alignment of the existing 132 kV overhead line. The line would deviate directly to the south of Pipkin Lodge to the east of Benton Street. The pylons would be screened by trees in views from Benton Street, approaching from the Layham direction.

We would remove the existing 132 kV overhead line.





## Section D Polstead

## **Our proposals**

We would build a new overhead line in this section.

The alignment would run to the south of the existing 400 kV power line, roughly following the alignment of the existing 132 kV overhead line.

When approaching the Dedham Vale AONB the proposed line would deviate slightly south west and connect into a cable sealing ends compound near Dollops Wood.

We would remove the existing 132 kV overhead line.





## Section E Dedham Vale AONB

## **Our proposals**

We would build approximately 4 km underground cables through the Dedham Vale AONB.

At each end of the underground cables section, we would need to build a CSE compound.

In this section we are proposing to build the eastern CSE compound to the south east of Sprotts Farm, east of the boundary of the AONB. This location was identified as it provided an opportunity to screen the compound next to the adjacent Dollops Wood. We would increase screening through additional planting and landscaping.

We are proposing to build the western CSE compound to the immediate west of Boxford Fruit Farm. This location was identified as it offered separation from the AONB to the east and would be next to existing tree planting along the boundary of the orchard, providing further natural screening. This location would also allow the terminal pylon required to transition the line back to overhead to be aligned more closely with the existing 400 kV overhead line.

We would remove the existing 132 kV overhead line.



When Dollops Wood was selected as the preferred location for the eastern CSE, consideration was given to using a method called horizontal directional drilling to install underground cables under Dollops Wood. Using directional drilling would avoid digging open trenches and tree clearance to lay the cables, thereby reducing any potential impact on the woodland. Once clear of the woodland, we would install the cables in trenches.

The feasibility of using directional drilling beneath the woodland is being investigated. It is potentially very challenging given the variation in topography.

We are therefore considering an alternative route for the underground cables this area. The alternative underground cable route would travel northwards past Sprotts Farm and back down in a south westerly direction between Broom Hill Wood and Bushy Park Wood, as shown on the map.





## Section F Leavenheath and Assington

## **Our proposals**

We would build a new overhead line in this section.

The alignment would continue through Leavenheath to the south of the existing 400 kV line, south of Assington and Sudbury before crossing the B1508 and the railway.

We would remove the existing 132 kV overhead line.





## Section G Stour Valley

## **Our proposals**

We would build a new overhead line roughly parallel to the existing 400 kV overhead line from the east of the area until just south of Sawyers Farm, where it would connect into a CSE compound.

West of Sawyers Farm we would build approximately 4 km of underground cables through the Stour Valley.

At each end of the underground cables section we would need to build a CSE compound.

We are proposing to build the eastern CSE compound to the south of Sawyers Farm. This location was identified as it benefited from existing vegetation on site, which would provide natural screening and minimise the visual impact to the surrounding landscape.

The location for the western CSE was subject to extensive consultation before our preferred site was confirmed as south west of Ansells Farm. This location would benefit from existing mature screening and would be located further away from Alphamstone Complex Local Wildlife Site.

This location also means that the underground cable would be routed further south and we would be able to remove approximately 1 km of the existing 400 kV line between here and Twinstead Tee.

We would remove the existing 132 kV line overhead line up to the 'diamond crossing' to the south west of Sparrows Farm.

# • proposed 400 kV overhead line • proposed 400 kV cable sealing end removal of existing 132 kV overhead line removal of existing 400 kV overhead line existing 400 kV line

## Considerations

Although recognised as a landscape of value and with links to famous artists, the Stour Valley (Section G) is not formally designated as an Area of Outstanding Natural Beauty and the review has identified this area as requiring further work to understand whether the additional cost of an underground cables (£118m) in this location is justified. We are therefore seeking views from stakeholders and consumers as to whether the previous decision to underground this section still provides value for money.

In particular, National Grid would like to understand views on:

- the landscape and cultural value of the Stour Valley
- progress on proposals to extend the Dedham Vale AONB boundary in the Stour Valley towards Sudbury
- the construction effects of undergrounding in the Stour Valley (on ecology, archaeology and traffic)
- anything else National Grid should consider.



# **Grid supply substation**

Our proposals include taking down the existing 132 kV power line operated by UK Power Networks (UKPN) between Burstall Bridge and the 'diamond crossing' near Twinstead.

Removing the line would make way for our new 400 kV reinforcement and help reduce its visual impact in the landscape.

The existing 132 kV line is part of the local distribution network and to take it down, we would need to carry out additional work to maintain local electricity supplies.

UKPN looked at a number of options to maintain the security of local electricity supplies and we carried out additional analysis of the options. In February 2013 we confirmed that building a new grid supply substation west of Twinstead would represent the best way forward from a lifetime cost, environmental and socio-economic perspective. The substation would contain transformers to change the level of voltage from the 400 kV network (owned and operated by National Grid) to the 132 kV needed to be distributed to the rest of UK Power Network's local network. The substation will also enclose protection isolation, cooling fans, a diesel generator, water tank and switching devices.

We identified a number of potential locations for the new substation and, following public consultation, we confirmed our preferred site as near Butler's Wood, just off the A131 south of Sudbury. This location would offer screening and direct access from the main road network.

## Considerations

We have undertaken further discussions with UKPN and they may now require two transformers at the substation site.

That would require a larger footprint than originally assumed. We carried our further assessment during 2020 to identify whether the larger footprint could be accommodated here. Our assessments have shown that the site could accommodate two transformers if required within the existing woodland screening. We therefore continue to consider this our preferred location for the substation.



## Non-statutory consultation March 2021

# Between 2009 and 2013 we carried out extensive consultation as we developed our proposals.

We have used these as a baseline and carried out further work to assess whether the 2013 proposals remain appropriate and have back checked our decisions to ensure they continue comply with our key policies and statutory duties.

Before developing our proposals further, we are holding a public consultation to seek feedback on the emerging proposals and inviting comment about any further considerations local people might wish us to take into account.

We recognise that not everyone may have participated in our early consultations and that peoples' views may have changed over time. We would value your thoughts and views to help us refine our plans. We will carefully consider all responses and take the feedback into consideration as we review and refine our plans.

You can find out how to get involved in the consultation in the Have Your Say (Chapter 15) section.

There will be a further opportunity to comment on our proposals when we carry out our final, statutory consultation.



# **Next steps**

## We will review all responses to our consultation as we continue to develop the designs.

We are undertaking further environmental assessment work and will be carrying out surveys. We will submit a new Environmental Impact Assessment Scoping Report to the Planning Inspectorate this year.

Over the coming months we will be in discussions with landowners and persons with an interest in land. If you feel your land may be affected by these proposals, please contact our land team. Their details can be found on our project website or by calling **01452 889000**.

When our proposals have been developed further, we will hold a more detailed stage of consultation, known as a statutory consultation.

A Preliminary Environmental Information Report (PEIR) will be prepared to accompany the statutory consultation. The **PEIR** represents an interim or preliminary assessment of known and potential significant environmental effects, based upon current detail and understanding of project.

A summary of the overall project timeline can be found on the next page:



## PEIR:

A Preliminary Environmental Information Report (PEIR) will be prepared to accompany the statutory consultation.

The PEIR represents an interim or preliminary assessment of known and potential significant environmental effects, based upon the level of current detail and understanding of the project at that time.



Following the statutory consultation we will review the responses and prepare our submission documents, including the Environmental Statement, which will set out the likely effects of the project. Once all documents have been prepared, we will submit an application to the Planning Inspectorate, seeking consent for the reinforcement and associated development. This will include seeking powers of compulsory purchase of land and rights, as necessary.

Once submitted, it can take up to 18 months for the Application to be determined. The Planning Inspectorate, on behalf of the Secretary of State, will decide whether the application meets the standards required to be formally accepted for examination. If the application is accepted, the **Examining Authority**, a group of independently appointed inspectors, will have six months to examine the proposal, listening to the views of Interested Parties and other relevant stakeholders through submission of evidence and through public hearings.

The Examining Authority will then prepare a report on the application to the Secretary of State for Business, Energy & Industrial Strategy, including a recommendation, within three months of examination closing. The Secretary of State then has a further three months to decide on whether to grant or refuse development consent.

## **Examining Authority:**

The Planning Inspectorate, on behalf of the Secretary of State, will decide whether the application meets the standards required to be formally accepted for examination. If the application is accepted, the Examining Authority, which is a group of independently appointed inspectors, have six months to examine the proposal, listening to the views of Interested Parties and other relevant stakeholders through submission of evidence and through public hearings.









We are here Before submitting an application, potential applicants have a statutory duty to carry out consultation on their proposals The Acceptance stage begins when an applicant submits an application for development consent to the Planning Inspectorate.

There follows a period of up to 28 days (excluding the date of receipt of the application) for the Planning Inspectorate, on behalf of the Secretary of State, to decide whether or not the application meets the standards required to be accepted for examination At this stage, the public will be able to register with the Planning Inspectorate to become an Interested Party by making a Relevant Representation. The Planning Inspectorate has up to six months to carry out the examination. During this stage Interested Parties who have registered by making a Relevant Representation are invited to provide more details of their views in writing.

The relevant Secretary of State then has a further three months to make the decision on whether to grant or refuse development consent.

The Planning

Inspectorate must

relevant Secretary

of State, including

a recommendation,

within three months

month Examination

stage.

of the close of the six

prepare a report on

the application to the

Once a decision has been issued by the relevant Secretary of State, there is a sixweek period in which the decision may be challenged in the High Court. This process of legal challenge is known as Judicial Review.

Further details on the development consent process can be found on the Planning Inspectorate website at: https://infrastructure.planninginspectorate.gov.uk/

# Have your say

## The aim of our non-statutory consultation is to:

- re-introduce the project and explain our proposals at the time we paused work in 2013
- explain our recent activity and next steps
- hear your views on our current proposals

Our consultation is running until 6 May 2021. We want to hear the views of local people. Knowing what matters to you, matters to us, so please get in touch and provide your feedback.

You may access the consultation and provide feedback in a range of ways, including online, over the phone and by sending feedback forms in the post. All the ways you can have your say are listed below:

All information will be readily accessible via the project website www.nationalgrid.com/bramfordtwinstead where you can explore the proposals in further detail.





#### Team call back

To allow for you to engage in the same detailed discussions that would be permitted at a face-toface consultation event, we will be hosting team call back surgeries throughout the non-statutory consultation period. You can request a telephone call from a member of the project team if you prefer to ask questions over the phone. Appointments are bookable via the project website, email or freephone information line throughout the week.

Once you have contacted us and booked a slot for your surgery appointment, you will have the opportunity to discuss the proposals and ask any questions directly to our expert team.

#### Join our webinars

The project team will be presenting proposals and taking live questions throughout the consultation period through webinars. A total of eight webinars will be held, where our team will present an overview of the proposals and talk through route specific information.

Please visit our website, **www.nationalgrid.com/ bramford-twinstead**, to sign-up for a webinar. The dates, times and topics of these sessions are listed right:

Date	Time	Торіс
Wednesday 31 March	4pm - 5pm	Overview of the proposals
Tuesday 6 April	7pm - 8pm	Overview of the proposals
Thursday 8 April	11am - 12pm	Overview of the proposals (A British Sign Language interpreter will be in attendance at this session)
Tuesday 13 April	7pm - 8pm	Sections AB and C: Bramford to Hintlesham and Brett Valley
Wednesday 14 April	7pm - 8pm	Sections D and E: Polstead and Dedham Vale AONB
Thursday 15 April	7pm - 8pm	Sections F and G: Leavenheath, Assington and Stour Valley
Thursday 22 April	4pm - 5pm	Overview of the proposals
Wednesday 28 April	4pm - 5pm	Overview of the proposals

A recording of all webinars can then be made available on the project website afterwards for those who require it. This will also allow those who are unable to attend one of the webinars live to still access materials.

#### Join our live chats

If you prefer to communicate via text, we are also holding two 'live chat' sessions on the project website during the nonstatutory consultation period. These sessions, each two hours in duration, allow members of the public to speak in one-on-one text conversations with the project team through a chat window on the project website.

To join a project live chat, just visit our website during one of the times listed below:

Date	Time
Friday 9 April	2pm - 4pm
Monday 19 April	6pm - 8pm

## **Online feedback form**

We want to make providing feedback on our proposals as easy as possible. The website provides an online feedback form for you to fill in.

## Postal feedback form

We want to ensure the whole community has the opportunity to respond to the consultation, including those who do not have access to the internet.

For anyone who does not have access to our online forms, printed copies of the feedback forms can be requested via our telephone information line. A paper copy of the feedback form and a freepost envelope will then be posted out to you, so you can send your feedback to us free of charge.



# Find out more

#### You can also contact us by: <u>contact@bramford-twinstead.nationalgrid.com</u> Freephone: 0808 196 1515

## Who to contact if you are a landowner or person with interest in land:

If you are a landowner and want to talk to our lands team please call **01452 889000** or email: **bramford-twinstead@brutonknowles.co.uk** 

Alternatively, you can find out more information about land interests by visiting our <u>www.nationalgrid.com</u>.

## Who to contact for a media enquiry:

If you are a member of the media and wish to contact the National Grid team, please call **0800 377 7347** (24 hour) or find our Press Contacts here <u>www.nationalgrid.</u> <u>com/media-centre/contacts</u>

All information will be readily accessible via the project website **www.nationalgrid.com/bramford-twinstead** where you can explore the proposals in further detail.

## Who to contact if you would like information or documents in an alternative format?

We are committed to making project information accessible to all users. If you need any information or documents in an alternative format such as large print, Braille or audio tape, get in touch using the above contact details.



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