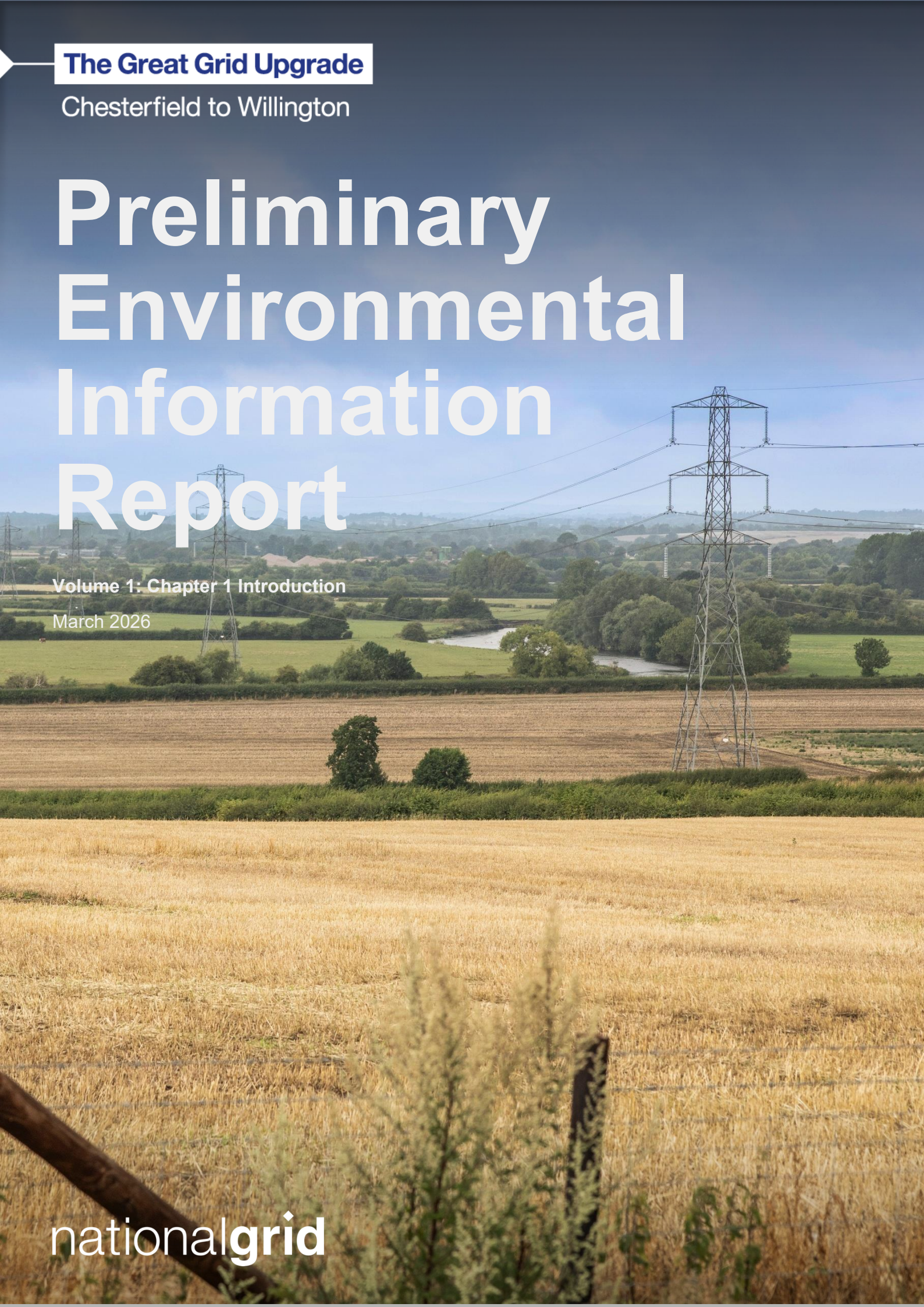
The Great Grid Upgrade

Chesterfield to Willington

Preliminary Environmental Information Report

Volume 1: Chapter 1 Introduction

March 2026



nationalgrid

Contents

1. Introduction

1.1 Overview of the Project

1.1.1 The Chesterfield to Willington Project (the 'Project') is a proposal by National Grid Electricity Transmission (NGET) plc (hereafter referred to as National Grid), which is responsible for ensuring electricity is transported safely and efficiently from where it is produced to where it is needed and for developing upgrades to the network, as agreed with the industry regulator, Office of Gas and Electricity Markets (Ofgem).

1.1.2 The Project is still in development, therefore the detailed design is not fully understood at this stage; however, the Project is likely to comprise the following principal components:

- a new 400 kilovolt (kV) overhead line, approximately 60 kilometres (km) in length between a proposed new Chesterfield Substation and the existing Willington Substation. It is anticipated that this would comprise steel lattice pylons in accordance with National Grid's guidance and national planning policy;
- a new 400 kV Chesterfield Substation, to be built in the vicinity of the existing Chesterfield 275 kV Substation and the existing 132 kV National Grid Electricity Distribution (NGED) Substation to the south east of Chesterfield (referred to as the 'new Chesterfield Substation'). This is proposed to be a Gas Insulated Switchgear substation; and
- replacement of short sections of existing overhead line and local changes to the lower voltage distribution networks to facilitate the construction of the Project.

1.1.3 The Project would include other required works, for example, temporary and permanent diversions for works on existing overhead line routes, temporary access roads, highway works, temporary works compounds, work sites and other ancillary works. The Project would also include utility diversions and drainage works. There would also be land required for mitigation, compensation and enhancement of the environment including Biodiversity Net Gain.

1.1.4 The Project is a Nationally Significant Infrastructure Project (NSIP) pursuant to section 16 of the Planning Act 2008 (Ref 1.1) because it comprises a new above ground electricity line in England with a length of more than 2 km, and with an operating voltage of above 132 kV. NSIPs are projects which are considered by the government to be of national importance and permission to build them therefore needs to be given at a national level, in this case, by the Secretary of State for Energy Security and Net Zero (SoS).

1.1.5 The Project also constitutes Environmental Impact Assessment (EIA) development as defined in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (Ref 1.2) (referred to as the 'EIA Regulations'). The Project falls within Schedule 1 paragraph 20 of the EIA Regulations as it comprises a new above ground electricity line with a length of more than 15 km, and with an operating voltage of above 220 kV. Consequently, an assessment of the impacts of the Project on the environment is required.

1.1.6 The Project would connect into the existing Willington Substation[1] located to the south west of Derby and a proposed new substation at Chesterfield. It is currently anticipated that the new Chesterfield Substation will be consented and delivered as part of a separate National Grid project (Chesterfield to High Marnham), distinct from this Project. However, it is possible that it will be decided to also include the new Chesterfield Substation works as part of the Development Consent Order (DCO) application for this Project. This would be to provide an alternative consenting mechanism to remove reliance on that separate planning application/ consent, therefore mitigating the risk of delays to the Project's delivery.

1.1.7 In view of this potential inclusion, the new Chesterfield Substation and its potential environmental effects were considered in the EIA Scoping Report (Ref 1.3) which was submitted to the SoS in October 2024. This is included within the Preliminary Environmental Information Report (PEIR) and other relevant documents (where applicable) as part of this Stage 2 (statutory) consultation. If the works are ultimately determined to be necessary to include as part of the Project, they will be considered as part of the Environmental Statement (ES).

1.1.8 Further details regarding the Project features will be included within the ES and would be incorporated within the DCO application.

1.2 The Need for the Project

1.2.1 How we generate electricity is changing. More electricity now comes from renewable sources in Great Britain, with an increased growth forecast in offshore wind capacity in Scotland and the North East of England.

1.2.2 This means National Grid needs a stronger network to carry that clean energy from where it is produced to where people live and work – including here in the East Midlands. Small-scale change is not enough. The current electricity system was mostly built in the 1960s to connect inland coal and nuclear power stations in the North and Midlands to regional networks, cities and industry. It was not designed for today's power sources or future demand.

1.2.3 Demand for energy is rising. As the way homes, businesses, industry and transport are powered changes, demand for electricity is set to increase significantly. The UK Government has set a target of 50 GW of offshore wind by 2030, rising to up to 140 GW by 2050, and 70 GW of solar generation by 2035.

1.2.4 To deliver more of this home-grown clean power and increase the UK's energy security, National Grid will need a grid that is able to carry all this extra electricity to wherever it is needed.

1.2.5 The Great Grid Upgrade (Ref 1.4) will connect more clean, home-grown energy to the homes, businesses and public services that need it.

1.2.6 Projects like Chesterfield to Willington will help make more secure, cleaner, home-grown energy from more affordable sources.

[1] Separate from the Project, National Grid (Customer and Network Development) is developing plans for an extension to the existing substation to facilitate new customer connections. It is anticipated that these extension works would be delivered via permitted development rights and are expected to be completed by 2029. If confirmed, this potential development will be considered as part of the Project's cumulative assessment within the Environment Statement.

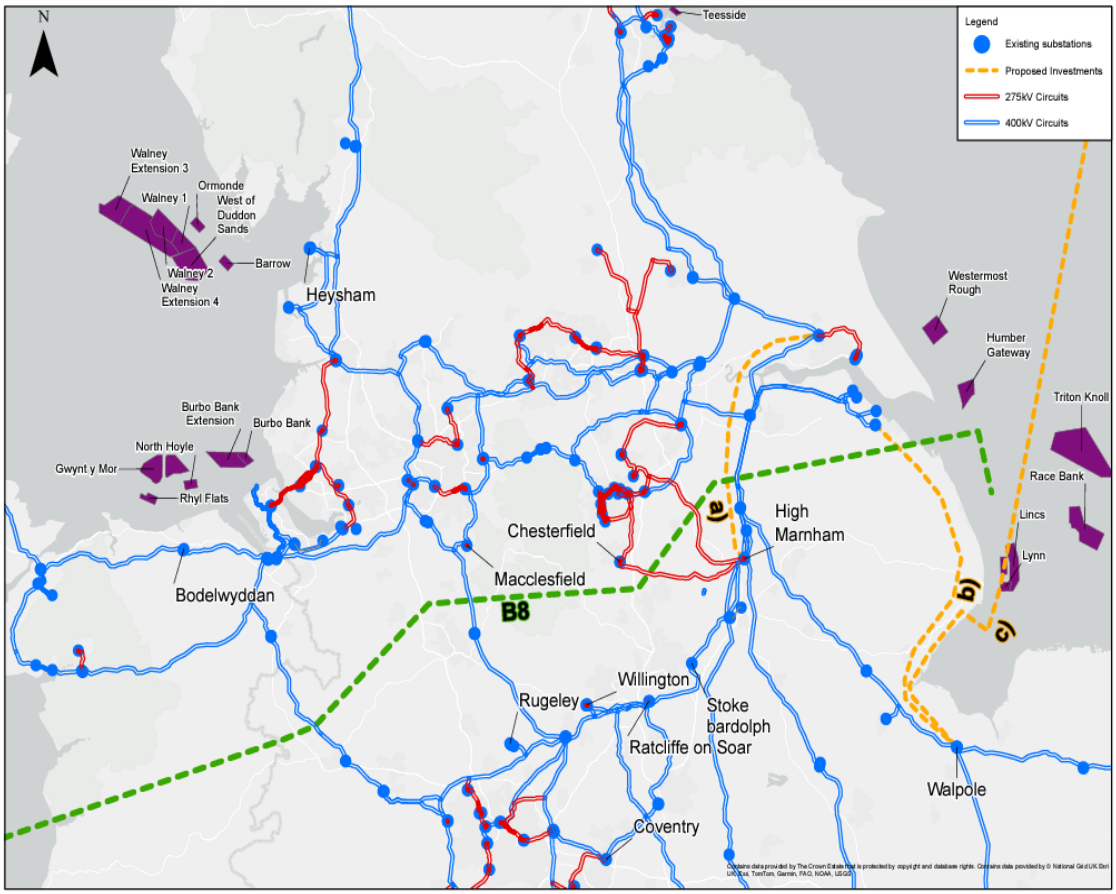
1.2.7 In considering the need for the Project, National Grid has due regard to the policy, projects and investment decisions for the transmission system set out within Future Energy Scenarios (Ref 1.5), the Electricity Ten Year Statement (Ref 1.6) and Network Options Assessment (Ref 1.7) process. National Grid also had regard to government targets for renewable energy and any emerging outcomes from the Offshore Transmission Network review (Ref 1.8) to ensure the options identified and selected are future-proofed and able to facilitate Net Zero targets.

1.2.8 The need for additional power flow in the region was identified by the National Energy System Operator (NESO)[2] in Electricity Ten Year Statement 2019 and the need case for the Project is set out in the Strategic Options Report (SOR) (Ref 1.9) which has been updated as part of this Stage 2 (statutory) consultation (Ref 1.10). This considered a wide range of options for providing the necessary power flows from the North East of England and Scotland, throughout the rest of the country. The Strategic Options Appraisal considered the following factors in evaluating the need for the Project:

- the need to ensure Security and Quality of Supply Standards (SQSS) compliance; and
- provide a cost-beneficial level of boundary uplift across network transmission boundary B8, as illustrated by the green dashed line in **Image 1.1**, to improve transfer capability, facilitating power flows and to reduce generation constraints on renewable energy sources, resulting from insufficient capacity of the National Electricity Transmission System (NETS).

[2] The Energy Act 2023 set the legislative framework for an independent system planner and operator to help accelerate Great Britain's energy transition. Therefore, what was formerly known as the 'Energy System Operator' (ESO) is now called the 'National Energy System Operator' (NESO), taking a whole system view, beyond electricity, inclusive of all energy sources and uses.

Image 1.1: The NETS in the North and Midlands



1.2.9 An optioneering process was then completed which identified a preferred strategic proposal to deliver a 400 kV electricity transmission connection between a proposed new 400 kV Chesterfield Substation (adjacent to the existing 275 kV Chesterfield Substation) and the existing Willington Substation.

1.2.10 Following the selection of the Strategic Proposal, the routeing and siting stage was undertaken. This resulted in an Emerging Preferred Corridor (EPC) being identified as reported in the Corridor Preliminary Routeing and Siting Study (CPRSS) (Ref 1.11). The EPC in the CPRSS was consulted on at Stage 1 (non-statutory) consultation. In response to the feedback received as part of this consultation, as well as further information obtained from surveys and ongoing design studies and assessments, the EPC has been refined to create the draft Order Limits referenced and used for the purposes of the assessments within the current Stage 2 (statutory) consultation documentation.

1.2.11 Other proposed projects that would reinforce the transmission system between the North of England, Midlands, and Southern England, are also proposed. These include proposals to increase the operating voltage of the existing overhead line between Brinsworth (on the east side of Sheffield) and High Marnham (south east of Retford in Nottinghamshire), referred to in the NESO 'Network Options Assessment Refresh' published in 2022 (Ref 1.7), where the separate Chesterfield to High Marnham project is referenced by the code 'EDEU'.

1.2.12 It is anticipated that the new Chesterfield Substation would be built under this separate project. Nevertheless, and as outlined in section 1.1 above, the Chesterfield Substation development has been covered within this PEIR to ensure its potential effects are understood in circumstances where it is subsequently incorporated within the DCO application for this Project. Potential sites for the substation were considered, taking account of site factors and informed by the Horlock Rules (Ref 1.12). A summary of the Horlock Rules is provided in **Chapter 2 Legislation, Regulatory and Planning Policy Context** of this PEIR. A summary of the key engineering and environmental factors that informed the proposed siting of the proposed new Chesterfield Substation are presented within **Chapter 3 Main Alternatives Considered** of this PEIR and the **Design Development Report** (DDR).

1.3 Geographical Context

1.3.1 The existing environment baseline is described throughout this PEIR in more detail (**Chapters 6** to **16**). The draft Order Limits are located within the administrative boundary of Derbyshire and the following local planning authorities:

- North East Derbyshire District Council;
- Ashfield District Council;
- Amber Valley District Council;
- Bolsover District Council;
- Erewash District Council; and
- South Derbyshire District Council.

1.3.2 The draft Order Limits are also in proximity to Chesterfield Borough Council and Derby City Council and have been considered where appropriate in the PEIR assessment.

1.3.3 For the purpose of reporting in the PEIR, the Project has been divided into six geographical sections, running from north to south. These are presented in **Figure 1.1 Project Location and Route Sections** in **Volume 2** and comprise:

- Section 1: Chesterfield to Tibshelf;
- Section 2: Tibshelf to Ripley;
- Section 3: Ripley to Morley;
- Section 4: Morley to Ockbrook;
- Section 5: Ockbrook to Aston-on-Trent; and
- Section 6: Aston-on-Trent to Willington.

1.3.4 The draft Order Limits have been selected to fully reflect the potential geographical extents of the Project and its environmental impacts and avoid, where practicable, potential impacts to areas with the highest amenity value in alignment with the guidelines for overhead line routeing set out through Holford Rules 1 and 2, as well as finding a direct path in alignment with Holford Rule 3 (Ref 1.13). A summary of the Holford Rules is provided in **Chapter 2 Legislation, Regulatory and Planning Policy Context** of this PEIR.

1.3.5 The Sections of the proposed route alignment are as follows:

- Section 1 of the proposed route alignment begins to the south east of Chesterfield at the northern extent of the Project. Section 1 encompasses the land and works associated with the proposed new Chesterfield Substation and covers an area extending from west of Hassocky Road in a south easterly direction towards Heath, before turning south, passing Stainsby, Astwith, and Hardstoft towards Tibshelf. Section 1 of the proposed route alignment is located within a predominantly agricultural landscape with urban fringe influences near to Chesterfield.
- Section 2 of the proposed route alignment extends from B6014 Doe Hill Lane west of Tibshelf, progressing in a generally south westerly direction toward Alfreton and then continues in the direction of Pentrich, broadly following the A38 corridor routeing southwards towards Ripley until reaching Lower Hartshay immediately south of the A610. Section 2 of the proposed route alignment is located within predominantly rural and agricultural areas.
- Section 3 of the proposed route alignment starts west of Ripley and extends to Morley, forming the central part of the Project. The proposed route alignment extends from the area where A610 passes through Lower Hartshay, progressing in a generally southerly direction closely following the western side of the A38 corridor toward the settlements of Cinderhill, Holbrook and Kilburn. The route crosses the A38 between Horsley and Coxbench, before reaching Morley. Section 3 spans both the eastern coalfield and the transitional Derbyshire Peak Fringe landscape, passing through predominantly rural and agricultural areas with occasional residential areas and transport corridors.
- Section 4 of the proposed route alignment extends from the north east of Morley Smithy where it crosses the A608 and continues south east, passing south west of Stanley and circumnavigating around Locko Park Registered Park and Garden. The proposed route alignment then progresses southwards until the A6096 and turns south west running around the north east side of Ockbrook. Section 4 of the proposed route alignment is located within predominantly rural and agricultural areas.
- Section 5 of the proposed route alignment continues from the south east side of Ockbrook and progresses in a generally southerly direction. After crossing the A52 (Brian Clough Way), it continues southwards crossing the A6005 and Derby to Nottingham Railway Line between Borrowash and Draycott. The route then crosses the River Derwent, circumnavigating eastwards around Ambaston and Elvaston, before turning south west, thereby avoiding direct impacts to these settlements. Continuing south west, the proposed route alignment passes between Thulston and the Trent Valley Crematorium before crossing the A6 Derby Spur near A50 Junction 2 (Aston Interchange) and then follows the A50 towards Chellaston. In this section, the landscape transitions to low-lying mixed arable and pastoral farmland interspersed with urban development and major transport corridors.
- Section 6 of the proposed route alignment begins to the north west of Aston-on-Trent and follows a generally south westerly direction. After crossing the A50, the route runs parallel to the Castle Donington railway line, remaining south of the A50. It then crosses the Trent and Mersey Canal and Castle Donington Line just north of Barrow upon Trent and continues roughly parallel to Twyford Road (A5132). Along this stretch, the proposed route alignment intersects and crosses

multiple existing overhead lines owned and operated by the District Network Operator (DNO) before entering the Willington Substation from the north east. Section 6 of the proposed route alignment is located within a predominantly agricultural area with pockets of industrial activity and residential areas.

1.3.6 There are a number of National Character Areas (NCA) and Landscape Character Areas (LCA) which are located within the draft Order Limits including the Nottinghamshire, Derbyshire and Yorkshire Coalfield, Derbyshire Peak Fringe, and Trent Valley Washlands. Williamthorpe Local Nature Reserve (LNR), Oakerthorpe LNR and Chellaston Brickworks LNR are located in close proximity to the draft Order Limits. In addition, the Morley Brick Pits, which is designated as a Site of Special Scientific Interest (SSSI), is also located adjacent to the draft Order Limits. The South Pennine Moors Special Area of Conservation (SAC) and Special Protection Area (SPA), known for its European dry heaths, blanket bogs and old sessile oak woods with *Ilex* and *Blechnum*, is located over 8 km to the west of the draft Order Limits at its closest point. There are also a number of non-statutory designated Local Wildlife Sites (LWSs) located within, and in close proximity to the draft Order Limits.

1.3.7 A number of heritage assets including Locko Park Registered Park and Garden with associated Grade II* and Grade II features, Swarkestone Lows round barrow cemetery, Morley Park Works, and Stainsby defended manorial complex including site of chapel, which is a scheduled monument and a scheduled monument named 'Settlement Site' are located in proximity to the draft Order Limits.

1.3.8 Within the draft Order Limits, other Grade II listed features include Nooning Lane Bridge, a Milepost at SK 414 315 South of Thulston Grange, and Trent and Mersey Canal Deep Dale Bridge Number 17 at SK 3485 2923. In addition, a Scheduled Monument named '*Cursus and mini henges, of Neolithic date, round barrows of Neolithic/Early Bronze Age date, and settlements, enclosures and fields of late Iron Age/Romano-British date, immediately East of Willington either side of the A5132'* (Ref 1.14) extends into the draft Order Limits.

1.3.9 Other discrete scheduled monuments and listed buildings are also located within proximity to the Project, notably, Grade I listed building Sutton Scarsdale Hall is located approximately 1.7 km to the north-east, and Hardwick Hall Historic Park and Gardens is located approximately 1.9 km to the east of the draft Order Limits at its closest point.

1.3.10 The draft Order Limits are located within several areas of flood risk (Flood Zones 2 and 3) particularly around the River Derwent and River Trent.

1.3.11 The draft Order Limits are located on land that is categorised on provisional Agricultural Land Classification (ALC) mapping predominantly as ALC Grade 4 (poor quality) and Grade 3 (good to moderate quality) land. Grade 4 land is mostly located in the north of the draft Order Limits, while Grade 3 land is primarily in the south of the draft Order Limits. There is a small portion of ALC Grade 2 (very good quality) land, mainly spread to the south and east of Derby.

1.4 Purpose of the Preliminary Environmental Information Report

1.4.1 Regulation 12(2)(b) of the EIA Regulations (Ref 1.2) defines Preliminary Environmental Information (PEI) as information that has been compiled by the applicant and '*is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development (and of any associated development)'*.

1.4.2 This PEIR has been prepared in accordance with the Planning Inspectorate's Advice Note Seven (Ref 1.15) which states in paragraph 8.4 that:

'*There is no prescribed format as to what PEI should comprise and it is not expected to replicate or be a draft of the ES* [...] *A good PEI document is one that enables consultees (both specialist and non-specialist) to understand the likely environmental effects of the Proposed Development and helps to inform their consultation responses on the Proposed Development during the pre-application stage.*'

1.4.3 The information presented within this PEIR is preliminary and reflects the current design development of the Project and the status of the individual environmental assessments. This report presents the findings of these assessments to provide an informed perspective of the proposed Project. It details the assessment approach that has been undertaken, offers preliminary conclusions on the likely significant effects of the Project and outlines the proposed environmental measures to address those effects.

1.4.4 This PEIR is intended to give consultees an understanding of the potential likely significant effects to enable them to prepare well informed responses to the Stage 2 (statutory) consultation. All conclusions and assessments are by their nature preliminary and are based on the Project design and assumptions described in **Chapter 4 Description of the Project**. All assessment work has, and continues to apply, a precautionary principle in that where limited information is available (in terms of the proposals for the Project), a realistic worst-case scenario is assessed. The final assessment will be presented within the ES submitted with the DCO application. The ES will consider the representations made during the Stage 2 (statutory) consultation, the ongoing design, and be informed by the EIA process.

1.4.5 This PEIR has been informed by the Scoping Opinion (Ref 1.16) adopted by the Planning Inspectorate (on behalf of the SoS) in December 2024.

1.4.6 This PEIR identifies which effects may be potentially significant. These potentially significant effects will be taken forward through the EIA process and additional mitigation may be identified as the design develops further. Therefore, potential likely significant effects identified at this preliminary stage may later be found to be not significant when reported in the ES, following further consideration of the environmental mitigation.

1.5 Structure of this PEIR

1.5.1 The structure of this PEIR is outlined below in **Table 1.1**. The PEIR is presented in three volumes: Volume 1 (main text); Volume 2 (figures); and Volume 3 (appendices). A separate Non-Technical Summary (NTS) of this PEIR and **Appendix 4A Draft Outline Code of Construction Practice** are also provided.

Table 1.1: Structure of the PEIR

Volume/Chapter	Content
Non-Technical Summary (NTS)	The NTS provides a concise description of the Project. Its purpose is to provide succinct information in non-technical language about the Project, the alternatives considered, the environmental baseline, assessment methodology, mitigation, and preliminary environmental effects.
Volume 1	
Chapter 1 Introduction	An introduction to the Project and the purpose and structure of this PEIR.
Chapter 2 Legislative, Regulatory and Planning Policy Context	An overview of the legislation and policy relevant to the Project.
Chapter 3 Main Alternatives Considered	An outline of the reasonable alternatives considered for the Project.
Chapter 4 Description of the Project	A description of the Project including permanent features and associated temporary construction works. It describes the general characteristics of the Project and outlines areas of uncertainty in relation to design parameters and how these are addressed in the environmental assessments through the application of Limits of Deviation and the Rochdale Envelope (Ref 1.17).
Chapter 5 Approach to Preliminary Environmental Information Report	A description of the overall EIA method that is proposed for the Project including durations considered within the assessments, and the approach to mitigation.
Chapter 6 Landscape and Visual	Each environmental topic scoped into the PEIR (and ultimately the ES) is presented in a separate chapter (**Chapters 6** to **16**). These topic chapters are structured as follows: 1. Overview 2. Legislation, Planning Policy and Guidance Context; 3. Scoping Opinion and Consultation; 4. Assessment Methodology; 5. Baseline Conditions; 6. Design Embedded and Good Practice Mitigation Measures; 7. Preliminary Assessment of Effects; 8. Potential Additional Mitigation Measures; 9. Monitoring; 10. Residual Effects; and 11. Summary.
Chapter 7 Ecology and Biodiversity	
Chapter 8 Historic Environment	
Chapter 9 Hydrology and Land Drainage	
Chapter 10 Geology and Hydrogeology	
Chapter 11 Agriculture and Soils	
Chapter 12 Traffic and Transport	
Chapter 13 Air Quality	
Chapter 14 Noise and Vibration	
Chapter 15 Socio-economics, Recreation and Tourism	
Chapter 16 Health and Wellbeing	

Volume/Chapter	Content
Chapter 17 Cumulative Effects	A description of the other projects and developments that are known about at the time of undertaking the preliminary assessment that could have cumulative effects with the Project. These are described and considered in the preliminary inter-project cumulative effects assessment (CEA).
Volume 2 Figures	Provides the figures that support Volume 1.
Volume 3 Appendices	Provides the technical Appendices that support Volume 1.

1.6 Other Assessments

1.6.1 In addition to the EIA, the DCO application for the Project requires other standalone assessments to support the application and meet the requirements of other relevant policies. Three such assessments are the Flood Risk Assessment, Water Framework Directive Assessment and the Habitats Regulations Assessment.

1.6.2 Whilst the outcomes of these assessments may be drawn upon when undertaking the EIA (and vice versa), the scope of these other assessments will be discussed and agreed with appropriate regulatory authorities in line with their own regulatory requirements and relevant policy and legislation. These additional documents will be submitted alongside the DCO application.

1.6.3 Where appropriate, the environmental topic chapters in this PEIR outline where the findings of one of the additional assessments are to be drawn upon when undertaking the EIA, and any proposed scope of the relevant additional assessment is set out to facilitate consultation with relevant consultees in relation to this PEIR.

1.7 Biodiversity Net Gain

1.7.1 The government’s intention is to introduce a mandatory requirement for terrestrial NSIPs to achieve BNG, to align with the Environment Act 2021 (Ref 1.18). The Department for Environment, Food and Rural Affairs (Defra) is proposing that from May 2026, all NSIPs will be required to deliver BNG. At the time of writing, the details of NSIP BNG are still to be defined; however, it is anticipated there will be a requirement to achieve 10 per cent gains in biodiversity, with offsets secured and managed for a minimum of 30 years. Defra has concluded a consultation exercise (ended July 2025) regarding NSIP BNG implementation and delivery, with a view to providing subsequent technical guidance for BNG implementation on NSIPs.

1.7.2 National Grid's Environmental Action Plan 2021 to 2026 (Ref 1.19) makes a commitment to achieving at least 10 per cent in Environmental gain (including biodiversity) on all construction projects by 2026.

1.7.3 This commitment requires delivery of quantifiable enhancement for biodiversity from the pre-development baseline, following the mitigation and gain hierarchies, measured using the Defra statutory biodiversity metric (Ref 1.20). On-site or off-site net gains will be formalised, detailed within a Biodiversity Net Gain Plan, or equivalent, and secured by long-term management with external organisations and partners, where required.

1.7.4 The Project will seek to deliver at least 10 per cent BNG and to align with future guidance released for NSIP BNG in 2026.

1.8 Transboundary Effects

1.8.1 There is a requirement under the EIA Regulations 2017 (Ref 1.2) to consider transboundary effects, i.e. those effects that could affect receptors within European Economic Area (EEA) States. A screening exercise was undertaken by National Grid and was submitted to the Planning Inspectorate. The Planning Inspectorate has undertaken the transboundary screening on behalf of the SoS for the purposes of Regulation 32 of the EIA Regulations 2017. The transboundary screening (Ref 1.21) concluded that the Project '*is not likely to have a significant effect on the environment in an EEA State'.*

1.9 Competence

1.9.1 Regulation 14(4) of the EIA Regulations (Ref 1.2) requires that an ES is prepared by 'competent experts' and that the ES is accompanied by a statement outlining the relevant expertise or qualifications of such experts.

1.9.2 This PEIR has been prepared and coordinated by WSP as competent experts that have extensive experience in undertaking and reporting EIAs for NSIPs and other major developments.

1.9.3 WSP is an accredited member of the Institute of Sustainability and Environmental Professionals (ISEP) 'EIA Quality Mark' – a voluntary scheme allowing organisations that lead the coordination of EIAs in the UK to make a commitment to excellence in their EIA activities, and have this commitment independently reviewed.

1.9.4 A Statement of Competence (SoC) has been included in **Appendix 1A Statement of Competence**, outlining the relevant expertise or qualifications of the experts who have prepared this PEIR for the Project.

1.10 Abbreviations and Glossary

1.10.1 Abbreviations and a glossary of terms used throughout this PEIR are presented within **Appendix 1B Abbreviations and Glossary**.

References

Ref 1.1 Planning Act 2008. [online] Available at: https://www.legislation.gov.uk/ukpga/2008/29/contents [Accessed May 2025]

Ref 1.2 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. [online] Available at: https://www.legislation.gov.uk/uksi/2017/572/regulation/12 [Accessed May 2025]

Ref 1.3 National Grid (2024) Chesterfield to Willington Environmental Impact Assessment Scoping Report. [online]. Available at: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN0210001-000005-Chesterfield%20to%20Willington%20EIA%20Scoping%20Report%20-%20Volume%201%20Main%20Text.pdf [Accessed May 2025]

Ref 1.4 National Grid (2025). The Great Grid Upgrade. [online] Available at: https://www.nationalgrid.com/the-great-grid-upgrade [Accessed October 2025]

Ref 1.5 National Grid ESO (2020). Future Energy Scenarios. [online] Available at: https://www.neso.energy/document/173821/download [Accessed May 2025]

Ref 1.6 National Grid ESO (2020). Electricity Ten Year Statement #ETYS2020. [online] Available at: https://www.neso.energy/document/181711/download [Accessed May 2025]

Ref 1.7 National Grid ESO (2022). Network Options Assessment (NOA) 2021/22. [online] Available at: https://www.neso.energy/document/262981/download [Accessed May 2025]

Ref 1.8 HMSO (2023). Offshore transmission network review. [online] Available at: https://www.gov.uk/government/groups/offshore-transmission-network-review [Accessed May 2025]

Ref 1.9 National Grid (2024). Chesterfield to Willington Strategic Options Report. [online] Available at: https://www.nationalgrid.com/document/151781/download [Accessed May 2025].

Ref 1.10 National Grid (2026). Chesterfield to Willington Strategic Options Report Update. [online] Available at: nationalgrid.com/chesterfieldtowillington

Ref 1.11 National Grid (2024) Chesterfield to Willington Corridor Preliminary Routeing and Siting Study. [online] Available at: https://www.nationalgrid.com/document/151791/download [Accessed May 2025].

Ref 1.12 National Grid (2009). Horlock Rules. NGC Substations and the Environment: Guidelines on Siting and Design. [online]. Available at: https://www.nationalgrid.com/sites/default/files/documents/13796-The%20Horlock%20Rules.pdf [Accessed October 2025]

Ref 1.13 National Grid (2024). The Holford Rules. [online] Available at: https://www.nationalgrid.com/sites/default/files/documents/13795-The%20Holford%20Rules.pdf [Accessed May 2025]

Ref 1.14 Historic England (1981). Cursus and mini henges, of Neolithic date, round barrows of Neolithic/Early Bronze Age date, and settlements, enclosures and fields of late Iron Age/Romano-British date, immediately East of Willington either side of the A5132. [online] Available at: https://historicengland.org.uk/listing/the-list/list-entry/1007028 [Accessed November 2025]

Ref 1.15 Planning Inspectorate (2020). Nationally Significant Infrastructure Projects Advice Note Seven: Environmental Impact Assessment: Process, preliminary environmental information and environmental statements. [online] Available at: https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-seven-environmental-impact-assessment-process-preliminary-environmental-information-an [Accessed May 2025].

Ref 1.16 Planning Inspectorate (2024). SCOPING OPINION: Proposed Chesterfield to Willington (2024). [online] Available at: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN0210001-000007-EN0210001%20Scoping%20Opinion.pdf [Accessed May 2025].

Ref 1.17 Planning Inspectorate (2025). Nationally Significant Infrastructure Projects - Advice Note Nine: Rochdale Envelope. [online] Available at: https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-nine-rochdale-envelope/nationally-significant-infrastructure-projects-advice-note-nine-rochdale-envelope [Accessed November 2025]

Ref 1.18 Environment Act 2021. [online] Available at: https://www.legislation.gov.uk/ukpga/2021/30/contents [Accessed May 2025].

Ref 1.19 National Grid Electricity Transmission (2024). Our 2021-2026 Environmental Action Plan. [online] Available at: https://www.nationalgrid.com/electricity-transmission/document/155131/download [Accessed May 2025].

Ref 1.20 Department for Environment, Food and Rural Affairs (Defra) (2021). Biodiversity metric: calculate the biodiversity net gain of a project or development. [online] Available at: https://www.gov.uk/guidance/biodiversity-metric-calculate-the-biodiversity-net-gain-of-a-project-or-development [Accessed May 2025].

Ref 1.21 Planning Inspectorate (2025). Transboundary screening undertaken by the Planning Inspectorate on behalf of the Secretary of State (SoS) for the purposes of Regulation 32 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 2017 EIA Regulations). [online]. Available at: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN0210001-000013-Regulation 32 Transboundary Screening document.pdf [Accessed June 2025].

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