

The Great Grid Upgrade

North Humber to High Marnham

Preliminary Environmental Information Report

Volume 1: Chapter 2 Legislation and Planning Policy
Context

February 2025



nationalgrid

Contents

2.	Legislation and Planning Policy Context	5
2.1	Introduction	5
2.2	Key Legislation	5
2.3	National Policy	8
2.4	Regional and Local Planning Policies	12
2.5	Statutory Guidance	13
2.6	Non-Statutory Guidance	14
2.7	National Grid Policy and Guidance	15
2.8	References	18

Table 2.1 – Summary of the Holford Rules

15

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2. Legislation and Planning Policy Context

2. Legislation and Planning Policy Context

2.1 Introduction

- 2.1.1 This chapter sets out a summary of the key environmental and planning legislation and national and local policy relevant to the Project. Additional legislation and policy applicable to specific environmental topics is listed in each relevant topic chapter (**Chapters 6 - 21** of this PEIR).
- 2.1.2 This Chapter does not assess whether the Project accords with planning policy. A Planning Statement will be produced to support the application for a Development Consent Order (DCO). It will include a full review of the national and local planning policy relevant to the Project at the time of submission of the application. The Planning Statement will also set out how the Project complies with the objectives of relevant national and local policy.

2.2 Key Legislation

Planning Act 2008

- 2.2.1 The Planning Act 2008 (Ref 2.1) introduced a new consenting procedure for Nationally Significant Infrastructure Projects (NSIPs). Section 14(1)(b) and Section 16 of the Planning Act 2008 and the Planning Act (Electric Lines) Order 2013 (Ref 2.2) outline that a project that involves the installation of an electric line above ground of more than 2 km, which will operate at 400 kV in England is an NSIP.
- 2.2.2 For an NSIP the grant of development consent is required by the making of a DCO under the Planning Act 2008.
- 2.2.3 Only a proposed new above ground electricity line would be an NSIP by virtue of the definitions in the Planning Act 2008. Other development, such as underground cables, may be granted development consent as associated development within the meaning of Section 115 of the Planning Act 2008.
- 2.2.4 Section 104 of the Planning Act 2008 states at (2)(a) that the Secretary of State must have regard to any National Policy Statement (NPS) which has effect in relation to development of the description to which the application relates.
- 2.2.5 The NPSs relevant to this Project are the Overarching National Policy Statement for Energy (EN-1) (Department for Energy Security & Net Zero (DESNZ), 2024) (Ref 2.3) and the National Policy Statement for Electricity Networks Infrastructure (EN-5) (DESNZ, 2024) (Ref 2.4) which are discussed in Section 2.3. National Policy Statement for Renewable Energy Infrastructure (EN-3) (DESNZ, 2024) (Ref 2.5) is also relevant insofar as it gives express support for the onshore infrastructure required to deliver new offshore wind developments.
- 2.2.6 The Planning Act 2008 has been amended through the adoption of the Localism Act 2011 (SI 2011 c.20) (Ref 2.6). Under the Localism Act 2011, the Planning Inspectorate is responsible for the NSIP planning process and will examine the DCO application for

the Project and make a recommendation to the Secretary of State (SoS) to grant or refuse consent. The SoS will then decide to either grant or refuse consent.

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

- 2.2.7 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations) (Ref 2.7) govern the EIA process relevant to NSIPs. Schedule 1 of the EIA Regulations lists those projects for which an EIA is required and includes, under paragraph 20, the construction of overhead electrical power lines with a voltage of 220 kV or more and a length of more than 15 km.
- 2.2.8 The Project includes the proposed installation of 400 kV electricity transmission infrastructure over a distance of approximately 90 km, of which the majority is overhead line. It therefore falls under Schedule 1 and requires a statutory EIA.
- 2.2.9 Regulation 5 of the EIA Regulations sets out the EIA process (Ref 2.7). This includes Regulation 5(2) and 5(3) which requires that an EIA identifies, describes and assesses the direct and indirect significant effects of the Project during construction and operation on the environment (see Table 5.5 for a list of relevant factors). Schedule 4 of the EIA Regulations set out the information to be included in an Environmental Statement (ES). There is a requirement under EIA Regulation 32(1) to consider transboundary effects, that is, *'a development is likely to have significant effects on the environment in an EEA State'*. A screening exercise was undertaken using Advice Note Twelve: Transboundary Impacts and Process, Annex I¹ as part of the scoping process. No transboundary effects have been identified in relation to the Project, as there is no pathway for effects to occur outside the UK – a position that was confirmed by the Planning Inspectorate following the scoping exercise in June 2024.

Electricity Act 1989

- 2.2.10 Section 9(2)(a) of the Electricity Act 1989 (Ref 2.9) places general duties on National Grid as a licence holder *'to develop and maintain an efficient, co-ordinated and economical system of electricity transmission...'* In addition, Section 38 and Paragraph (1) of Schedule 9 of the Electricity Act 1989 require that National Grid, when formulating proposals for new lines and other works:
- '(a) shall have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and*
- (b) shall do what [it] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects'.*
- 2.2.11 National Grid's Stakeholder, Community and Amenity Policy (Ref 2.10) sets out how the company will meet the Schedule 9 duty placed upon it by the legislation.
- 2.2.12 Under Licence Condition C8 (Requirement to offer terms) of the Transmission Licence Standard Conditions (Ref 2.11), National Grid ESO have a duty to meet obligations relating to making offers to provide connections to the Transmission System. In

¹ Now superseded by Nationally Significant Infrastructure Projects: Advice on Transboundary Impacts and Process (Ref 2.8).

summary, where any person applies for an offer, National Grid shall offer to enter into an agreement(s) to connect, or to modify an existing connection, to the Transmission System and the offer shall make detailed provision regarding:

- The carrying out of works required to connect to the Transmission System;
- The carrying out of works (if any) in connection with the extension or reinforcement of the Transmission System; and
- The date by when any works required to permit access to the Transmission System (including any works to reinforce or extend the Transmission System) shall be completed.

Environment Act 2021

- 2.2.13 The Environment Act 2021 (Ref 2.12) provides a legal framework for improving environmental management across a wide spectrum of environmental issues including waste and resources, water quality, biodiversity, and air quality. It aims to deliver long-term targets to improve environmental conditions and reduce pollution, which would need to be considered by the Project. The Environment Act 2021 in Section 99 and Schedule 15 includes a requirement for NSIPs to deliver biodiversity gain as part of the application and for the areas of biodiversity net gain to be maintained for a specified period. DCOs must meet a biodiversity gain objective defined in a biodiversity gain statement. This requirement for NSIPs begins in November 2025, and thus will apply to this Project. National Grid is currently working with other organisations to identify how this can best be implemented and the securing mechanisms for maintaining habitats for the specified period.

The Conservation of Habitats and Species Regulations 2017

- 2.2.14 There is a recognition within the Conservation of Habitats and Species Regulations 2017 (Ref 2.13) to undertake a screening exercise to determine whether there are likely significant effects on European sites because of the Project, either alone or in combination with other plans and projects. If likely significant effects cannot be ruled out, an Appropriate Assessment (AA) must be carried out by the competent authority, in this case, the Secretary of State. The applicant must provide a report with the application showing the site(s) that may be affected together with sufficient information to allow the AA to take place.
- 2.2.15 In light of the conclusions of the AA, other than where there are Imperative Reasons of Overriding Public Interest, the competent authority may only agree to the plan or project if it has ascertained the project will not adversely affect the integrity of the European Site.

Water Environment Regulations

- 2.2.16 The Water Environment (Water Framework Directive) Regulations 2017 (Ref 2.15) impose duties on the Secretary of State and the Environment Agency to carry out certain assessments, when deciding whether to grant, vary or revoke certain permits and licences which affect water quality.
- 2.2.17 Part 2 of the Regulations requires the identification of River Basin Districts (RBD), and several other assessments to be carried out by the Environment Agency to characterise and classify the status of water bodies in those districts and assess the economic

aspects of water use. River basin management plans must be established for each RBD.

- 2.2.18 The Regulations require several types of areas which are protected by other EU legislation (for example, protected habitats and birds' sites) to be included on registers of protected areas.

2.3 National Policy

- 2.3.1 National Policy Statements are produced by Government through a parliamentary approval process, and they present the planning policy framework for all decision making for NSIPs. They also include the Government's objectives for the development of NSIPs and are produced for different types of infrastructure development. NPSs for Energy have effect in relation to the decisions made by the Secretary of State (SoS) for applications for Development Consent for energy NSIPs.
- 2.3.2 The Overarching NPS for Energy (NPS EN-1)² (Ref 2.3) was designated in January 2024 and sets out national policy for energy infrastructure in combination with the relevant technology-specific NPS, in this case the NPS for Electricity Networks (NPS EN-5) (Ref 2.4).
- 2.3.3 The NPS for Electricity Networks (NPS EN-5)³ was also designated in January 2024 and sets out the Government's policy for nationally significant electricity transmission networks and, together with EN-1 sets the information that should be provided alongside any application for development consent to satisfy their requirements.
- 2.3.4 These NPSs have therefore informed the assessments presented within this PEIR and where relevant the NPSs are referenced and reviewed within the relevant chapter. Reference is also made to NPS EN-3 (Ref 2.5) which includes support for the onshore infrastructure required to deliver new offshore wind developments.

Overarching National Policy Statement for Energy (EN-1) (2024)

- 2.3.5 NPS EN-1 (Ref 2.3) sets out the Government's overarching policy for energy NSIPs. It emphasises the need for new energy projects to contribute to a secure, diverse, and affordable energy supply.
- 2.3.6 EN-1 recognises that to '*produce the energy required for the UK and ensure it can be transported to where it is needed, a significant amount of infrastructure is needed at both local and national scale. High quality infrastructure is crucial for economic growth, boosting productivity and competitiveness....*' (paragraph 2.1.3). It continues '*There is an urgent need for new electricity network infrastructure to be brought forward at pace to meet our energy objectives*' (paragraph 3.3.65)
- 2.3.7 Paragraph 3.3.68 recognises that '*the volume of onshore reinforcement works needed to meet decarbonisation targets is substantial*'. It also states that National Grid ESO forecasts that over the next decade a doubling of north south power transfer capacity will be required.

² <https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1>

³ <https://assets.publishing.service.gov.uk/media/65a78a5496a5ec000d731abb/nps-electricity-networksinfrastructure-en5.pdf>

- 2.3.8 Section 4.2 sets out the critical national priority for low carbon infrastructure and states: *‘Government has committed to fully decarbonising the power system by 2035, subject to security of supply, to underpin its 2050 net zero ambitions. More than half of final energy demand in 2050 could be met by electricity, as transport and heating in particular shift from fossil fuel to electrical technology’* (paragraph 4.2.1) concluding that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure (paragraph 4.2.4)
- 2.3.9 For electricity grid infrastructure paragraph 4.2.5 confirms that all power lines within the scope of EN-5, including network reinforcement and upgrade works, and associated infrastructure such as substations, are a CNP. EN-1 in paragraph 3.3.63 outlines that subject to any legal requirements, the urgent need for CNP Infrastructure to achieving the UK Government’s energy objectives, along with the national security, economic, commercial, and net zero benefits, will in general outweigh any other residual impacts not capable of being addressed by application of the mitigation hierarchy. Subsequently EN-1 states in paragraph 3.3.63 that the UK Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible.
- 2.3.10 EN-1 also sets out guidance on generic impacts of any of the types of energy infrastructure covered by the energy NPS’ in respect of matters such as air quality and emissions, biodiversity, dust and odour, flood risk, historic environment, landscape, land use, noise and vibration, socio-economics, traffic and transport and waste management.

National Policy Statement for Electricity Networks Infrastructure (EN-5) (2024)

- 2.3.11 NPS EN-5 (Ref 2.4) specifically relates to electricity network infrastructure.
- 2.3.12 As identified in EN-1, government has concluded that there is a CNP for the provision of nationally significant low carbon infrastructure.
- 2.3.13 *‘As stated in Section 4.2 of EN-1, to support the urgent need for new low carbon infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations, are considered to be CNP infrastructure’* (paragraph 2.1.5).
- 2.3.14 As set out in EN-1 (Section 4.2) the assessment principles outlined in Section 4 of EN-1 continue to apply to CNP infrastructure.
- 2.3.15 Paragraphs 2.2.1 and 2.2.2 note that *‘The Secretary of State should bear in mind that the initiating and terminating points – or development zone – of new electricity networks infrastructure is not substantially within the control of the applicant’*. *‘Siting is determined by:*
- *the location of new generating stations or other infrastructure requiring connection to the network; and/or*
 - *system capacity and resilience requirements determined by the Electricity System Operator’*.
- 2.3.16 Paragraph 2.2.6 recognises that *‘...the locational constraints identified above do not, of course, exempt applicants from their duty to consider and balance the site-selection considerations set out below, much less the policies on good design and impact mitigation...’*.

- 2.3.17 Paragraph 2.2.10 of EN-5 reiterates the duties of transmission and distribution licence holders under Section 9 of the Electricity Act 1989, in relation to developing and maintaining an economical and efficient network and, under Schedule 9, in formulating proposals for new electricity networks infrastructure, to *'have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest...'*
- 2.3.18 Paragraph 2.4.1 notes that *'The Planning Act 2008 requires the Secretary of State to have regard, in designating an NPS and in determining applications for development consent to the desirability of good design'*.
- 2.3.19 Section 2.7 of the NPS deals with holistic planning and states:
'...the government envisages that, wherever reasonably possible, applications for new generating stations and their related infrastructure should be contained in a single application to the Secretary of State. However a consolidated approach of this kind may not always be possible..'(paragraph 2.7.2).
This could be, for example, due to the differing lengths of time needed to prepare the applications for submission to the Secretary of State, or because a network application relates to multiple generation projects (which could be onshore or offshore), or because the works involved are strategic reinforcements required for a number of reasons.' (paragraph 2.7.3).
- 2.3.20 Section 2.8 deals with Strategic Network Planning and sets out that *'A more strategic approach to network planning will ensure that network development keeps pace with renewable generation and anticipates future system needs'* (this is also referred to in paragraphs 2.13.1 - 2.13.13).
- 2.3.21 Paragraph 2.9.7 recognises that *'the government does not believe that the development of overhead lines is incompatible in principle with applicants' statutory duty under Schedule 9 to the Electricity Act 1989 (to have regard to visual and landscape amenity and to reasonably mitigate possible impacts thereon'*.
- 2.3.22 Paragraph 2.9.16 recognises the importance of the guidelines provided in the Holford Rules *'intended as a common sense approach to overhead line design, were reviewed and updated by the industry in the 1990s and they should be embodied in the applicants' proposals for new overhead lines'*.
- 2.3.23 Paragraph 2.9.18 refers to the Horlock Rules, guidelines for the design and siting of substations setting out that *'these principles should be embodied in applicants' proposals for the infrastructure associated with new overhead lines'*.
- 2.3.24 Paragraph 2.9.20 covers undergrounding *'Although it is the government's position that overhead lines should be the strong starting presumption for electricity networks developments in general, this presumption is reversed when proposed developments will cross part of a nationally designated landscape (i.e., National Park, The Broads, or Area of Outstanding Natural Beauty⁴)'*.
- 2.3.25 It continues *'However, undergrounding will not be required where it is infeasible in engineering terms, or where the harm that it causes (see section 2.11.4) is not outweighed by its corresponding landscape, visual amenity and natural beauty benefits. Regardless of the option, the scheme through its design, delivery, and operation, should*

⁴ Areas of Outstanding Natural Beauty (AONBs) were renamed in 2023 to National Landscapes, to highlight the importance of these natural sites and their role in conservation and public enjoyment.

seek to further the statutory purposes of the designated landscape. These enhancements may go beyond the mitigation measures needed to minimise the adverse effects of the scheme’ (paragraph 2.9.22) and ‘Additionally, cases will arise where – though no part of the proposed development crosses a designated landscape high potential for widespread and significant adverse landscape and/or visual impacts along certain sections of its route may result in recommendations to use undergrounding for relevant segments of the line’ (paragraph 2.9.23).

- 2.3.26 Critical National Priority is referred to again in paragraph 2.12.7, ‘As highlighted in EN-1 government has concluded that there is a CNP for the provision of nationally significant low carbon infrastructure. This includes for electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations. This is not limited to those associated specifically with a particular generation technology, as all new grid projects will contribute towards greater efficiency in constructing, operating and connecting low carbon infrastructure to the National Electricity Transmission System. This includes infrastructure identified in the Holistic Network Design and subsequent strategic network design exercises’.

National Policy Statement for Renewable Energy (EN-3) (2024)

- 2.3.27 NPS EN-3 (Ref 2.5) also includes support for the onshore infrastructure required to deliver new offshore wind developments.
- 2.3.28 Section 2.8 deals with offshore wind. Paragraph 2.8.1 states that ‘As set out in the British Energy Security Strategy, the Government expects that offshore wind Will play a significant role in meeting demand and decarbonising the energy system. The ambition is to deploy up to 50GW of offshore wind capacity (including up to 5GW floating wind) by 2030, with an expectation that there will be a need for substantially more installed offshore capacity beyond this to achieve net zero carbon emissions by 2050.’
- 2.3.29 Paragraphs 2.8.34 to 2.8.43 (inclusive) reiterate the position set out in EN-1 and EN-5 that a co-ordinated approach to onshore-offshore transmission is required. Paragraph 2.8.35 states that ‘The previous standard approach to offshore-onshore connection involved a radial connection between single wind farm projects and the shore. A coordinated approach will involve the connection of multiple, spatially close, offshore wind farms and other offshore infrastructure, wherever possible, as relevant to onshore networks.’
- 2.3.30 The NPS also includes references to CNP Infrastructure outlining that the assessment principles outlined in Section 4 of EN-1 continue to apply to this. Applicants must show how any likely significant negative effects would be avoided, reduced, mitigated or compensated for, following the mitigation hierarchy. Early application of the mitigation hierarchy is strongly encouraged, as is engagement with key stakeholders including SNCBs, both before and at the formal pre-application stage.

National Planning Policy Framework (2024)

- 2.3.31 The revised National Planning Policy Framework (NPPF) (Ref 2.16) was published in December 2024. The NPPF sets out, in paragraph 5, that it does not contain specific policies for NSIPs. These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant NPS for major infrastructure, as well as any other matters that are relevant (which may include the NPPF). While NPS EN-1 and EN-5 remain the prime decision-making documents,

where they do not provide guidance, each topic chapter has considered whether there is important and relevant guidance in the NPPF that may require consideration by the decision-making authority.

2.3.32 The NPPF is supported by Planning Practice Guidance (PPG) (Ref 2.17) which was first published in March 2014. This guidance is updated on a regular basis and provides advice on a range of topics related to the implementation of NPPF Policies. Planning Practice Guidance has been considered in the relevant chapters of this PEI Report where applicable and in the subsequent Environmental Statement for the Project. The key PPG topics considered relevant to the Project at this stage are as follows:

- Air Quality;
- Biodiversity Net Gain;
- Climate Change;
- Environmental Impact Assessment;
- Flood Risk;
- Historic Environment;
- Natural Environment;
- Noise;
- Open Space, sports and recreation facilities, public rights of way and local green space;
- Travel Plans, Transport Assessments and Statements; and
- Water supply, wastewater, and water quality.

2.3.33 Although the NPPF does not contain policies relating to NSIPs, it does include policies pertinent to generic development management considerations and some of its principles may be considered, where relevant to the Project. These principles are concerned with protection and conservation of the natural and built and historic environment, climate change and flooding as well as sustainable growth, development, and a strong, competitive economy.

2.3.34 The NPPF underwent consultation seeking views on the Government proposed approach to revising the national planning policies to better achieve sustainable growth with an emphasis on collaborative, consistent and timely working methods between local authorities and policy makers to facilitate policies that recognise the need for upgraded facilities and infrastructure such as grid connections. Further, the revised policies advocate giving significant weight to wider proposals that support achieving a net zero future. This consultation took place between July 2024 and September 2024 and a revised NPPF was subsequently published in December 2024.

2.4 Regional and Local Planning Policies

2.4.1 As set out above, the NPSs are the primary basis for decision making, but the SoS must also have regard to any other matters which they think are both important and relevant to the decision and this could include regional and local planning policies. In so doing, the Secretary of State may have regard to the local impact reports produced by the relevant local planning authorities for consideration during the examination of the application.

2.4.2 The relevant adopted and emerging local plans for the Project comprise:

- East Riding
 - East Riding Local Plan 2012-2029 (Ref 2.18);
 - East Riding Local Plan Update (Ref 2.19);
 - East Riding of Yorkshire and Kingston Upon Hull Joint Minerals Local Plan 2016-2033 (Ref 2.20); and
 - East Riding of Yorkshire and Kingston Upon Hull Joint Waste Local Plan 2004. (Ref 2.21).
- North Lincolnshire
 - North Lincolnshire Local Development Framework Core Strategy 2011 (Ref 2.22);
 - Housing and Employment Land Allocation Development Plan Document (DPD) (Ref 2.23);
 - North Lincolnshire Local Plan 2003, Saved Policies (Ref 2.24); and
 - Draft North Lincolnshire Local Plan (Ref 2.25).
- Bassetlaw District Council
 - Bassetlaw District Local Plan 2020-2038 (Ref 2.26).
- Newark and Sherwood District Council
 - Newark and Sherwood Core Strategy DPD 2019 (Ref 2.42).
- Nottinghamshire County Council
 - Nottinghamshire and Nottingham Waste Local Plan 2002 (Ref 2.27);
 - Nottinghamshire and Nottingham Waste Core Strategy 2013 (Ref 2.28);
 - Nottinghamshire Minerals Local Plan 2021 (Ref 2.29); and
 - Nottinghamshire Draft Waste Local Plan (Ref 2.30).

2.5 Statutory Guidance

2.5.1 In April 2024 the Ministry of Housing, Communities and Local Government along with the Department for Levelling Up, Housing and Communities published new guidance for the pre application stage for Nationally Significant Infrastructure Projects. It outlines the requirements of applicants during the pre-application stage and introduces new requirements. The guidance outlines that the following activities should take place:

- Advise users of the (Planning Act 2008) regime on the processes involved in the pre-application Stage.
- Guide applicants as to how the pre-application requirements of the Planning Act 2008 should be fulfilled and provide some advice on best practice.
- Inform other users of the regime, including consultees, of their roles in the pre-application process and to let them know what is expected of applicants at this stage.

- Help ensure that the regime is transparent and accessible to all.
- Provides a guide to the pre application stage, statutory requirements and timescales.
- Introduces new requirements for the inception meeting with PINS and the preparation of the Programme Document by the Applicant.
- Outlines the key requirements and considerations when preparing an application for Development Consent.

2.6 Non-Statutory Guidance

Planning Inspectorate Advice Notes

- 2.6.1 The Planning Inspectorate has published a series of non-statutory advice notes to inform developers, consultees, the public and other interested parties about a range of procedural matters in relation to the Planning Act 2008 process. Not all these Advice Notes are applicable to the PEIR, although those that have informed the environmental assessment process for the Project, are discussed further below.
- 2.6.2 **Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements (Ref 2.32)** details the procedural requirements that apply to NSIPs which are EIA development and particularly, in the context of this PEIR, provides clarity on its role and purpose. Advice Note Seven recognises that the degree of information that is available within a PEIR is dependent upon the stage in the design process at which consultation takes place. Within this PEIR National Grid has therefore presented information on the likely significant effects associated with the development of the Project that are available at this stage, and where further studies and assessments remain, these have been clearly identified.
- 2.6.3 **Advice Note Nine: Rochdale Envelope (Ref 2.33)** provides guidance on the use of the ‘*Rochdale Envelope*’; a term used to describe those elements of a scheme that have not yet been finalised but can be constrained within certain limits and parameters hence allowing a determination of likely significant effects to be presented in the ES. When using the Rochdale Envelope to apply for flexibility within a DCO application, the Advice Note advises that the developer should use a worst-case approach to identifying likely significant effects and should incorporate mitigation accordingly within the parameters of their scheme. Greater information is included within **Chapter 5 Approach to Preparing the PEIR** on how National Grid intends to make use of the Rochdale Envelope in the consenting process for the Project.
- 2.6.4 **Nationally Significant Infrastructure Projects: Advice on Habitats Regulations Assessment (Ref 2.34):** provides advice for Applicants in relation to the Habitats Regulations. It identifies the stages of the HRA process and clarifies the information to be provided with a DCO application with respect to HRA at each stage of the Planning Act 2008 process.
- 2.6.5 **Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment (Ref 2.35):** sets out the recommended approach to Cumulative Effects Assessment (CEA) for NSIP projects including guidance on the relative weight to be applied to other developments depending upon how progressed they are through the consenting process. Further information on the CEA is included within **Chapter 21 Cumulative Effects**.

2.6.6 **Nationally Significant Infrastructure Projects: Advice on the Water Framework Directive** (Ref 2.36): sets out the approach to coordinating the requirements of the Water Framework Directive with the EIA process. Greater information is included within **Chapter 11 Water Environment**.

2.7 National Grid Policy and Guidance

2.7.1 National Grid has its own policies and processes that are followed when developing projects. The policies that are applicable to this Project are as follows:

- Our Approach to Options Appraisal (Ref 2.37): This document describes the options appraisal process that is followed when developing new electricity infrastructure projects. It follows a staged approach to the assessment and sets out the considerations when making decisions as to which option should be taken forward.
- Our Stakeholder, Community and Amenity Policy (Ref 2.38): This document describes the ten commitments that National Grid has made to the way that electricity works are carried out in the UK. This includes setting out how National Grid would meet its amenity responsibilities and how stakeholders and communities are involved on projects.
- Our Approach to Consenting (Ref 2.39): This document outlines National Grid’s approach to developing and delivering new infrastructure and applies to projects across their whole regulated electricity transmission business.

2.7.2 National Grid also has an extensive range of process and guidance documents that govern how projects are designed and implemented to ensure operational safety.

Holford Rules

2.7.3 Guidelines on overhead line routeing were first formulated in 1959 by Sir William, later Lord, Holford, as advisor to the Central Electricity Generating Board. Holford developed a series of planning guidelines in relation to amenity issues, that have subsequently become known as the ‘Holford Rules’ (Ref 2.40) and remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. A summary of the Holford Rules can be found in Table 2.1. These have been an important consideration during the development of the Project. The Holford Rules are also expressly considered as part of NPS EN-5. The principles of the Holford Rules are being applied to the Project.

Table 2.1 – Summary of the Holford Rules

Rule	Description
Rule 1	Avoid altogether, if possible, the major areas of highest amenity value, by so planning the general route of the first line in the first place, even if the total mileage is increased in consequence.
Rule 2	Avoid smaller areas of high amenity value, or scientific interests by deviation; if this can be done without using too many angle towers, i.e., the more massive structures which are used when lines change direction.

Rule 3	Other things being equal, choose the most direct line, with no sharp changes of direction and thus with fewer angle towers.
Rule 4	Choose tree and hill backgrounds in preference to sky backgrounds wherever possible; and when the line must cross a ridge, secure this opaque background as long as possible and cross obliquely when a dip in the ridge provides an opportunity. Where it does not, cross directly, preferably between belts of trees.
Rule 5	Prefer moderately open valleys with woods where the apparent height of towers will be reduced, and views of the line will be broken by trees.
Rule 6	In country, which is flat and sparsely planted, keep the high voltage lines as far as possible independent of smaller lines, converging routes, distribution poles and other masts, wires, and cables, to avoid a concentration or 'wirescape.'
Rule 7	Approach urban area through industrial zones, where they exist; and when pleasant residential and recreational land intervenes between the approach line and the substation, go carefully into the comparative costs of the undergrounding, for lines other than those of the highest voltage.

Horlock Rules

- 2.7.4 National Grid devised the Horlock Rules (Ref 2.41) in 2003, and these were subsequently updated in 2006. The Horlock Rules provide guidelines for the siting and design of new substations, or substation extensions, to avoid or reduce the environmental effects of such developments. In summary, like the Holford Rules, they facilitate consideration of environmental and amenity considerations within the design and siting of new substation infrastructure.
- 2.7.5 The Horlock Rules contain the following guidelines in relation to siting:
- Overall System Options and Site Selection
 - In the development of system options including new substations, consideration must be given to environmental issues from the earliest stage to balance the technical and capital cost requirements for new developments against the consequential environmental effects to keep adverse effects to a reasonably practicable minimum.
 - Amenity, Cultural or Scientific Value of Sites
 - The siting of new National Grid Company substations, sealing end compounds and line entries should as far as reasonably practicably seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connections.
 - Areas of local amenity value, important existing habitats and landscape features including Ancient Woodland, historic hedgerows, surface and ground water sources and nature conservation areas should be protected as far as reasonably practicable.

- Local Context, Land Use and Site Planning
 - The siting of substations, extensions and associated proposals should take advantage of the screening provided by landform and existing features and the potential use of site layout and levels to keep intrusion into surrounding areas to a reasonably practicable minimum.
 - The proposals should keep the visual, noise and other environmental effects to a reasonably practicable minimum.
 - The land use effects of the proposal should be considered when planning the siting of substations or extensions.
- Design
 - In the design of new substations or line entries, early consideration should be given to the options available for terminal pylons, equipment, buildings, and ancillary development appropriate to individual locations, seeking to keep effects to a reasonably practicable minimum.
 - Space should be used effectively to limit the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way, whilst also having regard to future extension of the substation.
 - The design of access roads, perimeter fencing, earthshaping, planting and ancillary development should form an integral part of the site layout and design to fit in with the surroundings.
- Line Entries
 - In open landscape especially, high voltage line entries should be kept, as far as possible, visually separate from low voltage lines and other overhead lines to avoid a confusing appearance.
 - The inter-relationship between pylons and substation structures and background and foreground features should be studied to reduce the prominence of structures from main viewpoints. Where practicable the exposure of terminal pylons on prominent ridges should be minimised by siting pylons against a background of trees rather than open skylines.

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