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Norwich to Tilbury

Volume 6: Environmental Statement

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Grid's response to the EIA Scoping Opinion - Tracked Changes Version

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1. Introduction

1.1 Introduction

- 1.1.1 This appendix has been produced to support Chapter 5: Environmental Impact Assessment (EIA) Approach and Methodology (document reference 6.5) (Revision B), which forms part of the Environmental Statement (ES) (Volume 6 of the Development Consent Order (DCO) application) for Norwich to Tilbury (the 'Project').
- 1.1.2 This appendix sets out National Grid's response to the EIA Scoping Opinion (document reference 6.20) received from the Planning Inspectorate on behalf of the Secretary of State, following the submission of the EIA Scoping Report (document reference 6.19).

1.2 Planning Inspectorate EIA Scoping Opinion

- 1.2.1 National Grid submitted the EIA Scoping Report for the Project to the Planning Inspectorate on 7 November 2022 (document reference 6.19). The Planning Inspectorate provided an EIA Scoping Opinion (document reference 6.20) on behalf of the Secretary of State on 14 December 2022. This included a number of items for National Grid to consider when producing the ES (Volume 6 of the DCO application) and the application for development consent.
- 1.2.2 Table A5.1.1: 'General items raised in the EIA Scoping Opinion' and Table A5.1.2: 'Topic specific responses in relation to aspects proposed to be scoped out' summarise the key points raised within the EIA Scoping Opinion and how National Grid has addressed these points within the ES (Volume 6 of the DCO application).
- 1.2.3 The EIA Scoping Report was written based on a broad corridor (referred to as the 'Scoping Report Corridor') with no reference to a Project alignment, location of temporary construction compounds or haul roads. This has now been superseded within the ES (Volume 6 of the DCO application), which presents the alignment (and associated permanent and temporary works) for the Project. Therefore, some of the comments received within the EIA Scoping Opinion related to the lack of specific Project information. This has been acknowledged within National Grid's responses.

Table A5.1.1 General items raised in the EIA Scoping Opinion

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
n/a	Project description	<i>'The Scoping Report presents a 'Scoping Report Corridor' within which elements of the Proposed Development would be located and has provided a high-level description of what the Proposed Development would comprise. At this stage the only specifically defined locations for works are at the existing Norwich Main, Tilbury and Bramford substations. This has limited the Inspectorate's ability to provide meaningful comments on the project description at this time. For the avoidance of doubt, the ES should provide a clear description of the physical characteristics of all elements of the Proposed Development (including any necessary removals/ diversions/ modification of existing National Grid infrastructure), so that the likely significant effects from their construction and operation can be ascertained. The Applicant should make effort to fix the siting of each component and reduce uncertainty; where this is not possible, the Applicant should ensure that the ES assesses a worst-case scenario adopting a parameters based approach.'</i>	Chapter 4: Project Description (document reference 6.4) (Revision B) , accompanied by Figure 4.1: Proposed Project Design (document reference 6.4.F1) (Revision B) and Figure 4.2: Proposed Project Design – Permanent Features (document reference 6.4.F2) (Revision B) present the proposed permanent and temporary elements of the Project assessed in the ES (Volume 6 of the DCO application).
Paras 4.4.2, 4.4.3 and 13.8.3 and Table 4.2	Pylons	<i>The Scoping Report refers to the potential use of alternative pylon designs (T pylons/ low height steel lattice pylons) as an embedded design measure. The pylon designs should be confirmed in the ES and committed to through the draft DCO (dDCO). The ES should provide dimensions of the pylons to be constructed. This should include maximum heights and widths</i>	Chapter 4: Project Description (document reference 6.4) (Revision B) assumes that the Project would comprise standard lattice pylons and low height pylons. Chapter 4 also details typical dimensions and details of foundations. The Order Limits allow for Limits of Deviation (LoD), as detailed within Chapter

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
		<i>of the steel work itself, along with details of the foundations that would be required at each pylon location.</i> <i>The Inspectorate acknowledges that some flexibility may be required for micro-siting of pylons but would expect the proposed locations to be identified within the ES along with any limits of deviation (LoD) required (both laterally and vertically, i.e. in terms of the depths of foundations).</i> <i>All surveys and assessments should be of sufficient spatial scale to incorporate any LoD for all permanent infrastructure.</i>	4: Project Description (document reference 6.4) (Revision B) and within the draft DCO (document reference 3.1) (Revision G).
Paras 4.4.4, 4.4.10 and 4.5.31	Proposed landscape planting	<i>Broad locations for proposed landscape planting are identified in the Scoping Report, including around the Cable Sealing End Compounds (CSECs) and at the new Tendring substation. The ES should confirm the locations and details of proposed landscape mitigation planting (including where this forms part of reinstatement proposals), with reference to accompanying plans.</i>	Locations for landscape planting around new substations, Cable Sealing End (CSE) compounds and existing substations (where practicable) are shown on Figure 4.1: Proposed Project Design (document reference 6.4.F1) (Revision B) and Figure 4.2: Proposed Project Design – Permanent Features (document reference 6.4.F2) (Revision B). In addition, more detailed landscaping proposals at these locations together with reinstatement planting proposals are presented in the Outline Landscape and Ecology Management Plan (LEMP) (document reference 7.4) (Revision G).

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
Paras 4.4.5 to 4.4.6	Underground cables	<i>The ES should identify the number of underground cables to be laid within each trench and confirm the number of trenches required within the corridor.</i> <i>The Scoping Report states that the cables would be laid within a permanent swathe of approximately 65m wide, potentially wider in some locations. It is not clear why the assessment corridor of 200m to up to 500m is therefore required. The corridor presented within the ES should reflect the temporary and permanent land take sought within the dDCO.</i>	Design information is detailed in Chapter 4: Project Description (document reference 6.4) (Revision B) and includes the number of cables to be laid within each trench. Justification for the required working width for the underground cable is provided in Chapter 4: Project Description (document reference 6.4) (Revision B). The assessment within the ES (Volume 6 of the DCO application) reflects the temporary and permanent land take sought in the draft DCO (document reference 3.1) (Revision G).
Paras 4.5.3 and 4.5.4	Site compounds	<i>The ES should confirm the locations and sizes of the Main Works Compounds and satellite compounds and where possible, show detailed layouts. Descriptions of compounds should explain how the sustainability of such compounds has been optimised and any proposed mitigation measures implemented to avoid or minimise impacts relating to their use.</i>	Design information is detailed in Chapter 4: Project Description (document reference 6.4) (Revision B) which also includes how sustainability has been optimised when designing temporary construction compounds. The locations of temporary construction compounds are shown on Figure 4.1: Proposed Project Design (document reference 6.4.F1) (Revision B) and Figure 4.2: Proposed Project Design – Permanent Features (document reference 6.4.F2) (Revision B) and typical layouts are presented within Design and Layout Plans – Subs and Cables (document reference

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			2.6.1) (Revision D) and Layout Plans – Overhead Lines (document reference 2.6.2). Mitigation measures associated with temporary construction compounds are recorded within the Outline Code of Construction Practice (CoCP) (document reference 7.2) (Revision G) .
Para 4.5.7	Temporary crossings	<i>The locations of temporary crossings e.g., over watercourses, streams and field ditches and the specific crossing methodology for each location should be identified within the ES.</i>	The details of temporary crossings are presented in Appendix 4.3: Watercourse Crossing Details (document reference 6.4.A3) (Revision C) and their locations are shown on Figure 4.1: Proposed Project Design (document reference 6.4.F1) (Revision B) .
Paras 4.5.11 and 4.5.23	Percussive piling	<i>The Scoping Report states that percussive piling may be required at some pylon locations and would be confirmed following ground investigation. The ES should assess the foundation design to be used, or where this is still to be determined, a worst-case scenario should be adopted to identify any likely significant effects.</i>	Further details and assumptions associated with piling, piling methodology and specific locations are set out within Chapter 4: Project Description (document reference 6.4) (Revision B) .
Paras 4.5.23 and 8.8.1	Trenchless installation	<i>The location of any trenchless crossings should be identified within the ES. Where trenchless installation is relied upon to mitigate potential significant effects (for example, crossing the River Stour), the Applicant should ensure this construction method is demonstrably secured.</i>	Design information is detailed in Chapter 4: Project Description (document reference 6.4) (Revision B) and specific locations are shown on Figure 4.1: Proposed Project Design (document

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			reference 6.4.F1) (Revision B) . This is secured within the Outline CoCP (document reference 7.2) (Revision G) , Requirement 4 of the draft DCO (document reference 3.1) (Revision G) .
Para 8.9.15	24 hour working	<i>The Scoping Report indicates the potential for 24-hour working. The locations and types of such activities should be identified and any likely significant effects from these works assessed within the ES.</i>	Proposed working hours are detailed within Chapter 4: Project Description (document reference 6.4) (Revision B) and are secured within the Requirements in the draft DCO (document reference 3.1) (Revision G) .
Para 12.8.2 and Initial Outline Code of Construction Practice (CoCP)	Depth of trenchless crossings	<i>The Scoping Report and Initial Outline CoCP indicate that a minimum depth of 1m below the hard bed level of the river is currently proposed for trenchless crossings of main rivers. The ES should provide a justification for this depth, and the Applicant is directed to the Environment Agency's scoping consultation response which notes that the conditions of a Flood Risk Activity Permit may require a deeper target depth of the trenchless crossing. The ES should also provide information as to whether this 1m depth is to be assumed for all trenchless crossings (as other waterbodies are not referenced), and the data sources used to determine the riverbed depth.</i>	Design information is detailed in Chapter 4: Project Description (document reference 6.4) (Revision B) . The actual depth of cover to the cables, where the cable route crosses watercourses, would be agreed with the Environment Agency or relevant Lead Local Flood Authority before works commence – this has been discussed through engagement with stakeholders.
n/a	Heights of structures	<i>The ES should state whether the heights of structures are above Ordnance Datum (AOD), or above ground level. Terminology should be consistent throughout the ES and should correspond with any heights detailed within the dDCO.</i>	The ES (Volume 6 of the DCO application) generally states heights above ground level (unless otherwise specified). Terminology within the ES (Volume 6 of the DCO

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			application) corresponds with heights detailed within the draft DCO (document reference 3.1) (Revision B) and on the Works Plans (document reference 2.3) (Revisions A – C) .
n/a	Road levels	<i>Proposed finished levels of any permanent access roads AOD should be identified within the ES (along with any necessary LoDs).</i>	Details of permanent access roads are included within Chapter 4: Project Description (document reference 6.4) (Revision B) .
n/a	Employment	<i>The ES should set out the expected number and nature of employment opportunities during each phase of the Proposed Development. This should be described in the context of the workforce availability in the area at a time when numerous other major projects are anticipated to be constructed. The ES should detail how any mismatch between supply and demand will be addressed and consider the origins of its workforce in all relevant aspect assessments (notably socio economics and traffic and transport). All assumptions made in this regard should be set out in the ES.</i>	Chapter 15: Socio-economics, Recreation and Tourism (document reference 6.15) (Revision C) reports the likely significant effects on the local economy and employment as a result of the construction of the Project based on the proposed construction worker numbers and proposed construction programme.
n/a	Vehicle movements	<i>The ES should detail the number of anticipated vehicle movements during all phases of the Proposed Development (including diverted traffic) and explain the assumptions upon which these have been established.</i>	Traffic numbers generated by the Project are presented in Appendix 16.3: Traffic and Transport Construction Effects (document reference 6.16.A3) (Revision B) together with assumptions. These numbers are then reflected within the assessment within Chapter 7: Air Quality (document reference

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			6.7) (Revision B) , Chapter 14: Noise and Vibration (document reference 6.14) (Revision B) and Chapter 16: Traffic and Transport (document reference 6.16) (Revision B) .
Paras 5.7.14 to 5.7.15 and 18.2.2	Impacts from decommissioning	<i>The Scoping Report anticipates that the transmission of electricity would continue for as long as there is a business case for doing so and states that decommissioning would be subject to separate consenting procedures. The Inspectorate agrees that decommissioning can be scoped out of the ES on that basis that a high-level summary of potential effects for each environmental topic would be included in an appendix to the Project Description chapter within the ES. The Inspectorate expects this to include a description of likely methods for decommissioning.</i>	A high-level summary of potential effects for each environmental topic relating to decommissioning together with likely methods for decommissioning is presented in Chapter 4: Project Description (document reference 6.4) (Revision B) .
Image 1.1 and Section 1.3	Geographical context	<i>The ES should clearly identify the locations of existing, as well as proposed, pylons along the proposed route, in order to aid understanding of the relationship between existing and proposed infrastructure.</i>	Figure 4.1: Proposed Project Design (document reference 6.4.F1) (Revision B) identifies the locations of existing, as well as proposed pylons within the Order Limits. Chapter 4: Project Description (document reference 6.4) (Revision B) provides a description of how the Project interacts with existing infrastructure.
Section 3	Alternatives	<i>The description of reasonable alternatives in the ES should include a comparison of environmental effects. It should include the specific locations considered for the change from overhead</i>	Details of the main reasonable alternatives considered are included in Chapter 3: Alternatives (document reference 6.3)

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
		<i>line (OHL) to underground cables, particularly in terms of impacts on the setting of the Dedham Vale Area of Outstanding Natural Beauty (AONB)¹ and on archaeological remains. Explanations should be provided for the rejection of offshore solutions, the extent of the OHL and underground sections and the locations of the substations and CSECs.</i>	(Revision B) , which includes a comparison of environmental effects between discounted options.
Para 5.1.2	Significance of effect	<i>The ES should explain why some assessments, such as the cumulative effects assessment, will use a different approach to conclude on the significance of effects from the remainder of the ES. The assessment methodology should be clearly described.</i>	Each environmental topic chapter (document references 6.6 to 6.17) including the cumulative assessment outlines the assessment methodology followed, along with reference to relevant guidance used to inform the assessments.
Para 5.2.5	Duration of effects	<i>Paragraph 5.2.5 of the Scoping Report states that the assessment methodology will assume short term effects would be those during construction plus one-year reinstatement, unless otherwise stated in aspect specific methodology. The Inspectorate considers that care should be taken when considering the duration of effects to avoid the potential downplaying of the significance of effects. For example, construction noise impacts on receptors for a five year duration is unlikely to be perceived as short term by those affected. In this regard, the Inspectorate welcomes the intention for the ecological assessment to ascribe short term impacts as being</i>	Noted.

¹ Now known as National Landscapes

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
		<i>those up to 1 year in duration (paragraph 8.10.19 of the Scoping Report).</i>	
Para 5.2.6 and Table 8.5	Duration of effects	<i>The Scoping Report proposes to assess effects during the phase within which the impact arises. The Scoping Report acknowledges there would be some permanent habitat loss at the new substation, cable sealing end compounds and pylon bases. The Applicant should ensure that assessing such impacts solely during the construction phase does not underplay the potential duration and consequently, the significance of effect. For example, in terms of effects from vegetation loss, the ES should differentiate between that to be lost temporarily (i.e. to be reinstated) and that to be permanently lost.</i>	The ES (Volume 6 of the DCO application) ensures that the duration of the construction effects are adequately covered within the assessment of effects.
Table 5.1	Significance matrix	<i>The Inspectorate notes that for a number of aspect chapters, the same terminology has been applied for the levels of impact magnitude as for the levels of significance in Table 14.9 (i.e., major, moderate, minor and negligible). The Applicant is advised to take caution with this approach to avoid confusion for readers.</i>	Noted.
Appendix D	Transboundary impacts	<i>Appendix D of the Scoping Report concludes that the Proposed Development would not have a significant effect either alone or cumulatively on the environment in a European Economic Area State. Following the adoption of this Scoping Opinion, the Inspectorate will undertake a transboundary screening, on behalf of the Secretary of State, under Regulation 32 of the</i>	Noted.

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
<i>2017 EIA Regulations. The Secretary of State's duty under Regulation 32 continues throughout the application process.</i>			
Major Accidents and Disasters			
Paras 5.7.1 to 5.7.4	National Grid Standards and a 'comprehensive risk management framework'	<i>There are references within this section of the Scoping Report to adherence to relevant National Grid Standards and a 'comprehensive risk management framework' to minimise risk of accidents. The description of the Proposed Development in the ES should describe any standards / measures which are relied upon to exclude likely significant effects and explain how they would be secured and implemented as part of the DCO.</i>	The Project would be designed to comply with design safety standards including National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS) and the suite of National Grid policies and procedures which contain details on design standards required to be met when designing, constructing and operating its projects. Relevant standards / measures are referred to and referenced within the ES where relevant.
Ecology and Biodiversity			
Table 8.5	Zone of Influence (Zol)	<i>Table 8.5 provides a defined Zol for habitat loss and air quality changes only. Zols should be defined and explained within the ES for all potential impact pathways (e.g., disturbance) and supported by figures where possible.</i>	Relevant Zols for ecology and biodiversity are presented within Chapter 8: Ecology and Biodiversity (document reference 6.8) <u>(Revision C)</u> .
Paras 8.9.10 to 8.9.11 and Table 8.9	Habitat loss and fragmentation - construction	<i>The Inspectorate notes the Applicant's intention to reinstate habitats as far as possible, however the ES should confirm if there are any habitats along the underground cable route that cannot be reinstated due to operational requirements. The Inspectorate further notes that paragraph 8.9.11 scopes in impacts from habitat fragmentation at the underground cable</i>	Chapter 8: Ecology and Biodiversity (document reference 6.8) <u>(Revision C)</u> includes clarity on proposed habitat reinstatement including operational restrictions under overhead lines and over underground cables. Further details on

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
		<i>sections for 'relevant biodiversity receptors'. Table 8.9 states that negative impacts to foraging/ commuting bats from habitat removal are not expected to be significant, however also indicates that all impacts on bats are scoped in. For the avoidance of doubt, the Inspectorate considers this matter should be scoped in for bats.</i>	reinstatement is provided within the Outline LEMP (document reference 7.4) (Revision G) . Noted in regards to bats.
Para 8.9.13	Habitat fragmentation or severance - operation	<i>The Scoping Report has not stated whether habitat fragmentation or severance during operation would be assessed. The Inspectorate considers that any likely significant effects from the OHL sections should be assessed.</i>	Habitat fragmentation/severance during operation (and maintenance) is assessed within Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision C) .
Table 8.6 and para 8.10.9	Survey areas and timings	<i>The ES should confirm what the 'immediately adjacent habitat' comprises for the proposed preliminary assessment field survey and habitat survey. The ES should also explain how the 'targeted locations' for habitats and species surveys have been determined. Efforts should be made to agree these locations with relevant consultation bodies.</i>	Specific survey areas are detailed within Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision C) , and the relevant species report (Appendices 8.1 – 8.15 in document references 6.8.A1 – 6.8.A15) (Revisions B and C) . Agreements to survey coverage / methodologies is included within Section 4 of Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision C) .
Figure 8.3	Legend	<i>The Legend to Figure 8.3 includes 'No main habitat but additional habitats present'. The ES should explain what is meant by this statement.</i>	'No main habitat but additional habitats present' is a specific category within the Natural England spatial dataset, that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			habitats of principal importance. Habitat survey results are presented within Appendix 8.1: Habitat Report (document reference 6.8.A1) (Revision C) .
n/a	Horizontal Directional Drilling (HDD) breakout	<i>Any likely significant effects from HDD breakout on river habitat and downstream designated sites should be assessed.</i>	Trenchless crossing locations and potential breakout effects on riverine habitat have been reviewed and are assessed within Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision C) .
n/a	Priority species	<i>Table 8.7 notes that species or habitats listed in accordance with the requirements of Section 41 of the NERC Act 2006 would be ascribed 'medium' or 'low' value; it is not clear why they have been assigned two separate values. No priority species have been identified within the Scoping Report, nor is there a commitment to identify them. These should be identified within the ES and any likely significant effect on them assessed.</i>	Individual protected species and habitats recognised under Section 41 of the NERC Act 2006 (Priority Species / Habitats of Principal Importance) have been considered within Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B) as separate receptors and therefore attributed an individual ecological value. Appendix 8.14: Species of Principal Importance Report (document reference 6.8.A14) (Revision B) details the baseline on Section 41 protected species including a desk study and their location. Appendix 8.1: Habitats Report (document reference 6.8.A1) (Revision C) details the baseline on Section 41 protected habitats and their location.

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			Chapter 8: Ecology and Biodiversity (document reference 6.8) <u>(Revision C)</u> includes the assessment of effects on priority species and habitats identified as part of baseline surveys.
n/a	Nature Recovery Network project	<i>The ES should assess any impacts from the Proposed Development on the Nature Recovery Network project which aims to create a habitat corridor along the Waveney and Little Ouse to the west of Diss (as identified by NE in its consultation response).</i>	Chapter 8: Ecology and Biodiversity (document reference 6.8) <u>(Revision C)</u> assesses the effects of the Project on the Waveney and Little Ouse Landscape Recovery Project.
n/a	Confidential Annexes	<i>Public bodies have a responsibility to avoid releasing environmental information that could bring about harm to sensitive or vulnerable ecological features. Specific survey and assessment data relating to the presence and locations of species such as badgers, rare birds and plants that could be subject to disturbance, damage, persecution, or commercial exploitation resulting from publication of the information, should be provided in the ES as a confidential annex. All other assessment information should be included in an ES chapter, as normal, with a placeholder explaining that a confidential annex has been submitted to the Inspectorate and may be made available subject to request.</i>	Noted. Confidential data will remain confidential.
Geology and Hydrogeology (now Contaminated Land, Geology and Hydrogeology)			

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
Para 9.2.5	Guidance to be used	<i>The Inspectorate considers that the ES and any accompanying ground investigation information should additionally be informed by BS5930: Code of practice for ground investigations.</i>	The ES (Volume 6 of the DCO application) and all ground investigation works undertaken for the Project have been informed by BS5930.
Table 9.1 and Para 9.9.11	Site specific dewatering assessments – construction	<i>In respect of dewatering, paragraph 9.9.11 of the Scoping Report proposes that significant effects are unlikely to occur where certain criteria are met. The Environment Agency scoping consultation response indicates that these are not recognised criteria. The Applicant should seek to agree criteria with the Environment Agency in order to determine where further assessment is required.</i>	National Grid have agreed the criteria with the Environment Agency where additional assessment is required. Appendix 9.3: Groundwater Baseline and Qualitative Groundwater Risk Assessment (document reference 6.9.A3) (Revision B) assess the potential effects on groundwater which relate to the specific geological and hydrogeological settings of the Order Limits and identified groundwater receptors, which also identifies where additional Hydrogeological Risk Assessment is likely to be required in accordance with commitment GH11 within the Outline CoCP (document reference 7.2) (Revision G) . Commitment GH07 within the Outline CoCP (document reference 7.2) (Revision G) also requires that any temporary dewatering activities during construction will be undertaken in accordance with the appropriate Environment Agency guidance and if required an Abstraction Licence and

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			Environmental Permit (for the discharge) will be obtained.
Figure 9.4 (with reference to paras 9.6.18 to 9.6.21)	Mineral resources	<i>The information presented on Figure 9.4 is inconsistent with that detailed in paragraphs 9.6.18 to 9.6.21, as follows:</i> <i>1. Paragraph 9.6.18 states that the Scoping Report Corridor passes through multiple Mineral Safeguarded Areas for sand and gravel, which are not shown on Figure 9.4; and</i> <i>2. Paragraph 9.6.19 states that there is no safeguarded mineral infrastructure or allocated sites, however page 1 of Figure 9.4 shows an entry for an adopted site at the northern extent of the Scoping Report Corridor.</i> <i>Figure 9.4 shows Mineral Consultation Areas and waste sites in Essex, however there is no equivalent data represented for Norfolk and Suffolk.</i>	Baseline information relating to mineral safeguarding is shown on Figure 9.3: Mineral Safeguarded Areas, Mineral Consultation Areas and Minerals Infrastructure (document reference 6.9.F3). This has informed the Minerals Resource Assessment detailed within Appendix 9.2: Qualitative Minerals Resource and Infrastructure Assessment (document reference 6.9.A2) (Revision B).

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
Paras 9.6.26 to 9.6.28	Source Protection Zones (SPZ1)	<i>The Scoping Report Corridor crosses several areas designated as a SPZ1. Where it is not possible to avoid such areas, the ES should detail any protective and emergency measures that would be required to safeguard drinking water supplies and agree these with the relevant local water company, where possible.</i>	Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9) (Revision B) identifies that the Order Limits cross through a groundwater Source Protection Zone (SPZ) 1, which is a very high sensitivity receptor, and that the Study Area also crosses a number of different SPZ1s. Appendix 9.3: Groundwater Baseline and Qualitative Risk Assessment (document reference 6.9.A3) (Revision B) presents additional assessment and mitigation measures required to ensure that significant effects to sensitive groundwater receptors are unlikely. The assessment also identifies areas where further targeted Hydrogeological Risk Assessment would be required (post DCO consent) to assess the specific risks to groundwater and groundwater receptors at specific locations and identifies any additional mitigation or remediation that may be required (in accordance with commitment GH11 in the Outline CoCP (document reference 7.2) (Revision G)).
Para 9.10.5	Assessment methodology	<i>The Inspectorate notes that a Tier 0 assessment will be undertaken as a first stage screening and that 'where a very low or low risk rating is assessed, these areas will not be taken</i>	Discussion regarding the proposed methodology including a tiered risk-based approach for contaminated land

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
		<i>forward for further assessment in the ES on the basis they have a low likelihood of significant effects'. The Inspectorate considers that the standard Land Contamination Risk Management approach should be adopted unless otherwise agreed with relevant consultation bodies, such as the Environment Agency.</i>	assessment have been held with the Environment Agency who noted that this is a reasonable approach. This methodology has been adopted within Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9) (Revision B) .
n/a	Water Framework Directive (WFD) Assessment	<i>Paragraph 12.10.5 of the Scoping Report indicates that a WFD Assessment will be provided. For clarity, the WFD assessment (and therefore the ES) should include relevant receptors for both hydrology and hydrogeology, including groundwater bodies (as listed on the Environment Agency Catchment Data Explorer). The WFD status of groundwater bodies is also relevant to the assessment of Groundwater Dependent Terrestrial Ecosystems within the Ecology chapter.</i>	A WFD Assessment (document reference 7.10) has been prepared in consultation with the Environment Agency. The WFD Assessment includes groundwater bodies and potential effects on the qualitative and quantitative status of these.
Health and Wellbeing			
n/a	Impacts on transport links to healthcare facilities - construction	<i>The ES should assess impacts on transport routes to and between healthcare facilities, where significant effects are likely. This should consider access by the public users of such facilities, as well as by the healthcare providers themselves. Appropriate cross reference should be made to the Traffic and Transport chapter of the ES.</i>	Chapter 10: Health and Wellbeing (document reference 6.10) (Revision C) summarises the findings from Chapter 16: Traffic and Transport (document reference 6.16) (Revision B) , identifying effects on transport routes, both in terms of staff / workers / providers and users of healthcare facilities.
Historic Environment			

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
Para 11.1.2	Interrelationships	<i>Paragraph 11.1.2 identifies interrelationships with other Scoping Report Chapters including Chapter 9 (Geology and Hydrogeology) and Chapter 12 (Hydrology and Land Drainage). However, neither Chapter 9 or 12 (paragraphs 9.1.2 and 12.1.2 respectively) identify interrelationships with Chapter 11 (Historic Environment). Clear cross-referencing and explanation should be provided between interrelated chapters in the ES. In addition to the chapters listed in paragraph 11.1.2, the Inspectorate considers that there would also be a relationship with the Traffic and Transport Chapter, for example in terms of impacts on protected lanes.</i>	Chapter 11: Historic Environment (document reference 6.11) (Revision D) identifies interrelationships between other environmental topic chapters where relevant.
Sections 11.6 and 11.10	Non-designated heritage assets	<i>The Applicant's attention is drawn to consultation responses from the local planning authorities (Appendix 2) including Chelmsford City Council and Essex County Council which highlight additional sources for obtaining data on non-designated heritage assets. The Applicant should make effort to discuss and agree relevant non-designated heritage assets for assessment and the detailed assessment methodology with relevant local planning authorities.</i>	Drafts of Appendix 11.1: Historic Environment Baseline Report (document reference 6.11.A1) (Revision C) have been shared with relevant stakeholders to agree non-designated baseline and the methodology to assess non-designated assets. Further details are within Section 4 of Chapter 11: Historic Environment (document reference 6.11) (Revision D) .
Sections 11.9 and 11.10	Construction impacts	<i>The temporary haul road/s should be included within the Geophysical Survey proposed in paragraph 11.10.22 of the Scoping Report. Impacts on designated and non-designated heritage assets from the temporary haul road/s should be assessed where significant effects are likely.</i>	Haul roads have been included within the geophysical survey. Results of surveys undertaken to date are provided in Appendix 11.4: Geophysical Survey Results Report (document reference 6.11.A4) (Revision D) . Archaeological survey work is ongoing.

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			Effects on designated and non-designated heritage assets from the haul roads are assessed within Chapter 11: Historic Environment (document reference 6.11) (Revision D) .
Para 11.9.6	Physical impacts on archaeological remains	<i>Impacts on archaeological remains from the movement of contaminants or pollutants should be assessed where significant effects are likely.</i>	Effects on archaeological remains from the movement of contaminants or pollutants are assessed where significant effects are likely within Chapter 11: Historic Environment (document reference 6.11) (Revision D) .
Para 11.9.6	Physical impacts on archaeological remains	<i>Impacts on archaeological remains from permanent changes to groundwater flows and levels as a result of the underground cabling should be assessed where significant effects are likely.</i>	The assessment within Chapter 9 Contaminated Land, Geology and Hydrogeology (document reference 6.9) (Revision B) has been used to inform the assessment of effects on archaeological remains, including if there is any potential for effects arising from permanent changes to groundwater flows and levels.
Section 11.10	Assessment methodology – historic landscapes	<i>The ES should describe the methodology for assessment of impacts on historic landscapes (with reference to relevant guidance) as this has not been specifically and separately addressed in Section 11.10 of the Scoping Report.</i>	The ES methodology for historic landscapes has been agreed with stakeholders, as detailed within Chapter 11: Historic Environment (document reference 6.11) (Revision D) . There is no standard impact assessment guidance to assess historic landscapes.

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
Paras 11.10.7 and 11.10.29	Intrusive archaeological surveys	<i>The Scoping Report states that intrusive fieldwork would be undertaken 'at the earliest available time'. Where necessary intrusive investigations and trial trenching should be completed prior to submission of the DCO application. The Applicant should make effort to discuss and agree the timing, scope and methodology for intrusive investigations and trial trenching with relevant consultation bodies.</i>	The scope, methodology and programme of archaeological fieldwork has been discussed and agreed with relevant stakeholders. Not all intrusive investigations have been undertaken at the point of submission of the DCO application. Agreement of the approach to intrusive investigations is outlined within the Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (document reference 7.5) (Revision C).
Hydrology, Land Drainage and Flood Risk			
Para 12.9.3	Water quality - construction	<i>An assessment of the potential for effects on ground water quality from disturbance and mobilisation of existing contamination has been scoped in (paragraph 9.9.6 of the Scoping Report). The Inspectorate considers the same potential impact on surface water should be assessed within the ES, where significant effects are likely.</i>	The potential for effects on surface water quality during construction of the Project is assessed in Chapter 12: Hydrology and Land Drainage (document reference 6.12) (Revision B). This assessment is informed by the Outline CoCP (document reference 7.2) (Revision G) that contains details of commitments to avoid significant effects on the water quality of surface waters during construction.
Para 12.9.9	Flood risk – construction phase	The Scoping Report proposes to assess construction phase flood risk from rivers and the sea only. The ES should confirm the risk from all sources of flooding (fluvial/ tidal, pluvial,	A Flood Risk Screening report was shared with the Environment Agency and the Lead Local Flood Authorities (LLFAs) to confirm

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
		groundwater, sewer and reservoir flooding) and assess any source where significant effects are likely.	sources of flood risk that could potentially give rise to significant effects. The agreed list was taken forward to the Flood Risk Assessment (FRA) (document reference 7.9) which assesses risks from all relevant sources of flood risk in detail.
n/a	Agricultural drainage - construction	<i>The ES should include an assessment of any likely significant effects on retained existing agricultural drainage or the removal of this as a result of the construction of the Proposed Development.</i>	The FRA (document reference 7.9) assesses potential effects of the Project during the construction and operation (and maintenance) on existing land drainage regimes including agricultural drainage systems. The FRA (document reference 7.9) informs the assessment within the ES.
n/a	Tilbury Flood Storage Area	<i>The ES should include an assessment of any likely significant effects on Tilbury Flood Storage Area, should the final route fall into the area, with reference to the Environment Agency's Thames Estuary 2100 Plan.</i>	The Project no longer interacts with the Tilbury Flood Storage Area.
n/a	Agricultural boreholes	Any likely significant effects on boreholes used for agricultural irrigation systems should be assessed.	Any likely significant effects on boreholes used by agricultural irrigation systems are assessed in Chapter 6: Agriculture and Soils (document reference 6.8) (Revision B) and Chapter 9: Contaminated Land, Geology (Revision B) and Hydrogeology (document reference 6.9) (Revision B) .
Landscape and Visual			

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
Para 13.8.6	Mitigation	<i>The ES should demonstrate that the choice of mitigation measures for the purposes of reducing landscape and visual impacts is appropriate to the prevailing landscape character. For example, tree belt screening planting may not be appropriate in open landscapes.</i>	Chapter 13: Landscape and Visual (document reference 6.13) (Revision B) outlines mitigation incorporated within the design. Proposed planting is detailed within the Outline LEMP (document reference 7.4) (Revision G) , which details proposed locations and specifications of planting.
Appendix I	Landscape and Visual Impact Assessment (LVIA) methodology	<i>Sequential effects are mentioned in a broad context in Appendix I of the Scoping Report (LVIA Methodology), but there is no specific reference to any assessment methodology for this matter. Given the scale and repetitive nature of the Proposed Development, combined with varying visibility of pylons, this is likely to be an important matter for users of Public Rights of Way (PRoW) networks and should be addressed in the ES.</i>	The methodology adopted to undertake the assessment of sequential effects is detailed in Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1) (Revision B) .
Appendix J	Arboricultural Impact Assessment (AIA) (to be appended to the ES LVIA Chapter)	<i>The Inspectorate acknowledges that some flexibility may be required for micro-siting of pylons but would expect the ES to provide clarity on the maximum extent of tree loss and demonstration that the design of the Proposed Development has sought to avoid or minimise loss of high grade trees.</i>	The Project has sought to avoid tree loss where practicable. Chapter 4: Project Description (document reference 6.4) (Revision B) outlines the proposed general vegetation / tree clearance requirements for the Project and these are also presented on the Trees and Hedgerows to be Removed and or Managed Plans (document reference 2.16) Revisions B - D) .

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			Appendix 13.6 Arboricultural Impact Assessment (document reference 6.13.A6) (Revision B) quantifies tree loss and also outlines how the loss of high grade trees has been minimised.
Appendix J	Arboricultural Impact Assessment	<i>The ES should identify any limitations to the assessment approach and explain how these have been addressed. For example, the use of LIDAR data for initial gathering of information may not detect the presence of low hedges or tree or hedge features that have recently been managed through coppicing or hedge laying at the time that the LIDAR data was captured.</i>	Appendix 13.6 Arboricultural Impact Assessment (document reference 6.13.A6) (Revision B) identifies limitations of the assessment approach and survey completeness.
Appendix J	Arboricultural Impact Assessment	Norfolk County Council <i>It is accepted that a pragmatic approach needs to be taken to data collection and the authority agree to limiting the collection of all tree data (as per BS 5837) to only Cat A and B trees. Adapting the Root Protection Area (RPA) to suit likely root morphology is acceptable (e.g. adjacent to roads, ploughed fields, streams etc). Category C trees may have a rooting area greater than 5m diameter. It is not considered overly onerous for an assessment to be made during the walkover survey when the tree / woodland categorisation is made, to determine an appropriate RPA for Cat C trees. If this is not carried out consent may be granted to development that harms trees suitable for retention. This would be particularly problematic for trees that are not in the developer's ownership.</i>	For C grade arboricultural features individual stem measurements were not recorded, however an arbitrary buffer zone of 3 m has been assumed to outer extent of canopy spread. This is detailed within Appendix 13.6 Arboricultural Impact Assessment (document reference 6.13.A6) (Revision B) .

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
Appendix J	Arboricultural Impact Assessment	Chelmsford City Council. <i>The impact upon arboriculture will need to be considered as part of the ES and an Arboricultural Impact Assessment and Arboricultural Method Statement should be scoped into the ES to enable further consideration of the construction implications on trees.</i>	This is detailed within Appendix 13.6 Arboricultural Impact Assessment (document reference 6.13.A6) (Revision B) .
Socio-economics, Recreation and Tourism			
Section 15.3	Study Area	<i>The study area should not be limited to solely the local authority spatial areas through which the Order Limits would pass; it should take into account the workforce profile and supply chain area (see ID 2.1.13 of this Opinion for the Inspectorate's comments in this regard) and be informed by the Zol of other aspect assessments (e.g., landscape and visual, traffic and transport). The Applicant should seek to agree the study area with the relevant local authorities.</i>	Agreement has been sought to agree the Study Areas through Thematic Group meetings with relevant stakeholders. Agreement has been confirmed with Norfolk County Council, Suffolk County Council, Essex County Council and Thurrock Council. Details are outlined within Chapter 15: Socio-economics, Recreation and Tourism (document reference 6.15) (Revision C) .
Section 15.8	Economy and employment	<i>Consideration should be given to the availability and origin of the workforce in the context of the numerous projects proposed in the region. Any assumptions around workforce origins within the socioeconomic assessment should be used to inform the study area and also be reflected in the assessment of transport impacts.</i>	Assumptions around workforce origins are detailed within Chapter 15: Socio-economics, Recreation and Tourism (document reference 6.15) (Revision C) . The Study Area for construction workforce effects comprises the Wider Study Area (spatial extent of the Local Planning Authority areas through which the Order Limits pass, Norwich City Council, West

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			Suffolk Council and Ipswich Borough Council), as amended following discussion with stakeholders. Traffic numbers provided within Appendix 16.3: Traffic and Transport Construction Effects (document reference 6.16.A3) (Revision B) includes movements from the anticipated workforce.
Para 15.8.6	Planning and development	<i>Areas with planning permission and site allocations should be mapped on figures within the ES to aid understanding of the effects of the Proposed Development on planning and development. Any likely significant effects on the delivery of housing should be assessed within the ES.</i>	Figure 17.2: Cumulative Effects Short List of Proposed Developments (document reference 6.17.F2) presents planning applications and site allocations relevant to the cumulative assessment. An assessment of effects on development land is also provided in Chapter 15: Socio-economics, Recreation and Tourism (document reference 6.15) (Revision C) .
Paras 15.9.4 to 15.9.5	Assessing significance	<i>The Inspectorate is content that a qualitative approach can be applied. However, the Inspectorate expects some qualification of terms (e.g., 'small in scale' and 'large number of people'). The assessment methodology should be clearly described within the ES.</i>	Additional detail is included within Chapter 15: Socio-economics, Tourism and Recreation (document reference 6.15) (Revision C) .
Table 15.9	Potential disruption to future and existing	<i>Table 15.9 states that 'Businesses reasonably likely to be affected by a Project of this type would be scoped into the ES'. The ES should detail the criteria used to identify businesses</i>	Agreement has been sought to agree the Study Area and criteria to identify businesses likely to be affected by the Project in Chapter 15: Socio-economics,

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
	businesses – construction	<i>likely to be affected and the Applicant should seek to agree these with relevant local authorities.</i>	Tourism and Recreation (document reference 6.15) (Revision C) at Thematic Group meetings with relevant stakeholders. Agreement has been confirmed with Norfolk County Council, Suffolk County Council, Essex County Council and Thurrock Council. Details are outlined within Chapter 15: Socio-economics, Recreation and Tourism (document reference 6.15) (Revision C) .
Table 15.9	Tourism and recreation – operation (inc. maintenance)	<i>The Inspectorate is content that a proportionate approach be undertaken whereby the assessment focuses on areas where there is potential for significant effects, rather than assessing all PRow and tourism and recreation assets within the Study Area. However, at present there is insufficient information provided as to where this focus would be. The ES should explain the criteria used to determine where to focus the assessment. The selection of PRow for further assessment should be agreed with relevant local authorities where possible.</i>	Chapter 15: Socio-economics, Tourism and Recreation (document reference 6.15) (Revision C) outlines the criteria where the assessment has been focussed. The selection of PRow assessed in Chapter 15: Socio-economics, Tourism and Recreation (document reference 6.15) (Revision C) has been discussed and agreed with PRow Officers at relevant Local Planning Authorities via the traffic and transport engagement.
n/a	Airfields	<i>Any likely significant effects on users of airfields should be assessed within the ES.</i>	National Grid has consulted with the Civil Aviation Authority, Ministry of Defence and the airfield operators to assess potential effects on operations, and to understand and mitigate appropriately. This has informed the assessment of effects on

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			airfields within Chapter 15: Socio-economics, Tourism and Recreation (document reference 6.15) (Revision C) .
Traffic and Transport			
Para 5.7.9	Impacts from management of waste	<i>Paragraph 5.7.9 of the Scoping Report states that transport effects from the management of waste would be considered within ES Chapter 16: Traffic and Transport, although this is not mentioned in Scoping Report Chapter 16. For the avoidance of doubt, this matter should be addressed within ES Chapter 16: Traffic and Transport.</i>	Traffic numbers resulting from the management of waste during construction is embedded in the calculations provided in Appendix 16.3: Traffic and Transport Construction Effects (document reference 6.16.A3) (Revision B) .
Para 16.3.1	Thresholds used to determine construction phase Study Area	<i>The Scoping Report adopts construction stage traffic assessment thresholds consistent with the Guidelines for Environmental Assessment of Road Traffic 1993. The Applicant should seek to agree the relevant 'sensitive areas' that inform the 10% increase criteria with the relevant local highways authorities.</i>	'Sensitive areas' along the vehicle construction route that inform the 10% increase criteria have been agreed with the relevant Local Highways Authorities and details are provided in Chapter 16: Traffic and Transport (document reference 6.16) (Revision B) . Guidance has been updated since the EIA Scoping Report (document reference 6.19) was issued. Chapter 16 has been prepared in accordance with Environmental Assessment of Traffic and Movement ('Institute of Environmental Management and Assessment (IEMA, 2023)).

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
Para 16.7.2	Additional traffic flow data	<i>The Applicant should seek to agree the locations where additional traffic flow data is required using Automatic Traffic Counts and Manual Classified Counts with relevant local highways authorities.</i>	Locations where additional traffic count flow data was required has been undertaken and agreed with Local Highways Authorities. Details are provided within Chapter 16: Traffic and Transport (document reference 6.16) (Revision B) .
Para 16.7.13	Abnormal Indivisible Loads (AIL) - construction	<i>Where AILs are required during the construction of the Proposed Development, their associated effects should be assessed in the ES. The assessment should consider impacts on bridges, culverts and Strategic Road Network (SRN) junctions, as well as potential cumulative effects on the road network with other committed developments.</i>	The effects of AIL movements during construction are assessed in Chapter 16: Traffic and Transport (document reference 6.16) (Revision B) . Suitable routes for AILs to use during construction have been identified and are detailed within the Outline Construction Traffic Management Plan (CTMP) (document reference 7.3) (Revision F) . The identification of suitable routes considered bridges, culverts, SRN junctions and potential cumulative effects with other developments.
Para 16.10.5	Construction traffic assessment of potential effects - engineering estimates	<i>Rationale should be provided for any estimates made within the assessment of potential effects in respect of the quantity of plant, equipment, materials to be brought on to site and excavated material be removed from site.</i>	Rationale used to generate estimated flows/vehicle types required during the Project are detailed within Appendix 16.3: Traffic and Transport Construction Effects (document reference 6.16.A3) (Revision B) .

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
n/a	Access to Norwich Main Substation	<i>Norfolk County Council has highlighted that the Sheringham Shoal Extension Project and Dudgeon Extension Project seeks to utilise the same access arrangements to Norwich Main substation. The ES should explain how these projects will overlap and identify any necessary measures to mitigate potential effects. Any likely significant cumulative effects should be assessed</i>	Traffic generated by 'other developments' / committed developments including the Sheringham Shoal Extension Project and Dudgeon Extension Project are included within the traffic numbers generated for the Project. Cumulative traffic numbers were used to undertake the assessment in Chapter 16: Traffic and Transport (document reference 6.16) (Revision B) .
Cumulative Impacts			
Paras 17.3.3 Zol and 17.3.5 and Table 17.1		<i>The Scoping Report states that 'The study area within which to search for other developments that have the potential to have cumulative effects with the Project is based on the ZOI for environmental effects'. Zols have not been presented for each environmental aspect. In particular, transport and traffic is not identified in Table 17.1, however the Inspectorate considers construction traffic to be a potential source of cumulative effects. For the avoidance of doubt, the Inspectorate considers cumulative effects should be assessed for all aspects and that Zols should be clearly identified. A 5 km Zol should be applied to consideration of cumulative LVIA effects to AONBs, unless cables are to be undergrounded, particular consideration should be given to cumulative effects with Bramford to Twinstead OHL.</i>	A Zol has not been identified in Chapter 17: Cumulative Effects (document reference 6.17) (Revision B) for traffic and transport as traffic flows for 'other developments' / committed developments (which have been agreed with Local Highways Authorities) are included within the traffic numbers generated for the traffic and transport, air quality and noise and vibration assessments in the ES (Volume 6 of the DCO application). Therefore, a cumulative assessment is inherent to the assessments presented in Chapter 6: Air Quality (document reference 6.7) (Revision B) , Chapter 14: Noise and Vibration (document reference 6.14) (Revision B) and Chapter

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			16: Traffic and Transport (document reference 6.16) (Revision B). A 5 km Study Area has not been applied to the LVIA as cables through the Dedham Vale National Landscape are to be undergrounded and there are no effects beyond 3 km that affect the National Landscape. The Bramford to Twinstead project is in the short list.
n/a	Projects for inclusion	<i>The Inspectorate appreciates that the projects for inclusion within the assessment are yet to be determined. Numerous consultation bodies have highlighted that the Proposed Development is one of a number of major projects proposed or recently consented in the region. Projects noted by consultation bodies include, but are not limited to:</i> 1. A12 Chelmsford to A120 Widening Scheme; 2. Anglian Water Strategic Pipeline from Bexwell to Bury St.Edmunds; 3. Bramford to Twinstead OHL project; 4. Chelmsford Garden Community; 5. Dunton Hills Garden Village; 6. East Anglia One North Offshore Wind Farm; 7. East Anglia Two Offshore Wind Farm; 8. East Anglia Three Offshore Wind Farm; 9. EuroLink Project; 10. Five Estuaries Offshore Wind Farm; 11. Longfield Solar Farm;	Chapter 17: Cumulative Effects (document reference 6.17) (Revision B) includes both the long and short list of cumulative developments considered in the ES (Volume 6 of the DCO application). The following other developments provided by the Planning Inspectorate are included within the long list: • A12 Chelmsford to A120 Widening Scheme • Bramford to Twinstead Overhead Line project • Chelmsford Garden Community • Dunton Hills Garden Village • East Anglia Three Offshore Wind Farm • Five Estuaries Offshore Wind Farm

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
		12. Lower Thames Crossing; 13. National Grid Bramford to Twinstead; 14. National Grid Tilbury – Gravesend tunnel upgrade; 15. Nautilus project; 16. North Falls Offshore Wind Farm; 17. North Thames Estuary & Marshes potential designation of an enlarged Site of Special Scientific Interest (SSSI) in the Tilbury area; 18. SeaLink project; 19. Sizewell C; 20. Sunnica solar farm; 21. Thames Freeport; 22. Thurrock Flexible Generation Plant; and 23. Tilbury 2 project. <i>The Inspectorate expects the ES to consider these projects. In particular the effect of multiple developments impacting on PRoW and the quality of user experience through multiple permanent closures and or diversions should be addressed.</i>	• Longfield Solar Farm • Lower Thames Crossing • National Grid Bramford to Twinstead • North Falls Offshore Wind Farm • Thurrock Flexible Generation Plant • Tilbury 2 The following other developments have not been included within the long list as they do not fall within the 3 km ZOI or they are no longer going ahead, and therefore they do not meet the criteria set out within the EIA Scoping Report (document reference 6.19) and agreed within the EIA Scoping Opinion (document reference 6.20): • Anglian Water Strategic Pipeline from Bexwell to Bury St.Edmunds • East Anglia One North Offshore Wind Farm • East Anglia Two Offshore Wind Farm • Nautilus project • Eurolink (LionLink) • Sizewell C • Sea Link • Sunnica Solar Farm

Reference from the EIA Scoping Opinion	Aspect	Planning Inspectorate's Comment in the EIA Scoping Opinion	Project Response
			Thames Freeport North Thames Estuary and Marshes potential designation of an enlarged SSSI in the Tilbury area has been considered as part of the baseline in the ES (Volume 6 of the DCO application). The long list and short list of cumulative developments have also been shared with relevant stakeholders.

Table A5.1.2 Topic specific responses in relation to aspects proposed to be scoped out

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
Major Accidents and Disasters			
Paras 5.7.4 and 18.2.2	Major Accidents and Disasters	<i>The Scoping Report states that individual aspect chapters would assess the likely risks (where relevant), including:</i> <i>1. flood risk, within ES Chapter 12: Hydrology and Land Drainage and the Flood Risk Assessment (FRA); and</i> <i>2. Unexploded Ordnance (UXO), historic ground contamination, landfill gases and asbestos, within ES Chapter 9: Geology and Hydrogeology and ES Chapter 12: Hydrology and Land Drainage.</i> <i>The Inspectorate considers that the potential for the Proposed Development to be vulnerable to or cause major accidents at crossings of watercourses and transport infrastructure, and at buried gas pipelines, should also be assessed in the relevant aspect chapters.</i> <i>On the basis of the above, the Inspectorate is content that a standalone ES chapter covering major accidents and disasters is not required. The EIA Approach and Method ES chapter should provide clear cross-referencing to where the likely risks are considered.</i>	Noted.
Material Assets and Waste			
Paras 5.7.9 and 18.2.2	Material assets (and waste)	<i>The Scoping Report states that information regarding materials and waste would be included within the ES project description chapter and that individual aspect chapters would assess impacts from waste (where relevant), including:</i> <i>1. transport effects from the management of waste arisings,</i>	Clear cross referencing to where relevant effects arising from material assets and waste are provided within Chapter 4: Project Description (document reference 6.4) <u>(Revision B)</u> .

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
		<i>within ES Chapter 16: Traffic and Transport.</i> <i>A draft Site Waste Management Plan (SWMP) is also proposed to be included within the DCO application.</i> <i>On this basis, the Inspectorate is content that a standalone ES chapter covering material assets (and waste) is not required. The EIA Approach and Methodology ES chapter should provide clear cross referencing to where the relevant impacts are considered.</i>	
Climate			
Paras 5.7.11 to 5.7.13 and 18.2.2	Climate	<i>The Scoping Report explains that OHLs are designed to withstand extreme weather conditions. It is proposed that vulnerability of the Proposed Development to climate change in terms of flood risk is considered in ES Chapter 12 (Hydrology and Land Drainage) and in the FRA. On this basis, the Inspectorate is content that no further assessment of the Proposed Development's vulnerability to climate change is required in the ES.</i> <i>The Scoping Report states that details of the likely construction materials and a 'simple estimate' of the Green House Gas (GHG) emissions associated with construction of the Proposed Development would be included within the ES Project Description chapter, but there is no indication of how/ if the significance of effects would be determined. The ES should provide an assessment of GHG emissions during construction (and operation, where relevant) where significant effects are likely to occur. This should include embodied carbon emissions from materials required.</i>	Noted. Appendix 4.1 Greenhouse Gas Assessment (document reference 6.4.A1) <u>(Revision B)</u> presents a 'simple estimate' (embodied carbon emissions from materials) of the Greenhouse Gas emissions associated with the construction of the Project together with a comparison against UK carbon budgets to determine significance. Appendix H: Outline Greenhouse Gas Reduction

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
			Strategy is also provided within the Outline CoCP (document reference 7.2) (Revision G) .
Agriculture and Soils			
Para 6.9.5	Maintenance or repair works required which would result in disturbance to soils – operation (inc. maintenance)	<i>Given the nature of the operational phase of the Proposed Development and that maintenance of the project would be undertaken in accordance with best practice methods for soil handling, the Inspectorate agrees that significant effects are unlikely and that this matter can be scoped out. The ES should however identify the best practice methods relied upon to reach this conclusion.</i>	Noted. Good practice methods for soil handling are detailed in Appendix C: Outline Soil Resource Plan of the Outline CoCP (document reference 7.2) (Revision D) .
Para 6.9.6 and Table 6.5	Impact on soil ecosystem functions – operation (inc. maintenance)	<i>The Scoping Report states that the majority of the land required for construction would be returned to its pre-construction land use (as agreed with the landowner) and that impacts on soil ecosystem functions are likely to be limited. The Inspectorate agrees that impacts on soil ecosystem functions during operation are unlikely to be significant and that this matter can be scoped out.</i>	Noted.
Para 6.9.9 and Table 6.5	Impacts to agricultural operations - operation (inc. maintenance)	<i>The Inspectorate agrees this matter can be scoped out on the basis that the ES confirms the amount of agricultural land to be permanently lost and explains why this is considered 'limited' and not likely to lead to significant effects. Reinstatement of land, and the proposed soil management and handling measures, should be clearly described in the ES and secured through the dDCO.</i>	Noted. The amount of agricultural land to be permanently lost is detailed within Chapter 6: Agriculture and Soils (document reference 6.6) (Revision B) . Good practice methods for soil handling are detailed in Appendix C: Outline Soil Resource Plan of the Outline CoCP (document reference 7.2)

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
			(Revision D). Reinstatement details are provided in the Outline LEMP (document reference 7.4) (Revision G).
Para 6.9.10 and Table 6.5	Economic effects on landowners and farmers – operation (inc. maintenance)	<i>The Applicant proposes to scope out the economic effects of the Proposed Development on individual landowners and farmers on the basis of compensation agreements that would be made outside of the EIA process. The Inspectorate agrees that significant effects are unlikely and is therefore content that this matter can be scoped out of further assessment.</i>	Noted.
Para 6.9.11	Impacts from Electric and Magnetic Fields (EMF) on land use – operation (inc. maintenance)	<i>The Inspectorate notes that paragraph 2.10.8 of National Policy Statement (NPS) EN-5 states that, in relation to EMFs, 'there is little evidence that exposure of crops, farm animals or natural ecosystems to transmission line EMFs has any agriculturally significant consequence'. The Scoping Report states that the Proposed Development would be designed in accordance with Government guidance and precautionary policies (and a compliance report will be submitted with the application for development consent). The Inspectorate agrees that this matter can be scoped out on this basis.</i>	Noted.
Air Quality			
Para 7.9.6 and Table 7.3	Construction generators	<i>Limited information has been provided in the Scoping Report regarding the likely use of generators and other non-road mobile machinery. Specifically, no information has been provided as to the type, number, location or operational hours of such machinery and likely emissions other than brief references within the Initial Outline CoCP to</i>	Chapter 7: Air Quality (document reference 6.7) (Revision B) provides an assessment of construction generators.

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
		<i>plant being switched off when not in use and being located away from sensitive receptors 'where practicable'. On this basis the Inspectorate is unable to exclude a likely significant effect and does not agree that this matter can be scoped out of the ES.</i>	including the details referred to in the comment.
Para 7.9.9 and Table 7.3	Vehicle emissions - construction (if relevant Institute of Air Quality Management (IAQM) indicative criteria are not exceeded)	<i>If the predicted numbers of construction traffic movements generated by the Proposed Development alone or cumulatively would demonstrably not exceed the relevant indicative criteria for air quality assessment set out in the IAQM guidance, as relevant to each of the affected roads used for construction traffic (once the route has been confirmed), the Inspectorate agrees that this matter can be scoped out of the ES. Where predicted construction traffic flows meet the criteria, the Scoping Report confirms that this matter will be scoped into the ES.</i>	Since the EIA Scoping Report was issued construction traffic numbers have been determined to be sufficient to generate the need for a detailed assessment in line with IAQM guidance, as outlined in Appendix 7.1: Air Quality Assessment Methodology (document reference 6.7.A1) (Revision B) . Chapter 7: Air Quality (document reference 6.7) (Revision B) presents an assessment of vehicle traffic emissions during construction.
Para 7.9.10 and Table 7.3	Diverted traffic – construction	<i>The Inspectorate agrees that vehicle emissions associated with diverted traffic can be scoped out of the ES, provided it can be demonstrated that the predicted volumes of diverted traffic would not exceed the relevant indicative criteria for air quality assessment set out in the IAQM guidance</i>	Noted.
Para 7.9.11 and Table 7.3	Vehicle emissions - operation (inc. maintenance)	<i>Having regard to the nature and characteristics of the Proposed Development, the Inspectorate agrees that vehicle emissions to air during operation (including maintenance) are not likely to result in significant effects.</i>	Further details of operation (and maintenance) vehicles is provided within Chapter 4:

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
		<i>Subject to the ES Project Description Chapter providing an explanation of the number, type and frequency of operational vehicle movements, this matter can be scoped out of the ES.</i>	Project Description (document reference 6.4) (Revision B) .
Ecology and Biodiversity			
Para 8.1.7 and Table 8.9	Great crested newt (GCN)	<i>The Applicant intends to offset the effects of the Proposed Development on GCN by obtaining a licence through the Natural England (NE) District Level Licence (DLL) scheme. It has provided a letter of comfort setting out NE's agreement with this approach in principle (Appendix K) and does not consider GCN further in the Scoping Report. The Inspectorate agrees that detailed consideration of GCN can be scoped out of the ES. The Inspectorate understands that the DLL approach includes strategic area assessment and the identification of risk zones and strategic opportunity area maps. The ES should include information to demonstrate whether the Proposed Development is located within a risk zone for GCN. NE will undertake an impact assessment and inform the Applicant whether their scheme is within one of the amber risk zones and therefore whether the Proposed Development is likely to have a significant effect on GCN. The outcome of this assessment will be documented on an Impact Assessment and Conservation Payment Certificate (IACPC). The IACPC can be used to provide additional detail to inform the findings in the ES, including information on the Proposed Development's impact on GCN and the appropriate compensation required.</i>	The proposed approach to GCN has been agreed with Natural England. Natural England have confirmed that the Project sits within amber risk zones and therefore is likely to have a significant effect on GCN. This information together with compensation required is referred to within Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision C) .
Para 8.9.6	Collision of nocturnal species	<i>The Scoping Report states that injury or mortality due to collision with machinery is not expected to affect nocturnal</i>	Potential collision effect on nocturnal species is assessed

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
	with machinery - construction	<i>species since construction is assumed not (in the main) to be undertaken at night. However, the Inspectorate notes that there might be potential for some activity to occur throughout the night, e.g. trenchless crossings.</i> <i>The Inspectorate considers that there is insufficient information about the location, nature and duration of night-time working to conclude that significant effects will not occur. Therefore, potential effects of collision of nocturnal species with construction machinery should be scoped into the assessment.</i>	and reported within Chapter 8: Ecology and Biodiversity (document reference 6.8) <u>(Revision C)</u> .
Para 8.9.13	Habitat loss – operation (inc. maintenance)	<i>The Inspectorate agrees that effects from habitat loss during operation are unlikely to be significant and that this matter can be scoped out of the ES. As noted in Section 2.2 of this Opinion, the ES should however assess the significance of any permanent habitat loss from the construction phase that would continue into the operational phase.</i>	Noted.
Para 8.9.15	Disturbance of protected/ notable fauna from lighting - construction	<i>In the absence of a defined location for the proposed new substation and CSECs compounds, and until there is certainty on the extent and presence of certain species, the Inspectorate does not agree that this matter can be scoped out.</i>	The effects of lighting on protected/ notable nocturnal species is assessed and reported within Chapter 8: Ecology and Biodiversity (document reference 6.8) <u>(Revision C)</u> .
Para 8.9.16 and Table 8.5	Disturbance of protected/ notable fauna from noise, vibration or visual stimuli – operation (inc. maintenance)	<i>Table 8.5 states that there would be no changes to noise or vibration during operation. The Applicant has proposed to scope out noise impacts from operation of the substation in the Noise chapter (see Section 3.12 of this Opinion). The Inspectorate does not consider sufficient information has been given to scope out operational noise impacts.</i>	Operational disturbance effects (noise, vibration and lighting) of the new Tilbury North and East Anglia Connection Node (EACN) Substations, substation extension at Bramford

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
		<i>Operational noise and vibration effects on ecological receptors from the new substation, the substation extensions and the CSECs should be scoped into the assessment where significant effects are likely to occur. In respect of lighting, the Scoping Report identifies the potential for limited lighting 'at the new substation for occasional maintenance visits' and at CSECs. Given the limited scale of these works, the Inspectorate agrees that it is unlikely that significant effects would occur from operational lighting; however, there is insufficient information regarding the type, location and hours of lighting at this stage to confirm this conclusion. The Inspectorate also notes that Table 8.5 identifies the potential for operational lighting to impact nocturnal fauna and states that this would require further assessment. Therefore, where significant effects are likely to occur, these should be assessed in the ES.</i> <i>In the absence of a defined location for the proposed new substation and CSECs, and until there is certainty on the extent and presence of certain species, the Inspectorate does not agree operational disturbance impacts can be scoped out.</i>	Substation and CSE compounds is considered within Chapter 8: Ecology and Biodiversity (document reference 6.8) <u>(Revision C)</u>.
Para 8.9.18	Air quality changes (resulting in habitat loss/ modification): Dust - construction	<i>The Inspectorate notes that dust during construction would be subject to a Dust Risk Assessment and controlled through the CoCP and considers that dust effects are unlikely to be significant; therefore this matter can be scoped out of the ES.</i>	Noted.
Para 8.9.20	Air quality changes (resulting in habitat loss / modification):	<i>Due to the low predicted number of vehicle movements in operation, the Inspectorate agrees that vehicle emissions during operation are unlikely to result in significant effects</i>	Noted.

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
	Vehicle emissions – operation (inc. maintenance)	<i>on biodiversity receptors; therefore this matter can be scoped out of the ES.</i>	
Para 8.9.22	Hydrological changes in surface water - construction	<i>The Scoping Report acknowledges the potential for direct impacts on watercourses where open cut trenches are necessary to cross them. It considers that impacts on surface water changes can be controlled with existing good practice measures to be set out in the Outline CoCP to avoid significant effects. The Inspectorate is unclear which measures within the Initial Outline CoCP the Applicant is relying upon, and also notes that impacts on hydromorphology during the construction phase have been scoped into the Hydrology and Land Drainage chapter (paragraph 12.9.7 of the Scoping Report). As such, the Inspectorate does not agree sufficient information has been provided at this stage to demonstrate that significant effects are not likely and considers this matter should be scoped in.</i>	Hydrological changes in surface water during construction is considered within Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision C) .
Para 8.9.23	Hydrological changes in surface water – operation (inc. maintenance)	<i>The Inspectorate agrees that given the nature of the development, significant effects on biodiversity receptors during operation are unlikely and therefore agrees this matter can be scoped out of the ES.</i>	Noted.
Paras 8.9.26 to 8.9.27	Introduction and/ or spread of Invasive Non-Native Species (INNS) - construction and operation (inc. maintenance)	<i>Whilst the Inspectorate agrees that the effects of INNS are unlikely to be significant with the proposed control measures in place, this cannot be confirmed until an up-to-date baseline position is known. This matter should therefore be scoped into the ES where significant effects are considered likely to occur following confirmation of the baseline position.</i>	Surveys have recorded the presence of INNS. Details are provided within Appendix 8.1 Habitats Report (document reference 6.8.A1) (Revision C) and an assessment is provided within Chapter 8: Ecology and

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
			Biodiversity (document reference 6.8) <u>(Revision C)</u> .
Para 8.10.15	Biodiversity receptors of less than 'Local' importance	<i>The Inspectorate agrees that impacts on biodiversity receptors of less than 'Local' importance can be scoped out of the ES.</i>	Noted.
Table 8.9	Norfolk Valley Fens Special Area of Conservation (SAC) – operation (inc. maintenance)	<i>Table 8.9 (page 105) has duplicate entries for this site, with the first scoping in impacts and the second scoping them out. The Inspectorate assumes the first row entry is a typographical error and notes the commentary in the second row entry that suggests there are no perceivable operational impact pathways on the Norfolk Valley Fens SAC. Table 8.3 states that the site is located 0.18km south-east of the Scoping Report Corridor. Noting the qualifying features of the Norfolk Valley Fens SAC and the lack of perceivable impact pathways during operation, the Inspectorate is content this matter can be scoped out of the ES. This does not preclude any assessment required under the Conservation of Habitats and Species Regulations 2017.</i>	Noted.
Table 8.9	Redgrave and South Lopham Fens Ramsar site and Waveney and Little Ouse Valley Fens SAC – construction and operation (inc. maintenance)	<i>The Scoping Report states that these designated sites are located 1.84km and 1.87km west of the Scoping Report Corridor, respectively. Noting the qualifying features of these sites and the lack of perceivable impact pathways, the Inspectorate is content these matters can be scoped out of the ES. This does not preclude any assessment required under the Conservation of Habitats and Species Regulations 2017.</i>	Noted.

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
Table 8.9 and Appendix E	National and local (statutory) sites designated for biodiversity – operation (inc. maintenance)	<i>The Inspectorate notes that some of the national and local sites identified in Appendix E are located within the Scoping Report Corridor. However, it is content that there are no perceivable impact pathways to the majority of these sites during operation and therefore agrees this matter can be scoped out of the ES subject to the exceptions below. The Inspectorate notes that Mucking Flats and Marshes Site of Special Scientific Interest (SSSI) and South Thames Estuary and Marshes SSSI are located 0.34km east and 1.98km south of the Scoping Report Corridor, respectively. Both sites have ornithological interest features. At this stage, insufficient information has been provided to confirm that likely significant effects from collision mortality with OHLs can be excluded. The Inspectorate considers that operational phase impacts on the national sites which underly European sites scoped in for operation (i.e. Stour and Orwell Estuaries Ramsar and SPA, and Thames Estuary and Marshes Ramsar and SPA) should be scoped in, in line with the internationally designated sites.</i>	Operation (and maintenance) effects on Mucking Flats and Marshes SSSI and South Thames Estuary and Marshes SSSI which underpin part of the Thames Estuary and Marshes SPA and Ramsar site together with national sites (where relevant) that underpin the Stour and Orwell Estuaries SPA and Ramsar site are assessed in Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision C) .
Table 8.9	Operational impacts (inc. maintenance) on: 1. Ancient woodland; 2. Habitats of Principal Importance in England (HPIE); 3. 'Important'	<i>The Scoping Report states that there are no perceivable pathways to impact these biodiversity receptors during operation. Subject to previous comments about consideration of operational stage effects arising from activities during construction, the Inspectorate is content that impacts during operation are unlikely to result in significant effects; therefore these matters can be scoped out of the ES.</i>	Noted.

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
	hedgerows'; 4. Vascular and nonvascular plants, fungi and INNS; 5. Protected species (fish, invertebrates, reptiles; breeding birds; badgers; hazel dormouse; otter; water vole; white-clawed crayfish; and amphibians (excluding GCN).		
Table 8.9	Groundwater Dependent Terrestrial Ecosystems (GWTDEs) – operation (inc. maintenance)	<i>Table 8.9 states that there are no perceivable pathways to impact GWTDEs during operation. This conflicts with paragraph 8.9.24 of the Scoping Report which identifies the potential for direct or indirect effects on GWTDEs, including wetlands, fens and wet woodland. The Inspectorate does not agree this matter can be scoped out of the ES.</i>	Potential effects during operation (and maintenance) on GWTDEs are presented in Chapter 8: Ecology and Biodiversity (document reference 6.8) <u>(Revision C)</u> .
Table 8.9	Other notable mammals (brown hare (<i>Lepus europaeus</i>), hedgehog	<i>The Scoping Report acknowledges the likely presence of these species within the Scoping Report Corridor and that negative impacts could occur. However, it anticipates impacts during construction and operation to be largely temporary and that habitats would be reinstated to equal or</i>	Effects on other notable mammals (brown hare, hedgehog, and harvest mouse) during construction and operation (and maintenance)

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
	(<i>Erinaceus europaeus</i>), and harvest mouse (<i>Micromys minutus</i>) – construction and operation (inc. maintenance)	<i>better condition, therefore impacts would not be significant. On the basis that potential negative impacts have been identified, the Inspectorate does not agree that this matter can be scoped out. Reinstatement of habitats is not sufficient justification to scope out the matter as this does not enable the decision maker to understand the potential impact on these species prior to reinstatement. Any likely significant effects on these species should be assessed within the ES (or example habitat loss, fragmentation and disturbance).</i>	have been scoped into the ES together with Species of Principal Importance (NERC Act 2006). Baseline information is presented in Appendix 8.14: Species of Principal Importance Report (document reference 6.8.A14) (Revision B) and the assessment is presented in Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision C) .
Appendix F	Invertebrate surveys	<i>The Inspectorate is content that large populations, or presence of protected invertebrates and/ or notable invertebrate assemblages would be restricted to distinct areas/ habitats that would be identified during the preliminary assessment. As such, it agrees that invertebrate surveys are unlikely to be required, but is reassured that targeted surveys would be undertaken subject to agreement with consultees (if the potential for a significant negative effect on invertebrates is identified in particular locations).</i>	A targeted approach to invertebrate surveys has been undertaken in 2024 in line with the methodology agreed with Natural England. Findings are reported within Appendix 8.5: Terrestrial Invertebrate Report (document reference 6.8.A5) (Revision B) and the assessment is presented in Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision C) .
Contaminated Land, Geology and Hydrogeology			
Para 9.9.2 and Table 9.7	Geohazards and ground instability – construction and	<i>On the basis that geohazards and ground instability would be considered during the engineering design of the</i>	Noted.

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
	operation (inc. maintenance)	<i>Proposed Development, the Inspectorate is in agreement that this matter can be scoped out of the ES.</i>	
Para 9.9.3 and Table 9.7	Geological SSSIs – construction and operation (inc. maintenance)	<i>NE has confirmed that Newney Green Pit SSSI is a site of geological interest located within the route corridor. On this basis, the Inspectorate does not agree that this matter can be scoped out. Any likely significant effects on the Newney Green Pit SSSI should be assessed within the ES.</i>	The design presented within Chapter 4: Project Description (document reference 6.4) (Revision B) does not affect this site and therefore it has not been included within the baseline within Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9) (Revision B) .
Para 9.9.8 and Table 9.7	Disturbance and mobilisation of existing contaminants – operation (inc. maintenance)	<i>The Inspectorate considers that significant effects from the disturbance and mobilisation of existing contamination during the operational phase are unlikely and agrees that this matter can be scoped out.</i>	Noted.
Para 9.9.9 and Table 9.7	Discovery of unexpected contaminants – construction and operation (inc. maintenance)	<i>The Scoping Report states that the risk from the discovery of unexpected contamination during construction would be mitigated by measures to be set out in the Outline CoCP; the Inspectorate notes that the Initial Outline CoCP proposes a protocol for dealing with unexpected contamination. Given the nature of the operational activities, the Inspectorate considers it unlikely that unexpected contaminants would be discovered. The Inspectorate is in agreement that these matters can be scoped out of the ES.</i>	Noted.

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
Para 9.9.10 and Table 9.7	Introduction of new contamination – construction and operation (inc. maintenance)	<i>The Inspectorate notes that the Outline CoCP would contain measures to reduce the risk of pollution, and for operation, standard control measures and best practice would be implemented resulting in a low risk of likely significant effects. However, the Environment Agency has highlighted recent problems with breakouts from HDD works under estuaries and inland alluvial soils. As the exact locations and designs for watercourse crossings are yet to be determined, the Inspectorate considers it premature to scope out this matter in respect of trenchless crossings. Any likely significant effects should be assessed within the ES.</i>	Introduction of new contamination during construction (as well as operation and maintenance) is assessed within Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9) (Revision B) .
Para 9.9.13 and Table 9.7	Dewatering – operation (inc. maintenance)	<i>On the basis that dewatering would not be required during operation, the Inspectorate agrees that this matter can be scoped out of the assessment. Should this position change during further design work, the ES should assess any likely significant effects from dewatering.</i>	Noted.
Para 9.9.14 and Table 9.7	Discharge of water – construction and operation (inc. maintenance)	<i>As noted above, the Scoping Report states at paragraph 9.9.13 that dewatering would not be required during operation. However, paragraph 9.9.14 refers to both construction and operation stages, stating that any discharges of pumped groundwater would be managed in accordance with relevant permits and agreements with the relevant authorities. The Inspectorate is in agreement that this matter can be scoped out of the ES on this basis.</i>	Noted.
Para 9.9.16 and Table 9.7	Connection of aquifer units – operation (inc. maintenance)	<i>Assuming there would be no works that would have the potential to create new connections between aquifers during operation and maintenance, the Inspectorate is in agreement that this matter can be scoped out of the ES.</i>	Noted.

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
Paras 9.9.17 to 9.9.20	Groundwater flow – construction and operation (inc. maintenance)	<i>The Inspectorate acknowledges that the overall dimensions of any foundations and cable ducts are small compared to the groundwater body as a whole. However, the Inspectorate does not consider that sufficient information has been presented in the Scoping Report to conclude that excavations or installation of new structures would not give rise to significant effects. The Inspectorate also notes there is an identified interrelationship between this matter and Chapter 11 (Historic Environment) as stated in paragraph 11.1.2 of the Scoping Report and specifically that paragraph 11.9.6 identifies potential impacts on archaeological remains as a result of changes in groundwater flow and quality. The Inspectorate is therefore not in a position to scope this matter out of the ES. Impacts to groundwater flow, including impacts on archaeological remains, should be assessed in the ES where significant effects are likely.</i>	Likely significant effects on groundwater flow and quality is assessed within Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9) (Revision B) and Chapter 11: Historic Environment (document reference 6.11) (Revision D) .

Health and Wellbeing

Paras 10.1.5, 10.10.2 to 10.10.6 and Table 10.2	Health related environmental change – construction and operation (inc. maintenance)	<i>The Scoping Report notes that likely significant effects from contributory factors would be considered by other environmental chapters; namely air quality, noise and vibration, geology and hydrogeology, traffic and transport. A discrete Health and Wellbeing chapter is therefore not proposed within the ES, although a specific section on health and wellbeing is proposed within Chapter 17: Cumulative Effects, as part of the intra-project cumulative effects assessment. The Inspectorate considers that a separate ES chapter covering Health and Wellbeing is required to ensure that the overall impacts of the scheme are not overlooked. Consideration should be given to direct and indirect impacts to both physical and mental health of</i>	Chapter 10: Health and Wellbeing (document reference 6.10) (Revision C) has been produced in line with the IEMA guidance on health in EIA (IEMA, 2022). The chapter summarises the findings of other environmental chapters on human health, taking account of vulnerable populations. It also considers direct and indirect effects to both physical and mental health.
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Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
		<i>receptors, as well as the potential for particular effects on any vulnerable populations. However, the ES should avoid duplication of assessment and, where relevant, the Health and Wellbeing aspect chapter should cross refer to information contained in other aspect chapters. The Health and Wellbeing chapter should take into account recent guidance such as the Institute of Environmental Management and Assessment (IEMA) 2022 guidance 'Determining Significance For Human Health In Environmental Impact Assessment'.</i>	
Para 10.10.11 and Table 10.2	EMFs – construction	<i>The Inspectorate agrees that an assessment of EMFs during construction can be scoped out on the basis that they are associated with power distribution.</i>	Noted.
Para 10.10.12 and Table 10.2	EMFs – operation (inc. maintenance)	<i>On the basis that the Proposed Development would be designed in accordance with cited Government guidance and precautionary policies (and that a compliance report will be submitted with the application for development consent), the Inspectorate agrees that an assessment of effects from EMFs during operation can be scoped out of the ES. However, the Inspectorate considers that the ES should contain a summary of the compliance report.</i>	Noted.
Historic Environment			
Para 11.9.8 and Table 11.8	Physical impacts on archaeological remains – operation (inc. maintenance)	<i>The Scoping Report states that no physical impacts on archaeological remains are anticipated during operation of the Proposed Development. On the basis that maintenance or repairs on subsurface features would be restricted to areas previously disturbed and mitigated during construction and that this commitment is secured through the dDCO (or other legal mechanism), the Inspectorate considers that</i>	Noted.

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
		<i>significant effects are unlikely to occur. Physical impacts on archaeological remains during operation (including maintenance) can be scoped out of the ES.</i>	
Paras 11.9.10 and 11.9.11 and Table 11.8	Direct physical impacts and indirect physical impacts (from vibration or subsidence) on designated and non-designated historic buildings – construction and operation (inc. maintenance)	<i>On the basis that the Proposed Development is routed to avoid direct physical impacts on historic buildings, the Inspectorate agrees that significant effects are unlikely to occur. Direct physical impacts on designated and non-designated historic buildings during construction and operation (including maintenance) can be scoped out of the ES. In terms of indirect physical impacts, the Scoping Report states that no adverse impacts through vibration or subsidence caused by changes to groundwater are anticipated. The detailed route alignment and locations of associated infrastructure are yet to be defined. As a consequence, the Inspectorate does not agree that indirect physical impacts through vibration or subsidence (during construction and operation including maintenance) can be scoped out of the ES at this time.</i>	Indirect effects as a result of vibration and subsidence are assessed within Chapter 11: Historic Environment (document reference 6.11) (Revision D) .
Para 11.9.16	Physical impacts on designated historic landscapes (including registered parks and gardens) and non-designated historic landscapes – operation (inc. maintenance)	<i>The Inspectorate agrees that physical impacts on designated and non-designated historic landscapes during operation (including maintenance) are not likely to result in significant effects and can be scoped out of the ES. However, where there is permanent loss of vegetation or other features that contribute to the historic landscape character arising from maintenance activities for the Proposed Development, consideration of this matter should be scoped into the assessment where significant effects are likely to occur.</i>	Vegetation loss associated with historic landscapes during operation (and maintenance) is assessed within Chapter 11: Historic Environment (document reference 6.11) (Revision D) .

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
Paras 11.10.11 and 11.10.12	Areas from the walkover survey	<i>The Inspectorate is content that a walkover survey is not required for the areas described within the five bullet points listed under 'Areas scoped out of survey'. The areas scoped in for walkover survey should include military remains, including former airfields and pillboxes. The ES should describe any limitations to the walkover survey relating to land access and explain how these have been addressed.</i>	The results of the walkover survey, including justification for any scoped-in areas that were not surveyed are provided in Appendix 11.1: Historic Environment Desk-Based Assessment (document reference 6.11.A1) (Revision C) .
Para 11.10.17	Impacts of the setting of listed buildings and non-designated historic buildings located beyond the 250 m Study Area and outside the Zone of Theoretical Visibility (ZTV)	<i>The Scoping Report states that for listed buildings and non-designated historic buildings located beyond the 250m study area that are outside the ZTV, a lack of visibility of the Proposed Development would mean that no change to setting would occur. As set out in Section 3.11 below (Landscape and Visual), the Inspectorate considers that the study area and ZTV should represent the extent of the likely impacts from all phases of the Proposed Development, including construction, maintenance and decommissioning. The methodology for the ZTV should be agreed with the relevant local authorities. The Inspectorate agrees that any impacts on the setting of listed buildings and non-designated historic buildings located beyond the 250m study area and outside of the ZTV are not likely to result in significant effects. This matter can be scoped out of the ES. The Inspectorate understands from paragraph 11.3.1 of the Scoping Report that listed buildings within the 2km and 3km study areas and ZTV will be considered in the assessment.</i>	The methodology to develop the ZTV has been issued and discussed with Local Planning Authorities, Dedham Vale National Landscape (an AONB) officers and Natural England and no comments have been received that disagree with the methodology.
Paras 11.10.17 and 11.10.18	Impacts on the setting of listed buildings and non-designated historic	<i>Paragraph 11.10.18 of the Scoping Report states that the assumptions listed would be '...kept under review to establish whether there is a need to alter the scoping out thresholds and approach taken'. Based on this statement</i>	The proposed methodology has been agreed with stakeholders through consultation. Further details are included within

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
	buildings as set out in bullet points 2 to 7 in paragraph 11.10.17 of the Scoping Report	<i>and the limited information and justification provided in terms of individual heritage assets, the Inspectorate is not in a position to scope these matters out of the ES at this stage without further consideration of the significance of heritage assets and the contributions made by their setting on a case-by-case basis.</i>	Chapter 11: Historic Environment (document reference 6.11) (Revision D) .
Table 11.8	Impacts on inter-tidal and marine archaeology – construction and operation (inc. maintenance)	<i>On the basis that the Proposed Development would not interact with intertidal or marine areas, the Inspectorate agrees that this matter can be scoped out of the ES.</i>	Noted.
Hydrology, Land Drainage and Flood Risk			
Para 12.9.4 and Table 12.4	Water quality – operation (inc. maintenance)	<i>The Inspectorate agrees that pollution impact pathways to surface watercourses during operation would be limited as land would be reinstated following construction and there would be no operational discharges to surface watercourses, other than surface water drainage. On this basis, the Inspectorate agrees this matter can be scoped out subject to confirmation that there are no issues arising from aquifer connections created during construction that could have the potential to impact on surface water bodies during operation. Table 12.4 further justifies scoping out this matter on the basis that surface water drainage from operational infrastructure would be managed using suitable Sustainable Drainage Systems (SuDS). Details of the SuDS should be provided within the ES as there is no previous mention of them within the Scoping Report.</i>	Noted. Details of SuDS are provided in Annex C of the FRA (document reference 7.9) and commitments to providing SuDS to manage surface water runoff during construction and operation (and maintenance) of the Project are included in the Outline CoCP (document reference 7.2) (Revision G) .

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
Para 12.9.5 and Table 12.4	Surface water interests (surface water abstractions and discharges) – construction	<i>The Inspectorate notes that the Proposed Development may not require large scale consumptive water uses at any single location. However, given the size of the Proposed Development, the need for welfare facilities and potential water requirements for mixing of drilling fluids, it considers that insufficient information has been provided to demonstrate that significant effects would not occur. The Inspectorate also notes that an abstraction licence would be applied for, if required, for construction activities. As such, the Inspectorate does not agree that this matter can be scoped out at this stage</i>	Details are provided within the assessment presented in Chapter 12: Hydrology and Land Drainage (document reference 6.12) (Revision B) . The assessment explains why there would be no new temporary or permanent abstractions and that the water supply needs of the Project during construction would be sourced either from mains water supply or in remote locations, where this option may not be available, water would be tankered in.
Para 12.9.6 and Table 12.4	Surface water interests (surface water abstractions and discharges) – operation (inc. maintenance)	<i>Given the nature of the Proposed Development, the Inspectorate is content that there would be no large scale consumptive water uses or discharges during the operational phase. The Inspectorate agrees this matter can be scoped out of the ES.</i>	Noted.
Para 12.9.8 and Table 12.4	Hydromorphology – operation (inc. maintenance)	<i>On the basis that the design of any crossing points would be discussed with the Environment Agency and Lead Local Flood Authorities (LLFAs) and that watercourses would be reinstated following construction; the Inspectorate agrees that significant effects are unlikely and that this matter can be scoped out of the ES. However, the ES should confirm the measures that would be in place to ensure the reinstated condition of any affected watercourses is either the same as or better than their pre-construction condition.</i>	The Outline CoCP (document reference 7.2) (Revision G) contains details of commitments to reinstate watercourses effected by construction, to achieve the same or better than pre-construction conditions.

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
Para 12.9.12	Flood risk to and from other sources (sewers and reservoirs) – construction and operation (inc. maintenance)	<i>The Inspectorate agrees that the Proposed Development would be of low vulnerability to flooding from sewers and reservoirs and that this matter can be scoped out of the ES.</i>	Noted.
Landscape and Visual			
Paras 13.9.6, 13.9.11 and 13.9.19 and Table 13.4	Night-time effects on designated landscapes, landscape character and visual amenity – construction and operation (inc. maintenance)	<i>The Scoping Report proposes that measures in the Initial Outline CoCP would avoid any significant effects from night-time lighting during construction. The Scoping Report states that operational (including maintenance) lighting would be located at the proposed substation and CSECs and would be designed to minimise intensity and light spill as far as practicable. Given the limited scale of these works, the Inspectorate agrees that it is unlikely that significant effects would occur from operational lighting; however, there is insufficient information regarding the type, location and hours of lighting at this stage to confirm this conclusion. In the absence of a defined location for the proposed new substation and CSECs, the Inspectorate does not agree that this matter can be scoped out. Therefore, night-time effects on designated landscapes, landscape character and visual amenity (during construction and operation (inc. maintenance) should be assessed in the ES where significant effects are likely.</i>	Night-time effects on designated landscapes, landscape character and visual amenity during construction and operation (and maintenance) are assessed in Chapter 13: Landscape and Visual (application document 6.13) (Revision B) .

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
Para 13.9.12 and Table 13.4	Effects on visual receptors located outside the ZTV - construction and operation (inc. maintenance)	<i>The Scoping Report explains that the identification of visual receptors would be informed by ZTV mapping, ground truthed by field work. The Scoping Report states that visual receptors located wholly outside the ZTV are highly unlikely to have views of the Proposed Development. The Inspectorate considers that the study area and ZTV should represent the extent of the likely impacts from all phases of the Proposed Development (including construction, maintenance and decommissioning) and should encompass long views from within the Dedham Vale National Landscape (an AONB). The Applicant should make effort to agree the methodology for the ZTV with relevant consultation bodies including local authorities. On this basis, Inspectorate agrees that any impacts on visual receptors located outside of the ZTV, once ground truthed by field work, are unlikely to result in significant effects. This matter can be scoped out of the ES.</i>	The methodology to develop the ZTV has been issued and discussed with Local Planning Authorities, Dedham Vale National Landscape (an AONB) officers and Natural England and no comments have been received that disagree with the methodology.
Para 13.9.13 and Table 13.4	Effects on private views for individual properties – construction and operation (inc. maintenance)	<i>The Scoping Report explains that the routing process has sought to avoid residential areas as far as practicable. Effects on the visual amenity of local residents would be considered as part of the assessment of visual effects on settlements and communities, from representative viewpoints at publicly accessible places. Appendix H of the Scoping Report sets out 41 indicative preliminary viewpoints, including representative viewpoints. The Inspectorate considers this is a relatively low number, given the nature and scale of the Proposed Development. There is also a lack of viewpoints to support the assessment of impacts on heritage assets. The number and location of viewpoints (representative, specific and illustrative), as well</i>	National Grid has sought to agree landscape and heritage viewpoints with relevant stakeholders. There are 204 landscape viewpoints and 46 heritage viewpoints. Further details of engagement to agree them are presented in Chapter 13: Landscape and Visual (document reference 6.13) (Revision B) and Chapter 11: Historic Environment (document reference 6.11) (Revision D) .

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
		<i>as the locations for wireframes and photomontages, should be agreed with relevant consultation bodies including local authorities, Historic England, NE and the National Landscape (AONB) Partnership and be in line with relevant guidance, where possible. On this basis, the Inspectorate agree that effects on private views for individual properties can be scoped out of the ES.</i>	Locations of viewpoints are also shown on Figure 13.7: Visual Receptors and Viewpoints (document reference 6.13.F7) (Revision D) and Figure 11.5 Historic Environment and LVIA Viewpoint Locations (document reference 6.11.F5).
Para 13.9.18 and Table 13.4	Visual effects on rail travellers - construction and operation (inc. maintenance)	<i>Taking account of the nature and characteristics of the Proposed Development, the Inspectorate agrees that any visual impacts on rail travellers (during construction and operation including maintenance) are not likely to result in significant effects and that this matter can be scoped out of the ES.</i>	Noted.
Noise and Vibration			
Para 14.9.7	Vibration effects on structures - construction	<i>Vibration effects on structures from construction activities are proposed to be scoped out of the ES on the basis that all such activities would be located sufficient distance away from structures to avoid significant impacts (i.e. >10m). Given that vibration effects are influenced by a range of factors including ground conditions and the precise nature of the works, the Inspectorate does not consider that it is appropriate to apply an arbitrary distance threshold to consideration of vibration. The ES should assess the potential for peak particle velocity from construction works to exceed thresholds set out in relevant British Standards e.g. BS7385-2:1993 Evaluation and measurement for vibration in buildings. The assessment should give particular consideration to effects on heritage assets.</i>	An assessment of potential construction vibration effects is provided within Chapter 14: Noise and Vibration (document reference 6.14) (Revision B) .

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
Para 14.9.10	Vibration effects on the public highway from traffic - construction	<i>The Scoping Report states that vibration is only generated when there are irregularities in the road surface. The Inspectorate considers it reasonable to assume that public highways road surface would be maintained and therefore significant effects are unlikely to occur. The Inspectorate agrees this matter can be scoped out.</i>	Noted.
Para 14.9.11	Noise effects from substations – operation (inc. maintenance)	<i>The Scoping Report proposes to scope out operational noise impacts from the proposed new substation and extensions to the existing substations on the basis that they will include noise mitigation by design. Paragraph 14.8.5 of the Scoping Report identifies these as possibly including ‘...plant selection, siting, screening and enclosures, as appropriate’. Paragraph 14.9.11 also states that these works would be subject to separate local planning applications, however these works are started to form part of the Proposed Development at paragraphs 1.1.7, 4.1.2, 4.4.9, 4.4.13 and 4.4.14. In the absence of information on the specific design measures, and as the location of the proposed new substation is yet to be determined, the Inspectorate does not consider sufficient information has been presented to provide confidence that significant effects would not occur. An assessment of operational noise consistent with the requirements of BS 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound should be provided.</i>	An assessment of operational noise effects from the proposed new EACN Substation is presented in Appendix 14.3: EACN Substation Operational Noise Assessment (document reference 6.14.A3) (Revision B). An assessment of operational noise effects from the proposed new Tilbury North Substation is presented in Appendix 14.5: Tilbury North Substation Operational Noise Assessment (document reference 6.14.A5) (Revision B). Operational noise from the substation extensions at Norwich Main Substation and Bramford Substation once operational would comprise only new connections with no new ‘noisy’ plant proposed to be installed (e.g. Super Grid Transformers or shunt reactors), as reported

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
			within Chapter 14: Noise and Vibration (document reference 6.14) (Revision B) .
Para 14.9.12	Noise effects from overhead lines – operation (inc. maintenance)	<i>The Scoping Report states that the Proposed Development would use 'triple araucaria' conductors. The Inspectorate agrees that operational noise generated from OHLs and pylons is unlikely to give rise to significant effects and is therefore content to scope this matter out on the basis that this conductor type is used. The Inspectorate welcomes that the Applicant would consider an assessment within the ES should alternative designs be employed.</i>	Noted.
Para 14.9.13	Noise effects from fittings (e.g., insulators, dampers, spacer and clamps) – operation (inc. maintenance)	<i>The Inspectorate is content that pylon fittings designed to National Grid Technical Specifications are unlikely to result in significant noise effects and therefore this matter can be scoped out of the ES.</i>	Noted.
Para 14.9.15	Noise effects from CSE compounds – operation (inc. maintenance)	<i>The Scoping Report proposes to scope out the effects of operational noise generated from CSECs on the basis that the source of the noise is the same as that of OHLs. The Inspectorate agrees that operational noise generated from CSECs is unlikely to give rise to significant effects and is therefore content to scope this matter out.</i>	Noted.
Para 14.9.16	Noise effects from underground cables – operation (inc. maintenance)	<i>The Inspectorate agrees that operation of the underground cables is unlikely to generate noise on a scale that would result in significant effects. This matter can therefore be scoped out.</i>	Noted.

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
Para 14.9.17	Vibration – operation (inc. maintenance)	<i>The effects of operational vibration are proposed to be scoped out of the ES on the basis that all plant with moving parts capable of generating vibration is to be mounted on anti-vibration mounts. The Inspectorate does not consider sufficient information has been presented at this stage to provide confidence that significant effects would not occur. The ES should provide sufficient information regarding the design specifications to demonstrate that significant vibration effects will not arise.</i>	Transformers and other electrical equipment vibrate at twice power frequency i.e., 100 Hz and associated harmonic frequencies e.g. 200 Hz, 300 Hz. However, the effects are negligible and are countered by the use of industry standard mitigation techniques such as the use of vibration isolation pads to prevent transmission of ground borne vibration. Ground borne vibration has never been raised as a significant issue or resulted in any complaints at any other operational National Grid substation sites.
Para 14.9.18	Maintenance activities	<i>The Inspectorate agrees that noise and vibration from short term maintenance activities can be scoped out of the ES. However, the ES should consider the potential that more substantial activity is required as part of maintenance, eg replacement of components of the Proposed Development, which would be more akin to the impacts described during the construction stage. The ES should include an assessment of any likely significant effects.</i>	Potential noise and vibration effects from substantial maintenance activities is considered within Chapter 14: Noise and Vibration (document reference 6.14) (Revision B) .
Para 14.10.8	Baseline noise surveys	<i>The Scoping Report states that baseline surveys would only be undertaken where there is a justifiable reason for a particular Noise Sensitive Receptor (NSR). The Inspectorate is content with this approach but considers that baseline noise surveys should be carried out at proposed substation</i>	Baseline noise surveys undertaken for the Five Estuaries offshore wind farm project have been used on the Project to establish the existing noise

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
		<i>locations consistent with the requirements of BS 7445-1:2003 Description and measurement of environmental noise: Guide to quantities and procedures. The Applicant should seek to agree the need for, and locations of, any such NSRs for which baseline surveys are considered necessary with relevant local authorities.</i>	environment. This has been agreed with Tendring District Council. Additionally, baseline noise surveys have been undertaken to inform the assessment of operational noise from the proposed Tilbury North Substation. Further detail is provided within Chapter 14: Noise and Vibration (document reference 6.14) (Revision B) .
Table 14.3	Lowest Observed Adverse Effect Level (LOAEL) for night-time effects	<i>The Inspectorate assumes that the night-time LOAEL level identified in Table 14.3 of 50dB LAeqT is a typographic area, since the Significant Observed Adverse Effect Level (SOAEL) threshold is set at 45dB LAeqT. The LOAEL value should be set with reference to the SOAEL value and informed by reference values for daytime resting.</i>	The LOAEL for night-time construction works is 40 dB LAeqT.
Socio-economics, Recreation and Tourism			
Para 15.8.3 and Table 15.9	Financial effects on individual businesses - construction	<i>The Inspectorate agrees this matter can be scoped out on the basis that this may be the subject of landowner negotiations and may result in compensation payments to offset effects. The Inspectorate also notes that construction phase impacts on farm businesses would be assessed within the agriculture and soils assessment.</i>	Noted.
Para 15.8.3 and Table 15.9	Effects on property values – construction and	<i>The Inspectorate notes that construction activities would be transitory and therefore does not consider that significant effects are likely; effects on property values during construction can be scoped out of the ES. With regards to operation, the Scoping Report does not provide a detailed</i>	Further detail is provided in Chapter 15: Socio-economics, Recreation and Tourism

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
	operation (inc. maintenance)	<i>route or confirm the likely receptors and consequences of the impact. The Inspectorate does not consider there is sufficient information to rule out the potential for significant effects. An assessment of likely significant effects should be provided.</i>	(document reference 6.15) (Revision C) .
Para 15.8.4 and Table 15.9	Employment and economy – operation (inc. maintenance)	<i>The Inspectorate agrees that this matter can be scoped out of the ES on the basis that the Proposed Development would not generate a significant number of additional jobs, and that significant indirect employment i.e., to supply chains is unlikely.</i>	Noted.
Para 15.8.5 and Table 15.9	Effects on business's ability to function – operation (inc. maintenance)	<i>In the absence of a detailed route and confirmation of likely receptors, the Inspectorate does not consider there is sufficient information to rule out the potential for significant effects at this stage. An assessment of likely significant effects should be provided.</i> <i>The Inspectorate's comments in respect of land in agricultural use are provided in Section 3.4 of this Scoping Opinion.</i>	Effects on businesses that fall within 3 km of the Order Limits where visual effects are an economic consideration during operation (and maintenance) are assessed within Chapter 15: Socio-economics, Recreation and Tourism (document reference 6.15) (Revision C) .
Paras 15.8.9 to 15.8.10 and Table 15.9	Community facilities – operation (inc. maintenance)	<i>In the absence of a detailed route and confirmation of likely receptors, the Inspectorate does not consider there is sufficient information to rule out the potential for significant effects at this stage. An assessment of likely significant effects should be provided.</i>	Chapter 15: Socio-economics, Recreation and Tourism (document reference 6.15) (Revision C) provides an assessment of community facilities within the Order Limits during operation (and maintenance).

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
Para 15.8.14 and Table 15.9	Tourism accommodation – operation (inc. maintenance)	<i>The Inspectorate considers that significant effects on tourism accommodation from routine inspection and maintenance workers are unlikely. This matter can therefore be scoped out of the ES. However, the Inspectorate considers there may be potential for tourism accommodation to be affected by the presence of OHL infrastructure where it is in very close proximity to receptors. In the absence of a detailed route and confirmation of likely receptors, the Inspectorate does not consider there is sufficient information to rule out the potential for significant effects at this stage - an assessment of likely significant effects should be provided.</i>	Tourism accommodation affected by the presence of overhead line infrastructure is considered within Chapter 15: Socio-economics, Recreational and Tourism (document reference 6.15) (Revision C) . The Inspectorate's concern about the overhead line infrastructure being in 'very close proximity' to receptors is covered in Chapter 13: Landscape and Visual (document reference 6.13) (Revision B) .
Traffic and Transport			
Para 16.9.6 to 16.9.7	Traffic and transport effects – operation (inc. maintenance)	<i>The Inspectorate agrees that the number of vehicle trips generated by the operation and maintenance of the Proposed Development are unlikely to result in significant effects, it is therefore considered acceptable to scope this matter out. The ES description of the development should clearly set out the likely number and type of operation and maintenance vehicles.</i>	Noted.
Cumulative Effects			
Para 17.2.3	Intra-project cumulative effects - receptors with negligible effects	<i>The Inspectorate agrees that where a negligible effect on a receptor has been concluded as a result of the Proposed Development alone, the receptor can be scoped out of the intra-project cumulative effects assessment.</i>	Noted.

Reference from Scoping Opinion	Aspect	Planning Inspectorate's Comment in the Scoping Opinion	Project Response
Para 17.3.8	Inter-project cumulative effects - minor planning applications	<i>The Inspectorate considers that small scale developments are unlikely to give rise to significant cumulative environment effects over and above the Proposed Development in isolation and agrees that this matter can be scoped out of further consideration.</i>	Noted.

Abbreviations

Abbreviation	Full Reference
AONB	Area of Outstanding Natural Beauty
CoCP	Code of Construction Practice
CSE	Cable Sealing End
CTMP	Construction Traffic Management Plan
dDCO	Draft Development Consent Order
DCO	Development Consent Order
EACN	East Anglia Connection Node
EIA	Environmental Impact Assessment
EMF	Electric and Magnetic Field
ES	Environmental Statement
FRA	Flood Risk Assessment
GCN	Great Crested Newt
GHG	Greenhouse Gases
GWTDEs	Groundwater Dependent Terrestrial Ecosystems
IAQM	Institute of Air Quality Management
IEMA	Institute of Environmental Management and Assessment
INNS	Invasive Non-Native Species
LEMP	Landscape and Ecological Management Plan
LLFA	Lead Local Flood Authority
LOAEL	Lowest Observed Adverse Effect Level
LoD	Limits of Deviation
NERC	Natural Environment and Rural Communities
NETS	National Electricity Transmission System
PRoW	Public Right of Way
SAC	Special Area of Conservation
SLA	Special Landscape Area
SPA	Special Protection Area
SPZ	Source Protection Zone

Abbreviation	Full Reference
SuDs	Sustainable Drainage Systems
SSSI	Special Site of Scientific Interest
SQSS	Security and Quality of Supply Standard
WFD	Water Framework Directive
ZoI	Zone of Influence
ZTV	Zone of Theoretical Visibility

Glossary

Term	Description
Alignment	The proposed overhead line and underground cable route
Biodiversity	The variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems
Cable Sealing End	Structures used to transfer transmission circuits between underground cables and overhead lines
Cable Sealing End Compound	Electrical infrastructure used as the transition point between overhead lines and underground cables. A compound on the ground acts as the principal transition point
Code of Construction Practice	A code of construction practice (CoCP) sets out the standards and procedures to which a developer (and its contractors) must adhere in order to manage the potential effects of construction works
Construction Traffic Management Plan	Plan detailing the procedures, requirements and standards necessary for managing the traffic effects during construction of the Project so that safe, adequate and convenient facilities for local movements by all transport modes are maintained throughout the construction process
Contaminated Land	Land where a substance or contaminant which is in or under the land which has the potential to cause significant harm or the significant possibility of significant harm to human health, property or protected species or significant pollution or the significant possibility of significant pollution to controlled waters
Cumulative Effects	The assessment of the effect on the environment which results from the incremental effect of an action when added to other past, present or reasonably foreseeable actions regardless of what agency or person undertakes such actions. Cumulative effect impact can result from individually minor but collectively significant actions taking place over a period of time.
Development Consent Order	A statutory instrument which grants consents and other rights to build a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008
Electric and Magnetic Fields	All equipment that generates, distributes or uses electricity produces Electric and Magnetic Fields (EMF), and EMFs also occur naturally. Electric fields are created by differences in voltage: the higher the voltage, the stronger the resultant field. Magnetic fields are created when electric current flows: the greater the current, the stronger the magnetic field
Environmental Impact Assessment	An assessment of the likely effects of a development project on the environment, which is reported in an Environmental Statement that is publicised and consulted on and taken into account in the decision on whether a project should proceed

Term	Description
Environmental Statement	The main output from the EIA process, an ES is the report required to accompany an application for development consent (under the Infrastructure Planning (EIA) Regulations 2017) to inform public and stakeholder consultation and the decision on whether a project should be allowed to proceed. The EIA Regulations set out specific requirements for the contents of an ES for Nationally Significant Infrastructure Projects
Flood Risk Assessment	A flood risk assessment is an assessment of the risk of flooding, particularly in relation to residential, commercial and industrial land use. In England and Wales, the Environment Agency requires a Flood Risk Assessment (FRA) to be submitted alongside planning applications in areas that are known to be at risk of flooding
Greenhouse Gases	Greenhouse gases refer to a number of chemicals in the Earth's atmosphere such as carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O)
Habitats Regulation Assessment	The process by which plans and projects are assessed as to whether they are likely to have a significant effect on a European site either alone or in combination with other plans or projects, under the Conservation of Habitats and Species Regulations 2017, as amended
Limits of Deviation	LoD allow for adjustment to the final positioning of the permanent infrastructure for example to avoid localised constraints or unknown or unforeseeable issues that may arise. This could include, previously unidentified poor ground conditions may require a pylon to be moved slightly for geotechnical reasons, such as ground stability. The horizontal LoD define the parameters within which the position on the ground of proposed permanent infrastructure may deviate from the position shown on the plans. This applies to both linear (for example overhead line and underground cables) and non-linear (for example the EACN Substation and CSE compounds) proposed infrastructure. Vertical LoD limit the maximum vertical height, or the depth below ground, of any new infrastructure
Mitigation	The action of reducing the severity and magnitude of change (impact) to the environment. Measures to avoid, reduce, remedy or compensate for significant adverse effects
National Landscape (an Area of Outstanding Natural Beauty)	Formally designated under the National Parks and Access to the Countryside Act of 1949 to protect areas of the countryside of high scenic quality that cannot be selected for National Park status due to their lack of opportunities for outdoor recreation (an essential objective of National Parks).
Order Limits	The maximum extent of land within which the authorised development may take place
Overhead Line	Conductor (wire) carrying electric current, strung from pylon to pylon

Term	Description
Public Right of Way	A footpath, bridleway or byway accessible to all members of the public
Pylon	Structures that support the overhead line (conductors)
Receptor	The physical resource or user group that would respond to an effect e.g. somebody or something adversely affected by a pollutant.
Residual Effects	The consequence of an 'impact' of construction, operation and decommissioning of the Proposed Development after mitigation measures have been applied.
Scoping	Scoping is the process of determining the content and extent of matters that should be covered in the Environmental Impact Assessment
Scoping Report	Report determining the content and extent of matters that should be covered in the Environmental Impact Assessment
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptors to the specific type of change or development proposed and the value related to that receptor.
Significance	A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic
Species	A group of living organisms consisting of similar individuals capable of exchanging genes or interbreeding.
Substation	Substations are used to control the flow of power through the electricity system. They are also used to change (or transform) the voltage from a higher to lower voltage to allow it to be transmitted to local homes and businesses.
Transport Assessment	A TA is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport effects of the Project
Underground Cable	An insulated conductor carrying electric current designed for underground installation. Underground cables link together two Cable Sealing End compounds
Water Framework Directive	The Water Framework Directive (2000/60/EC) commits European Union member states to achieve good qualitative and quantitative status of all water bodies

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