Meridian Solar Farm

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Post-Submission Application Documents

8.24 Connection to the National Grid Weston Marsh Substation Note

APFP Regulation 5(2)(q)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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1. Introduction

1.1. Overview

1.1.1. This note has been produced in response to the Examining Authority's (ExA) procedural decision to request additional and updated evidence [PD-005] with regards to Work No. 14. The ExA refers to two scenarios for this area, one being a new overhead electric line (Scenario one) and the second being a new underground transmission electrical cable with associated permanent cable sealing end compounds (CSECs) (Scenario Two).

1.1.2. In its letter, the ExA requests further information in relation to the connection to the National Grid Weston Marsh substation:

- An update on any progress in the determination of the likelihood of scenario one or scenario two proceeding.
- A figure showing the proposed route of scenario two, including the locations of the CSECs.
- Clarification of any differences in the design principles used for the scenarios.
- A table detailing the differences in the design parameters and mitigation measures for the scenarios and how these would be secured.
- For scenario two, Tier 1 and Tier 3 visualisation, with photomontages, from representative viewpoints showing the effect of the cable sealing compounds required for the scenario.

1.1.3. The following sections respond to these requests in turn.

2. Connection to the National Grid Weston Marsh substation

2.1. Update on the likelihood of either scenario occurring

2.1.1. The Applicant's preferred design solution at Weston Marsh remains the above-ground arrangement that has been presented within the DCO Application (referred to by the ExA as "Scenario One", but which is referred to in the rest of this paper as the "Preferred Alignment"). This is considered by the Applicant to be the design which presents the most efficient and appropriate approach, provided it can be aligned with the final design of the National Grid Electricity Transmission (NGET) projects being brought forward in this area. This includes both the Grimsby to Walpole project (G2W) and the Weston Marsh to East Leicestershire project (WMEL).

2.1.2. Engagement undertaken in design workshops between the Applicant and NGET in November 2025 led to the Applicant refining its Preferred Alignment to present what it understood to be a workable route which could accommodate the Scheme and the G2W project. The Applicant proceeded to DCO submission on that basis. Provided that the Scheme and the NGET projects can align, the Applicant has assessed cumulative effects within the Environmental Statement, noting both of the NGET projects also deliver overhead lines.

2.1.3. However, flexibility has been retained near the proposed Weston Marsh B Substation within the area marked by Work No. 14 to allow different overhead line routes or an underground connection into the Weston Marsh B Substation, if determined to be necessary to coordinate with NGET's emerging infrastructure.

2.1.4. The Applicant seeks to clarify that any alternative overhead or underground routing through this area of Work No. 14 would not be limited to a single predefined "Scenario Two". Depending on future design development of NGET's G2W and WMEL projects, a range of alternative connection arrangements may be required, including overhead lines, underground cabling, or a combination of both. While the precise form of any alternative arrangement cannot currently be identified, all such arrangements would need to be delivered within the parameters assessed in the DCO Application.

2.1.5. Therefore, it remains the Applicant's view that this flexibility is necessary to ensure deliverability of the Scheme should changes occur to NGET's design of

the G2W and WMEL projects which would conflict with the Scheme. This is unlikely to be known until NGET's design for the G2W and WMEL projects has developed further, potentially post-consent.

2.1.6. It is noted, further to NGET's Relevant Representation [RR-138] and the discussion at ISH1 (refer to agenda item 6 within the **Written Summary of Oral Submissions at ISH1** (Doc Ref. 8.28)), that NGET has raised concerns with the Preferred Alignment, in respect of potential interactions with G2W and WMEL.

2.1.7. However, at this stage, NGET has not provided specific information to justify why the Scheme's design, including the Preferred Alignment within Work No. 14, is not feasible. The Applicant is ready and willing to engage with NGET, if it considers further optionality is required within the current Order Limits to ensure a design solution that can accommodate all three projects.

2.1.8. Otherwise, based on the Applicant's understanding of the NGET projects, including past design workshops held between the parties, the Applicant's Order Limits and Preferred Alignment provide appropriate space for all three projects to viably route through the area. The NGET projects are still at a pre-submission stage, and as such also retain ongoing flexibility to amend their design and/or Order Limits to ensure all three projects are compatible. The final exact alignment, including use of undergrounding if required, can be confirmed at detailed design. The protective provisions being progressed by the parties include cooperation provisions to ensure a workable alignment in detailed design.

2.2. Proposed Route of Scenario Two

2.2.1. Work No.14, as shown on the **Works Plans** [APP-010], has been included to provide flexibility in relation to the connection into the proposed NGET Weston Marsh B Substation, including alternative routeing and connection technologies, where required, to coordinate with NGET's emerging infrastructure proposals.

2.2.2. The Applicant is unable to provide a figure showing a route for "Scenario Two" or the locations of associated CSECs. This is because there is no fixed or defined alternative route. Rather, the flexibility within Work No. 14 is intended to accommodate a range of potential alternative connection arrangements that may be required in response to the evolving design of NGET's G2W and WMEL projects. This may include, for example:

a) Undergrounding all or part of the Scheme's grid connection within Work No. 14 next to an overhead line alignment of Grimsby to Walpole, in a similar route to the Preferred Alignment. This would require inclusion of a CSEC north of the A151 within the Work No. 14 area. It could require a further CSEC to the north of Wool Hall Farm to bring the grid connection back overhead in the approach to Weston Marsh Substation B. However, the second CSEC may not be required, if undergrounding all the way to Weston Marsh Substation B is deemed to be feasible and appropriate during detailed design.

b) The Scheme routing its grid connection on the western side of Work No. 14 (to the west of Wool Hall Farm), while G2W routes to the east.

c) Routing a small section of the Scheme's grid connection in Work No. 14 underground beneath the existing NGET 2WS overhead line should G2W not proceed with the decommissioning of the current line.

2.2.3. As the detailed design, alignment, extent and programme of the G2W and WMEL projects are still in the design development phase, the nature of any potential conflict with the Scheme are currently unknown. It is therefore not possible at this stage to identify a specific alternative route or the location of any CSECs that may be required.

2.2.4. Any alternative connection arrangement would be delivered within the parameters assessed as part of the DCO Application. This is outlined further below.

2.3. Design Principles, Parameters and Mitigation for Work No. 14 Area

2.3.1. The Design Principles applicable to the connection into the proposed Weston Marsh B Substation within the Work No. 14 area are as set out within Section 4.4 of the **Design Approach Document** [APP-268], together with the Holford Rules set out in Appendix 2 of that document. These principles apply to any configuration of overhead or underground grid connection within Work No. 14. The Applicant has not adopted separate design principles for different connection scenarios. This reflects the earlier explanation that specific scenarios with certain locations for overhead/underground features cannot be committed to at this stage, given the ongoing design development of G2W and WMEL.

2.3.2. The Preferred Alignment was developed having regard to the Design Principles set out in Section 4.4 of the **Design Approach Document** [APP-

268], together with the Holford Rules set out in Appendix 2 of that document.

2.3.3. Should any alternative connection arrangement be required within Work No. 14, the same principles and Holford Rules would continue to guide the detailed design process for an alternative route. Accordingly, there are no differences in the design principles that would apply should a different final connection alignment or technology be applied.

2.3.4. In addition to the Design Principles and Holford Rules, as described within the **Design Approach Document** [APP-268], the final design of the Work No. 14 area is governed by the Requirements of the **Draft DCO** (Doc Ref. 3.1 Rev 2), the **Design Parameters** (Doc Ref. 7.4 Rev 2) and the mitigation secured through the management plans submitted with the DCO Application (refer to **Environmental Mitigation and Commitments Register** (Doc Ref. 7.7 Rev 1) for a full account of the mitigation requirements and how they are secured). Access from the public highway to the Work No. 14 area would be in accordance with the **Streets, Rights of Way and Access Plans** [APP-015] regardless of the configuration of the grid connection.

2.3.5. Table 2-1 summarises the design parameters that apply to an overhead line, an underground cable and CSECs, in accordance with **Design Parameters** (Doc Ref. 7.4 Rev 2). As noted above, while the Preferred Alignment would utilise an entirely overhead line configuration through Work No. 14, an alternative design may include some combination of overhead or underground connection. If any undergrounding is implemented, CSEC(s) will be required to bring the overhead connection underground. As such, design parameters established for the overhead line, underground cabling and CSECs are all relevant to the Work No. 14 area.

2.3.6. Upon further review, an additional design parameter to secure flood mitigation measures for any CSECs specifically within the Work No. 14 area has been added to **Design Parameters** (Doc Ref. 7.4 Rev 1) and the **Environmental Mitigation and Commitments Register** (Doc Ref. 7.7 Rev 1) submitted at Deadline 1 and is also referred to within Table 2-1.

2.3.7. Table 2-2 summarises the relevant mitigation requirements for the Work No. 14 area, in accordance with the **Environmental Mitigation and Commitments Register** (Doc Ref. 7.7 Rev 1). Where mitigation is specific to either an overhead line or underground configuration within the Work No. 14 area, this has been brought out separately.

2.3.8. Furthermore, in accordance with Schedule 14 of the **Draft DCO** (Doc Ref. 3.1 Rev 2), paragraph 2(4), any application to the relevant planning authority to discharge the Requirements of the DCO must include a statement to confirm whether it is likely that the subject matter of the application will give rise to any materially new or materially different environmental effects in comparison with those reported in the Environmental Statement and if it will, then it must be accompanied by information setting out what those effects are.

2.3.9. As such, the final design of Work No. 14 area would be bound by the environmental effects reported within the Environmental Statement. A summary of the Work No. 14 area environmental effects is presented within **Work No. 14 Assessment Summary** [AS-030].

2.4. Request for Visualisations

2.4.1. Whilst the Applicant has produced photomontages for its Preferred Alignment within the Work No. 14 area (refer to **ES Figure 12-21** [APP-141] and **ES Figure 12-22** [APP-146]), as set out within Section 2.2 of this document, it is not possible to identify any specific locations or routes where an alternative connection design may be located or required within Work No. 14 at this stage, given it could be any combination of overhead or underground configurations and also interact with the emerging final designs of G2W and WMEL. As such, it is not possible to create visualisations with photomontages that would be entirely representative of how any undergrounding or alternative overhead line arrangement within the Work No. 14 area may be implemented. The Applicant considers that such attempt could be misleading to the examination process of the DCO Application, as it may give an impression to Interested Parties that the route of an alternative connection design, including shown locations of any CSECs within the Work No. 14 area, are fixed, when it would always only be indicative.

2.4.2. **Additional CSEC Visualisations** (Doc Ref. 8.23) have been provided at Deadline 1, which are considered to provide clarification of the visual effects of a CSEC in general.

Table 2-1: Extract of Design Parameters relevant to Work No. 14 Area from Design Parameters (Doc Ref. 7.4 Rev 2)

Scheme Component	Parameter/ Principle	Parameter / Principle Description
Overhead Line		
Grid Connection Route 400kV Overhead Electric Line (Work No 9, 13, 14 and 15)	Overhead electric line configuration	400kV single circuit overhead electric line.
	Overhead electric line height	In accordance with the preliminary design, the pylon heights vary between 44.5m and 58.6m above ground. A 7.4m vertical limit of deviation has also been set. As such, the maximum pylon height above ground would not exceed 66m. A minimum vertical clearance of 8.1m above open ground from the overhead electric line will be maintained.
	Foundation	Each leg of the pylon would be supported by foundations. Depending on ground conditions, this may comprise either a pad and column foundation or a piled foundation. Pad and column foundations would have a depth up to 4.8m, piled foundations would be up to 20m in depth.
Underground Cable		
CSECs	Maximum CSEC compound footprint	46m x 46m.
	Flood Risk Mitigation Measures	A bund or a flood protection wall and gate would be provided around any CSEC within the Work No. 14 area, to a maximum height of 2.3m above ground level, subject to detailed hydraulic modelling at detailed design stage.
	Foundation	Structural components would each be sited on a concrete foundation slab with a foundation depth up to approximately

Scheme Component	Parameter/ Principle	Parameter / Principle Description
		2.5m, or piles to a maximum depth of 12m. This is with the exception of the foundations for the terminal pylon and gantries, for which design parameters are set out above under Grid Connection Route 400kV Overhead Electric Line.
	Fencing	Metal palisade type fencing. Up to 2.5m in height. Further fencing up to 3m in height may be required to enclose electrical equipment within each compound.
	Lighting	Security lighting with motion detectors is proposed at the CSECs.
Underground transmission electrical cables (between CSECs and to connect to the National Grid Substation, if required)	Underground cable configuration	400kV single circuit cable.
	Trench dimensions	Up to 1.5m wide and 5m deep. The cable duct would have a minimum depth of cover of 0.9m.
	Trenchless crossings	Trenchless crossings would have a maximum depth of 7m and a minimum depth of 3m below watercourses.
	Climate resilience mitigation	Waterproof insulation to be used on all underground cabling.

Table 2-2: Summary of Mitigation Requirements relevant to Work No. 14 area from Environmental Mitigation and Commitments Register (Doc Ref. 7.7 Rev 1)

Environmental Topic (Primary driver for mitigation)	Mitigation Ref.	Commitment and Associated Document Reference	Securing Mechanism
Mitigation applicable to all configurations within the Work No. 14 Area			
ES Chapter 5: Agriculture and Soils (Doc Ref. 6.1 Rev 1)	AS-2, AS-3	Good practice environmental management measures to minimise impacts on soils and land quality are set out in the **Outline Construction Environmental Management Plan (OCEMP)** (Doc Ref. 7.10 Rev 2), **Outline Operational Environmental Management Plan (OOEMP)** (Doc Ref. 7.11 Rev 1) and **Outline Decommissioning Environmental Management Plan (ODEMP)** (Doc Ref. 7.12 Rev 1). Requirements for soil surveys, soil management and restoration are set out in the **Outline Soil Management Plan (OSMP)** (Doc Ref. 7.14 Rev 1).	Requirement 12: Construction Environmental Management Plan Requirement 13: Operational Environmental Management Plan Requirement 19: Soil Management Plan Requirement 21: Decommissioning and Restoration
ES Chapter 6: Air Quality [APP-057]	AQ-1	Good practice measures to minimise dust are set out within the **OCEMP** (Doc Ref. 7.10 Rev 2), **OOEMP** (Doc Ref. 7.11 Rev 1) and **ODEMP** (Doc Ref. 7.12 Rev 1), and **Outline Construction Traffic Management Plan (OCTMP)** [APP-278].	Requirement 12: Construction Environmental Management Plan Requirement 13: Operational Environmental Management Plan Requirement 15: Construction Traffic Management Plan

Environmental Topic (Primary driver for mitigation)	Mitigation Ref.	Commitment and Associated Document Reference	Securing Mechanism
			Requirement 20: Decommissioning and Restoration
ES Chapter 7: Climate Change [APP-058]	CC-1, CC-2	Good practice measures to reduce GHG emissions and measures for climate risks are set out in the **OCEMP** (Doc Ref. 7.10 Rev 2), **OOEMP** (Doc Ref. 7.11 Rev 1) and **ODEMP** (Doc Ref. 7.12 Rev 1).	Requirement 12: Construction Environmental Management Plan Requirement 13: Operational Environmental Management Plan Requirement 20: Decommissioning and Restoration
ES Chapter 8: Cultural Heritage (Doc Ref. 6.1 Rev 1)	CH-2, CH-4	The **OCEMP** (Doc Ref. 7.10 Rev 2), **OOEMP** (Doc Ref. 7.11 Rev 1) and **ODEMP** (Doc Ref. 7.12 Rev 1) set out good practice measures to be adopted with regards to cultural heritage.	Requirement 12: Construction Environmental Management Plan Requirement 13: Operational Environmental Management Plan Requirement 21: Decommissioning and Restoration
	CH-4	The scope and type of mitigation to be applied to the Scheme has been set out in the **Outline Archaeological Mitigation and Management Strategy (OAMMS)** (Doc Ref. 8.7), which has been consulted on with the Archaeological Advisor to Lincolnshire County Council (LCC) and Historic England. In accordance with the **OAMMS** (Doc Ref.	Requirement 11: Archaeology

Environmental Topic (Primary driver for mitigation)	Mitigation Ref.	Commitment and Associated Document Reference	Securing Mechanism
		8.7), an additional phase of archaeological evaluation will be undertaken at the pre-construction phase. This includes: • Geophysical survey within the Grid Connection Route; • Archaeological evaluation trenching within the Grid Connection Route. Once the pre-construction phase of archaeological evaluation has been undertaken and the results from this and the detailed design of the Scheme are available, a detailed Archaeological Mitigation and Management Strategy (AMMS), building on the OAMMS, will be produced.	
ES Chapter 9: Ecology and Biodiversity (Doc Ref. 6.1 Rev 1)	EC-1	The **OCEMP** (Doc Ref. 7.10 Rev 2), **OOEMP** (Doc Ref. 7.11 Rev 1) and **ODEMP** (Doc Ref. 7.12 Rev 1) set out good practice measures to be adopted to minimise impacts on ecology and biodiversity. Pre-construction and pre-decommissioning ecological surveys will be undertaken to inform detailed design. Micro-siting of infrastructure would be undertaken to avoid, where practicable,	Requirement 12: Construction Environmental Management Plan Requirement 13: Operational Environmental Management Plan Requirement 21: Decommissioning and Restoration Natural England CL31 Displacement Licence

Environmental Topic (Primary driver for mitigation)	Mitigation Ref.	Commitment and Associated Document Reference	Securing Mechanism
		woodland blocks, hedgerows, tree lines, reedbeds and Habitats of Principal Importance (HPI) once protected species surveys have been undertaken. Pre-construction and pre-decommissioning ecological surveys will also confirm requirements for protected species licensing. A Natural England CL31 displacement license for water voles is likely required prior to the start of construction.	
ES Chapter 11: Hydrology and Flood Risk (Doc Ref. 6.1 Rev 1)	HF-1, HF-2, HF-3	The **OCEMP** (Doc Ref. 7.10 Rev 2), **OOEMP** (Doc Ref. 7.11 Rev 1) and **ODEMP** (Doc Ref. 7.12 Rev 1) set out good practice measures to be adopted to minimise pollution risk, flood risk and impacts on watercourses.	Requirement 12: Construction Environmental Management Plan Requirement 13: Operational Environmental Management Plan Requirement 21: Decommissioning and Restoration
ES Chapter 11: Hydrology and Flood Risk (Doc Ref. 6.1 Rev 1)	HF-6	An Outline Drainage Strategy has been prepared and is included within **ES Appendix 11-4: Outline Drainage Strategy** [APP-227]. The drainage design for the Grid Connection Route will be in accordance with Annex E of **ES Appendix 11-4: Outline Drainage Strategy** [APP-232].	Requirement 5: Detailed Design Approval Requirement 10: Surface and Foul Water Drainage

Environmental Topic (Primary driver for mitigation)	Mitigation Ref.	Commitment and Associated Document Reference	Securing Mechanism
ES Chapter 11: Hydrology and Flood Risk (Doc Ref. 6.1 Rev 1)	HF-8	Where not disapplied through the **Draft DCO** (Doc Ref. 3.1 Rev 2), there may be the need for secondary permissions for temporary and potentially some permanent works affecting watercourses or groundwater (e.g. flood risk activity permits, water activity permits, land drainage consents, temporary abstraction / impoundment licences and trade effluent consents). All temporary works will be carried out under the necessary consents/permits and that the Contractor will comply with any conditions imposed by any relevant permission, including any imposed under relevant approvals provided subject to protective provisions in the **Draft DCO** (Doc Ref. 3.1 Rev 2).	Compliance with legislative requirements Consents deemed through **Draft DCO** (Doc Ref. 3.1 Rev 2)
ES Chapter 12: Landscape and Visual [APP-063]	LVIA-1	Good practice measures set out in the **OCEMP** (Doc Ref. 7.10 Rev 2) and the **ODEMP** (Doc Ref. 7.12 Rev 1) with regards to the protection of existing trees, minimising lighting and the provision of fencing.	Requirement 12: Construction Environmental Management Plan Requirement 21: Decommissioning and Restoration.

Environmental Topic (Primary driver for mitigation)	Mitigation Ref.	Commitment and Associated Document Reference	Securing Mechanism
ES Chapter 12: Landscape and Visual [APP-063]	LVIA-2	The **Outline Landscape and Ecology Management Plan (OLEMP)** (Doc Ref. 7.16 Rev 1) establishes the landscape strategy for the Scheme and sets out design principles to minimise landscape and visual effects, where reasonably practicable. These include (but are not limited to) the below: • Conserving existing vegetation patterns and maintaining buffers from existing vegetation, where reasonably practicable. • Maintaining buffers from residential properties.	Requirement 7: Landscape and Ecology Management Plan
ES Chapter 13: Noise and Vibration [APP-064]	NV-1	Best Practicable Means (BPM) (as defined in Section 72 of the Control of Pollution Act 1974) to minimise noise and vibration are secured within the **OCEMP** (Doc Ref. 7.10 Rev 2) and **ODEMP** (Doc Ref. 7.12 Rev 1). The Contractor's CEMP and DEMP will also set out a noise monitoring scheme, a communication strategy and a noise complaint system. Prior to works being undertaken, liaison will be undertaken with	Requirement 4: Community Liaison Group Requirement 12: Construction Environmental Management Plan Requirement 21: Decommissioning and Restoration

Environmental Topic (Primary driver for mitigation)	Mitigation Ref.	Commitment and Associated Document Reference	Securing Mechanism
		occupiers of sensitive receptors that may be adversely affected by construction/ decommissioning noise and vibration.	
ES Chapter 14: Socio-economics and Land Use [APP-065]	SE-1	The **Outline Skills, Supply Chain and Employment Plan (OSSCEP)** (Doc Ref 7.17 Rev 1) sets out measures to maximise benefits for local residents and businesses, including any proposed employment or skills schemes.	Requirement 20: Skills, Supply Chain and Employment
ES Chapter 15: Traffic and Access [APP-066]	TA-1, TA-2, TA-4	The transport mitigation measures are primarily set out within the **OCTMP** [APP-278]. Measures for the management of decommissioning traffic are similar to those set out for construction, and have been set out within the **ODEMP** (Doc Ref. 7.12 Rev 1). Mitigation measures for the operational phase of the Scheme are set out in the **OOEMP** (Doc. Ref. 7.11 Rev 1). Points of access for vehicles are also established through **Streets, Rights of Way and Access Plans** [APP-014 and AS-009].	Requirement 3: Approved Details and Amendments to Them Requirement 15: Construction Traffic Management Plan Requirement 21: Decommissioning and Restoration
ES Chapter 15: Traffic and Access [APP-066]	TA-3	The **Outline PRoW Management Plan** [AS-026] sets out measures for minimising	Requirement 17: Public Rights of Way

Environmental Topic (Primary driver for mitigation)	Mitigation Ref.	Commitment and Associated Document Reference	Securing Mechanism
		impacts on PRoW during construction, operation and decommissioning.	
ES Chapter 16: Other Environmental Topics, Section 16.5 Major Accidents and Disasters [APP-067]	MAD-1	An Emergency Response Plan will be developed in consultation with the relevant local authority emergency planning officer, emergency services including the local fire service and will detail the procedures for responding to incidents and emergencies on site as set out in the **OCEMP** (Doc Ref. 7.10 Rev 2), **OOEMP** (Doc Ref. 7.11 Rev 1) and the **ODEMP** (Doc Ref. 7.12 Rev 1). Furthermore, the management plans include measures for the protection of existing utilities.	Requirement 12; Construction Environmental Management Plan Requirement 13: Operational Environmental Management Plan Requirement 21: Decommissioning and Restoration
ES Chapter 16: Other Environmental Topics, Section 16.5 Major Accidents and Disasters [APP-067]	MAD-3	Protective provisions are included within the **Draft DCO** (Doc Ref. 3.1 Rev 2) for statutory undertakers whose assets may be affected, and further bespoke protective provisions are being negotiated with statutory undertakers, where necessary. These include the requirement for detailed design and safe working practices to be agreed with the statutory undertaker prior to construction.	**Draft DCO** (Doc Ref. 3.1 Rev 2), Schedule 13

Environmental Topic (Primary driver for mitigation)	Mitigation Ref.	Commitment and Associated Document Reference	Securing Mechanism
ES Chapter 16: Other Environmental Topics [APP-067] Materials and Waste	MW-1	Measures to manage the impact of materials and waste are included within the **OCEMP** (Doc Ref. 7.10 Rev 2), **OOEMP** (Doc Ref. 7.11 Rev 1), **ODEMP** (Doc Ref. 7.12 Rev 1) and the **Outline Site Waste Management Plan (OSWMP)** [APP-285].	Requirement 12; Construction Environmental Management Plan Requirement 13: operational Environmental Management Plan Requirement 14: Waste Management Plan Requirement 21: Decommissioning and Restoration
Mitigation only applicable to overhead line configurations within Work No. 14 area			
ES Chapter 13: Noise and Vibration [APP-064]	NV-4	As detailed information about the overhead line design is subject to detailed design, a commitment to undertake a Tier 3 assessment in accordance with guidance provided in TGN(E)322[1] is secured in the **OOEMP** (Doc Ref. 7.11 Rev 1).	Requirement 13: Operational Environmental Management Plan Requirement 18: Operational Noise
ES Chapter 16: Other Environmental Topics, Section 16.3 Electric and	EMF-1	As set out within the **Design Parameters** (Doc Ref. 7.4 Rev 2), a minimum vertical clearance of 8.1m above open ground has	Requirement 5: Detailed Design Approval

[1] National Grid (2021); Technical Guidance Note TGN(E)322 – Operational Audible Noise Assessment Process for Overhead Lines (New Build, Reconducting, Diversion and Uprating).

Environmental Topic (Primary driver for mitigation)	Mitigation Ref.	Commitment and Associated Document Reference	Securing Mechanism
Magnetic Fields [APP-067]		been adopted within the design of the Grid Connection 400kV overhead line.	
Mitigation only applicable to underground cabling configurations with CSEC(s) within Work No. 14 area			
ES Chapter 7: Climate Change [APP-058]	CC-3	Good practice mitigation measures for climate risk would be embedded in the design of the Scheme, as set out in the **Design Parameters** (Doc Ref. 7.4 Rev 2): • Flood protection measures in the form of bunding or a flood defence wall have been specified for the Cable Sealing End Compounds (CSECs) within areas at risk of flooding. • Waterproof insulation to be used on all underground cabling.	Requirement 5: Detailed Design Approval
ES Chapter 11: Hydrology and Flood Risk (Doc Ref. 6.1 Rev 1)	HF-4	As set out within the **Design Parameters** (Doc Ref. 7.4 Rev 2), the following flood risk protection measures have been embedded within Scheme design: • A bund or a flood protection wall and gate would be provided around any CSEC within the Work No. 14 area, to a maximum height of 2.3m above	Requirement 5: Detailed Design Approval

Environmental Topic (Primary driver for mitigation)	Mitigation Ref.	Commitment and Associated Document Reference	Securing Mechanism
		ground level, subject to detailed hydraulic modelling at detailed design stage.	
ES Chapter 13: Noise and Vibration [APP-064]	NV-1	As set out within the **OCEMP** (Doc Ref. 7.10 Rev 2), no Horizontal Directional Drilling (HDD) works will take place within 100 m of a residential receptor north of High Road.	Requirement 12: Construction Environmental Management Plan
ES Chapter 12: Landscape and Visual [APP-063]	LVIA-3	As set out within the **OOEMP** (Doc Ref. 7.11 Rev 1) and the **OLEMP** (Doc Ref. 7.16 Rev 1), the operational lighting scheme would be designed to minimise off-site light spill.	Requirement 7: Landscape and Ecology Management Plan