



HELIOS RENEWABLE
ENERGY
PROJECT

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**National Policy Statement Accordance
Table: National Policy Statement for
Electricity Networks Infrastructure (EN-5)**

January 2025



Helios Renewable Energy Project

National Policy Statement Accordance Table: National Policy Statement for Electricity Networks Infrastructure (EN-5)

Planning Inspectorate Reference: EN010140

January 2025

Prepared on behalf of Enso Green Holdings D Limited

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1. Introduction

1.1. Overview

- 1.1.1. This document has been prepared on behalf of Enso Green Holdings D Limited ('the Applicant') to demonstrate that the Helios Renewable Energy Project ('the Proposed Development') is in accordance with the National Policy Statement for electricity networks infrastructure (EN-5).

2. Accordance with the NPS for Electricity Networks Infrastructure (EN-5)

NPS EN-5 Relevant Paragraph	NPS EN-5 Detail	NPS EN-5 Proposed Development compliance
Site selection and design		
Paragraph 2.2.1	The Secretary of State should bear in mind that the initiating and terminating points – or development zone – of new electricity networks infrastructure is not substantially within the control of the applicant.	The Proposed Development includes distribution systems and associated infrastructure (i.e. substations), which are covered by NPS EN-5 as infrastructure for electricity networks. The siting of these elements is determined by the location of the solar PV generating station element of the Proposed Development and the Point of Connection at Drax National Grid Substation.
Paragraph 2.2.2	<p>Siting is determined by:</p> <ul style="list-style-type: none"> • the location of new generating stations or other infrastructure requiring connection to the network, and/or • system capacity and resilience requirements determined by the Electricity System Operator. 	
Paragraph 2.2.3	These twin constraints, coupled with the government’s legislative commitment to net zero by 2050, strategic commitment to new interconnectors with neighbouring North Seas countries and an ambition of up to 50GW of offshore wind generation by 2030, means that very significant amounts of new electricity networks infrastructure is required, including in areas with comparatively little build-out to date.	

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Paragraph 2.2.4	However, a strategic and holistic approach to onshore and offshore network planning, as set out in paragraphs 2.7 – 2.8, will identify the most efficient way of meeting decarbonisation targets and should reduce the overall amount of network infrastructure required.	
Paragraph 2.2.5	Additionally, applicants retain control in managing the identification of routing and site selection between the identified initiating and terminating points or within the development zone.	
Paragraph 2.2.6	Moreover, the locational constraints identified above do not, of course, exempt applicants from their duty to consider and balance the site-selection considerations set out below, much less the policies on good design and impact mitigation detailed in sections 2.4-2.9.	Compliance with the relevant policies from Sections 2.4 to 2.9 is set out below.
Paragraph 2.2.7	The connection between the initiating and terminating points of a proposed new electricity line will often not be via the most direct route. Siting constraints, such as engineering, environmental or community considerations will be important in determining a feasible route.	The alignment and routing for the cable corridor has taken environmental and landscape factors into account to determine the optimum route selection. The design evolution process that resulted in changes to the cable corridor is detailed in Table 5.1 of the Design and Access Statement [APP-229]. The exact route will be confirmed at the detailed design stage and will be determined based on siting constraints.

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Paragraph 2.2.8	There will usually be a degree of flexibility in the location of the development's associated substations, and applicants should consider carefully their placement in the local landscape, as well as their design	As detailed in Paragraph 4.3.16 of the Design and Access Statement [APP-229] , the on-site substation and BESS compound have been placed in a central position in the Site, well-screened from surrounding assets by both the earth bund and landscaping, further eliminating any potential views from identified sensitive receptors.
Paragraph 2.2.9	In particular, the applicant should consider such characteristics as the local topography, the possibilities for screening of the infrastructure and/or other options to mitigate any impacts. (See Section 2.10 below and Section 5.10 in EN-1.)	<p>Chapter 3: Site and Development Description [APP-023] of the ES in paragraphs 3.3.1 – 3.3.3 states that in accordance with NPS EN-1, the exact details of all elements of the design of the Proposed Development cannot be confirmed until the tendering process for the design has been completed and the detailed design has been approved in advance of the Proposed Development commencing (or phase thereof). This is to allow for flexibility to accommodate changes in technological advancements.</p> <p>As set out in Paragraph 3.2.5 of the Planning Statement [APP-228] the DCO application seeks flexibility for different configurations of solar PV modules.</p> <p>As detailed in Section 6.3 of the Design and Access Statement [APP-229], the Proposed Development has been informed by a detailed and sensitive iterative design process. This has involved taking account of the context and features of the land within the Order limits, sensitive</p>

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		<p>receptors, information from environmental surveys and feedback from stakeholders. The design also takes into account constraints and opportunities in order to develop a good design that balances the need to maximise renewable energy generation from the Proposed Development along with the minimisation of potential impacts or provision of mitigation and environmental enhancements where practicable.</p> <p>The key focus of Objective 2 of the Design and Access Statement [APP-229] is to ensure the Proposed Development responds sensitively to the landscape (Paragraphs 4.3.5-4.3.7). Landscape was a key factor in the layout and design of the Proposed Development. The design has evolved to reduce the impacts on landscape features including the incorporation of buffers from woodland/hedgerows.</p>
Paragraph 2.2.10	As well as having duties under Section 9 of the Electricity Act 1989, (in relation to developing and maintaining an economical and efficient network), applicants must take into account Schedule 9 to the Electricity Act 1989, which places a duty on all transmission and distribution licence holders, in formulating proposals for new electricity networks infrastructure, to “have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest	<p>The alignment and routing for the cable corridor has taken environmental and landscape factors into account to determine the optimum route selection. The design evolution process that resulted in changes to the cable corridor is detailed in Table 5.1 of the Design and Access Statement [APP-229].</p> <p>Measures to protect and enhance biodiversity throughout the lifetime are set out in the outline Construction Environmental Management Plan</p>

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	<p>and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and ...do what [they] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.</p>	<p>(oCEMP) [APP-121], outline Operational Environmental Management Plan (oOEMP) [APP-124], outline Landscape and Ecological Management Plan (oLEMP) [APP-143] and outline Decommissioning Environmental Management Plan (oDEMP) [APP-123], which will be secured via DCO Requirements as set out in the dDCO [AS-007]. As set out in Paragraph 5.3.10 of the Design and Access Statement [APP-229], any hedgerow or watercourse crossings will be kept to a minimum width, and where a cable route crosses a hedgerow, the hedgerow will be reinstated after construction.</p> <p>The cable will be installed underground to reduce the potential visual impact. As a result, the cable corridor is considered highly unlikely to result in significant landscape and visual effects, as set out in Paragraph 7.5.11 of ES Chapter 7 Landscape and Views [APP-027].</p> <p>With regards to features of archaeological interest, as set out in Paragraph 6.4.4 of ES Chapter 6 Cultural Heritage [APP-026], the area of the underground cable corridor will be subject to an Archaeological Watching Brief during construction as per the methodology set out within the Archaeological Mitigation Strategy [APP-126].</p>
<p>Paragraph 2.2.11</p>	<p>Depending on the location of the proposed development, statutory duties under Section 85</p>	<p>There are no nationally designated landscapes within the Order Limits. The nearest National</p>

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	<p>of the Countryside and Rights of Way Act 2000, Section 11A of the National Parks and Access to the Countryside Act 1949 (as amended by Section 62 of the 1995 Environment Act), and Section 17A of the Norfolk and Suffolk Broads Act 1988 may be relevant. Applicants should note amendments to each of these provisions contained in Section 245 of the Levelling Up and Regeneration Act 2023.</p>	<p>Landscapes (also known as Areas of Outstanding Natural Beauty (AONB)) and National Parks are located more than 35km from the Proposed Development.</p>
Climate Change adaption and resilience		
Paragraph 2.3.1	<p>Section 4.9 of EN-1 sets out the generic considerations that applicants and the Secretary of State should take into account in order to ensure that electricity networks infrastructure is resilient to the effects of climate change.</p>	<p>As outlined in Chapter 12: Climate Change [APP-032] of the ES, the effects of climate change has been taken into account in the design of the Proposed Development when considering how it will be constructed, operated and decommissioned. An oCEMP [APP-121] and an Outline Construction Traffic Management Plan ('oCTMP') [AS-006] are included within the ES. Final, detailed versions would be subject to approval by the relevant authority and secured by draft DCO requirements 6 and 7. The documents detail the measures to be adopted by the project to reduce environmental impacts.</p>
Paragraph 2.3.2	<p>As climate change is likely to increase risks to the resilience of some of this infrastructure, from flooding for example, or in situations where it is located near the coast or an estuary or is underground, applicants should in particular set out to what extent the proposed development is expected to be vulnerable, and, as appropriate, how it has been designed to be resilient to:</p> <ul style="list-style-type: none"> • flooding, particularly for substations that are vital to the network; and especially in light of changes to groundwater levels resulting from climate change; 	<p>As set out in paragraph 9.9.8 of the ES Chapter 9 Water Environment [APP-029], the Proposed Development has been designed to be safe in the combined fluvial and tidal design flood scenario without increasing flood risk elsewhere. Design</p>

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	<ul style="list-style-type: none"> • the effects of wind and storms on overhead lines; • higher average temperatures leading to increased transmission losses; • earth movement or subsidence caused by flooding or drought (for underground cables); and • coastal erosion – for the landfall of offshore transmission cables and their associated substations in the inshore and coastal locations respectively 	<p>mitigation measures include the appropriate sequential design of the Site to avoid (as far as possible) areas of elevated flood risk and incorporation of flood resilience and resistance measures so that the equipment can remain operational during times of elevated flood risk. This includes the integration of an earth bund to protect the on-site substation and BESS and the stow position of solar panels and inverter units being located above the design flood level. Pollution prevention measures, surface water management measures and appropriate design of watercourse crossings are also proposed. The detailed design of the embedded mitigation measures regarding flood risk have been informed by the results of the Environment Agency (EA) approved site-specific flood model.</p> <p>Four water tanks sit at each entrance to the BESS compound, two of which are for the purpose of firefighting, (shown on ES Figure 4.3 BESS and Substation Preliminary Drainage Strategy Drawing [APP-061] which will be secured through DCO requirement), up to an elevation of 3.65m above ground level and diameter of up to 3.45m (ES Figure 4.4 Water Tank Elevations [APP-062]) . The attenuation basins located within the Substation and BESS Compound will have sufficient capacity to hold 228,000 litres of fire water (1,900 litres per minute for two hours) and accommodate a 1-in-100 year storm event plus</p>

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Paragraph 2.3.3	Section 4.10 of EN-1 advises that the resilience of the project to the effects of climate change must be assessed in the Environmental Statement (ES) accompanying an application. For example, future increased risk of flooding would be covered in any flood risk assessment (see Sections 5.8 in EN-1).	<p>30% allowance for climate change. The presence of a flood bund around the entire Substation and BESS Compound would contain any runoff within the bunded area in event of a fire/ storm event.</p> <p>An oLEMP [APP-143] has been included in this ES submitted in support of the DCO application, with the final LEMP to be secured via a DCO requirement.</p> <p>The oLEMP outlines that proposed native woodland planting is composed of a mix of locally characteristic trees and shrubs from a broad palette, to provide greater diversity and therefore better capacity to adapt to changing climatic conditions, which are projected in Table 12.3 of the Climate Change chapter, as well as providing both under-storey and canopy planting. The species selection has been informed by tree survey information and specialist ecologist input.</p> <p>Resilience of the Proposed Development to the effects of climate change, particularly increased risk of flooding, have been assessed in the ES. The ES finds that the design of the Proposed Development adequately mitigates the risk of climate change.</p> <p>Chapter 9: Water Environment [APP-029] of the ES and the Flood Risk Assessment (FRA) [APP-232 - APP-235] assess and discuss mitigation</p>

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		<p>regarding increased risk of flooding caused by climate change.</p> <p>Paragraph 12.3.12 of Chapter 12: Climate Change [APP-032] of the ES assess the effects of climate change on the Proposed Development by:</p> <ul style="list-style-type: none"> • Establishing the existing baseline conditions (2023); • Determining future baseline conditions by reviewing UK climatic projections (2018) up to 2066 (rationale for temporal scope explained below) (including identifying sensitive receptors); • Assessing the likely significant effects of the Proposed Development, with embedded mitigation measures incorporated, on the established baseline and future conditions; • Identifying additional mitigation measures; and • Assessing residual effects.

Environmental and Biodiversity Net Gain

Paragraph 2.5.1	<p>When planning and evaluating the proposed development’s contribution to environmental and biodiversity net gain, it will be important – for both the applicant and the Secretary of State – to supplement the generic guidance set out in EN-1 (Section 4.6) with recognition that the linear nature of electricity networks infrastructure can allow for excellent opportunities to: reconnect important habitats via green corridors,</p>	<p>The grid connection cable route is located under highway land or crossing third party land (of which option agreements have been or are being secured with compulsory acquisition rights sought as a last resort).</p> <p>The net gain benefits of the project are delivered by the Proposed Development holistically as opposed to the cable route individually. The Planning Statement [APP-228] discusses in detail</p>
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	<p>biodiversity stepping zones, and reestablishment of appropriate hedgerows; and/or connect people to the environment, for instance via footpaths and cycleways constructed in tandem with environmental enhancements.</p>	<p>the potential benefits of the scheme within Section 5, 'Planning Appraisal'. The wider environmental gains are outlined in Paragraph 5.5.13. Further detail regarding the compliance of the Proposed Development in terms of Environmental and Biodiversity Net Gain is provided in response to Paragraphs 4.6.1-4.6.17 in the National Policy Statement Accordance Table: EN-1.</p>
Land Rights and Land Interests		
Paragraph 2.6.1	<p>In order to be lawfully able to install, inspect, maintain, repair, adjust, alter, replace or remove an electricity line (above or below ground), its related equipment (such as monopoles, pylons/transmission towers, transformers and cables), and/or its associated mitigation or enhancement schemes, applicants must: own the land on, over, or under which the relevant activity is to take place; or hold sufficient rights over or interests in that land (typically in the form of an easement); or have permission for the activity from the present owner or occupier of that land (typically in the form of a wayleave).</p>	<p>The majority of the land required for the Proposed Development has been secured by the Applicant way of option agreements with the affected landowners. In particular this includes all the land required for the solar arrays, inter array cabling, substation and BESS. In respect of the cable from the substation to the national grid substation there are two landowners which have agreed heads of terms with the legal agreements currently being drafted. It is expected that these agreements will be completed by the end of the examination. In respect of the highway land required for the grid connection cable the Applicant will, in the first instance, rely on the powers available to statutory undertakers pursuant to the New Roads and Street Works Act 1991.</p>
Paragraph 2.6.2	<p>Where the applicant does not own or wish to own the land in question, it should try to reach a voluntary agreement giving it sufficient rights</p>	

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	and/or permissions to undertake the relevant work	<p>However, to ensure that there is no interest in land which can impede the delivery of the Proposed Development (such as unknown interests or the unregistered land parcels identified in the Book of Reference) the Applicant has included the power to acquire the rights to construct, operate and maintain the infrastructure required for the Proposed Development by compulsion. The reasons and justification for these powers are set out in Section 7 of the Statement of Reasons [AS-011].</p> <p>With regards to the cable corridor, Temporary Possession will be used to allow the Applicant to know exactly where the underground cables and crossing points of highway will be which will ensure that the minimum areas of land will be burdened by the acquisition of rights. Once a detailed design process has been undertaken and the exact cable route is known, only that part will be subject to Compulsory Acquisition powers (rights only). This strategy would allow landowners to use their land as normal once the cables are installed and is therefore preferred to the Applicant taking permanent freehold acquisition of this land. If any land was subject to Compulsory Acquisition powers (rights only), then the landowners would be compensated accordingly.</p>

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Paragraph 2.6.3	As a last resort, where it does not succeed in reaching the agreement that it requires, the network company may, as part of its application to the Secretary of State, seek to acquire rights compulsorily over the land in question by means of a provision in the DCO.	As a last resort the Applicant is seeking the ability to acquire rights compulsorily over the land and this is set out in Part 5 of the draft DCO and further explained in the Explanatory Memorandum and Statement of Reasons.
Paragraph 2.6.4	In such cases (i.e. where the compulsory acquisition of rights is sought) permanent arrangements are strongly preferred over voluntary wayleaves (which could, for example, be terminable on notice by the landowner) in virtue of their greater reliability and economic efficiency and reflecting the importance of the relevant infrastructure to the nation’s net zero goals.	In this case the Proposed Development is time limited and therefore it is not necessary for permanent rights to be provided for the grid connection cable. The rights for the grid connection cable are only required for the lifetime of the Proposed Development. The Proposed Development does not contain any electricity network infrastructure which would be required by the network operator to be in place permanently.
Paragraph 2.6.5	The applicant may also seek the compulsory acquisition of land. This will not normally be necessary where lines and cables are installed but may be sought where other forms of electricity networks infrastructure (such as new substations) are required.	The Applicant is not seeking to compulsorily acquire any land. The compulsory acquisition of rights is considered sufficient.
Holistic Planning		
Paragraph 2.7.1	EN-1 explains in Section 4.10 that the Planning Act 2008 aims to create a holistic planning regime, such that the cumulative effects of the	The DCO application for the Proposed Development comprises of the solar PV generating station and all related infrastructure. The

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Paragraph 2.7.2	<p>same project can be considered together. Co-ordinated applications typically bring economic efficiencies and reduced environmental impact.</p> <p>Accordingly, the government envisages that, wherever reasonably possible, applications for new generating stations and their related infrastructure should be contained in a single application to the Secretary of State¹⁴. However, a consolidated approach of this kind may not always be possible, nor represent the most efficient strategy for delivery of new infrastructure.</p>	Environmental Impact Assessment (EIA) reported in the ES is based on the full description of the Proposed Development as set out in ES Chapter 3 Site and Development Description [APP-023] .
Transmission Network		
Paragraph 2.8.4	The Secretary of State should also take into account that Transmission Owners (TOs) and Distribution Network Operators (DNOs) are required under Section 9 of the Electricity Act 1989 to bring forward efficient and economical proposals in terms of network design.	The Applicant has entered into a Bilateral Connection Agreement with NESO. The agreement allows for a 190 MW connection. NESO have allocated to the Proposed Development a new generator bay within the National Grid Drax 132kV Substation compound. Further details are included in the Grid Connection Statement [APP-230] .
Applicant assessment		
Paragraph 2.9.9	<p><i>Landscape and Visual</i></p> <p>New substations, sealing end compounds (including terminal towers), and other above-</p>	Landscape impacts associated with the substation have been considered and mitigated against in the design of the Proposed Development. As set out in Paragraph 4.3.12 of the Design and Access

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Paragraph 2.9.11	ground installations that serve as connection, switching, and voltage transformation points on the electricity network may also give rise to adverse landscape and visual impacts.	Statement [APP-229] the substation will be surrounded by an earth bund which will reduce the potential visual impacts by shielding the substation from view.
Paragraph 2.9.20	<p>Landscape and visual benefits may arise through the reconfiguration, rationalisation, or undergrounding of existing electricity network infrastructure. Though mitigation of the landscape and visual impacts arising from overhead lines and their associated infrastructure is usually possible, it may not always be so, and the impossibility of full mitigation in these cases does not countermand the need for overhead lines.</p> <p><i>Undergrounding and subsea cables</i></p> <p>Although it is the government's position that overhead lines should be the strong starting presumption for electricity networks developments in general, this presumption is reversed when proposed developments will cross part of a nationally designated landscape (i.e. National Park, The Broads, or Area of Outstanding Natural Beauty).</p>	<p>The cables for the Proposed Development will be installed underground.</p> <p>The cables for the Proposed Development will be installed underground; therefore, no overhead lines will be included in the project.</p> <p>There are no nationally designated landscapes within the Order Limits. The nearest National Landscapes (also known as AONBs) and National Parks are located more than 35km from the Proposed Development.</p>
Paragraph 2.9.22	However, undergrounding will not be required where it is infeasible in engineering terms, or where the harm that it causes (see section 2.11.4) is not outweighed by its corresponding	The cables for the Proposed Development will be installed underground; therefore, no overhead lines will be included in the project.

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	<p>landscape, visual amenity and natural beauty benefits. Regardless of the option, the scheme through its design, delivery, and operation, should seek to further the statutory purposes of the designated landscape. These enhancements may go beyond the mitigation measures needed to minimise the adverse effects of the scheme.</p>	
<p>Paragraph 2.9.23</p>	<p>Additionally, cases will arise where – though no part of the proposed development crosses a designated landscape – a high potential for widespread and significant adverse landscape and/or visual impacts along certain sections of its route may result in recommendations to use undergrounding for relevant segments of the line or alternatively consideration of using a route including subsea cabling.</p>	
<p>Paragraph 2.9.37</p>	<p><i>Noise and Vibration</i></p> <p>Audible noise effects can also arise from substation equipment such as transformers, quadrature boosters and mechanically switched capacitors.</p>	<p>ES Chapter 11 Noise & Vibration [APP-031] has assessed the impacts of all aspects of the Proposed Development including substations in accordance with this policy.</p>
<p>Paragraph 2.9.38</p>	<p>Transformers are installed at many substations and generate low frequency hum. Whether the noise can be heard outside a substation depends on a number of factors, including transformer type and the level of noise</p>	<p>Paragraph 11.5.1 of the ES Chapter 11 Noise and Vibration [APP-031] describes how the Proposed Development has been designed to ensure that acoustic effects at sensitive receptors are minimised through the optimal location of noise generating plant, such as the BESS and substation. The integration of an earth bund and associated landscaping will help to mitigate</p>

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	attenuation present (either engineered intentionally or provided by other structures).	<p>against operational noise of the BESS and substation.</p> <p>Paragraph 11.9.1 summarises the assessment of the likely significant noise and vibration effects resulting from the construction and decommissioning phases of the Proposed Development, arising from construction and decommissioning activities, concluded that effects will be short-term and temporary, and no greater than negligible at the closest NSR to any construction and decommissioning activities, and are therefore not significant in EIA terms.</p> <p>As set out in the ES Chapter 11 Noise and Vibration [APP-031] due to the low level of noise emitted by the Proposed Development when operational, noise impacts on residential properties are not considered to be significant and therefore no amendments to the Site boundary were made in response to potential noise effects. However, the Proposed Development includes the provision of substantial buffers to settlements and individual properties, this is not to mitigate against noise directly but will contribute towards noise reduction.</p>
Paragraph 2.9.39	For the assessment of noise from substations, standard methods of assessment and interpretation using the principles of the relevant British Standards are satisfactory.	Noise has been assessed, including the potential operational noise from the Substation and can be found in ES Chapter 11 Noise and Vibration [APP-031]. The chapter sets out that all noise measurements were undertaken by a consultant

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Paragraph 2.9.61	<p><i>Sulphur Hexafluoride</i></p> <p>Applicants should at the design phase of the process consider carefully whether the proposed development could be reconceived to avoid the use of SF6-reliant assets.</p>	<p>certified as competent in environmental noise monitoring, and, in accordance with the principles of British Standard 7445: 2003: 'Description and Measurement of Environmental Noise' (paragraph 11.3.4).</p> <p>At this time, SF-6 use would be limited to the 132Kv circuit breakers at the on-site substation. This is in line with the current standards used by Distribution Network Operators (DNOs). RWE will continue to work with the DNO to avoid the use of SF-6 if possible and remain in compliance with adoptable standards.</p>
Paragraph 2.9.62	<p>Where the development cannot be so conceived, the applicant must provide evidence of their reasoning on this point. Such evidence will include, for instance, an explanation of the alternatives considered, and a case why these alternatives are technically infeasible or require bespoke components that are grossly disproportionate in terms of cost.</p>	
Paragraph 2.9.63	<p>In particular, an accounting of the cost differential between the SF6 reliant asset and the appropriate SF6-free alternative should be provided.</p>	
Paragraph 2.9.64	<p>Where applicants, having followed the above procedure, do propose to put new SF6-reliant assets onto the electricity system, they should design a plan for the monitoring and control of</p>	<p>If SF-6 is used in the Proposed Development, the Applicant would comply with all relevant regulations and standards for its use.</p>

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	fugitive SF6 emissions consistent with the Fluorinated gas (F-gas) Regulation and its successors.	
Mitigation		
Paragraph 2.10.5	<p data-bbox="813 485 1397 515"><i>Landscape and Visual</i></p> <p data-bbox="813 555 1397 810">In addition to good design in accordance with the Holford and Horlock rules (please see paragraphs 2.9.16 - 2.9.19), and the consideration of undergrounding or rerouting the line where possible, the principal opportunities for mitigating adverse landscape and visual impacts of electricity networks infrastructure are:</p> <ul data-bbox="813 850 1397 1398" style="list-style-type: none"> <li data-bbox="813 850 1397 1034">• consideration of network reinforcement options (where alternatives exist) which may allow improvements and/or extensions to an existing line rather than the building of an entirely new line; <li data-bbox="813 1074 1397 1289">• selection of the most suitable type and design of support structure in order to minimise the overall visual impact on the landscape. In particular, ensuring that towers are of the smallest possible footprint and internal volume; and <li data-bbox="813 1329 1397 1398">• the rationalisation, reconfiguration, and/or undergrounding of existing electricity networks 	<p data-bbox="1420 485 2022 740">The cables for the Proposed Development will be installed underground to reduce the potential visual impact. As a result, the cable corridor is considered highly unlikely to result in significant landscape and visual effects, as set out in Paragraph 7.5.11 of ES Chapter 7 Landscape and Views [APP-027].</p> <p data-bbox="1420 780 2022 1412">The second design objective for the Proposed Development is for it to be sensitively integrated into its landscape setting, and to avoid and minimise adverse landscape and visual effects where possible, as set out in Paragraph 4.3.5 of the Design and Access Statement [APP-229]. As set out in Paragraph 4.3.16 of the Design and Access Statement [APP-229], the on-site substation and BESS compound have been placed in a central position in the Site, well-screened from surrounding assets by both earth bund and landscaping, to mitigate adverse landscape and visual impacts (including views from heritage assets). As set out in Paragraph 7.5.18 of ES Chapter 7 Landscape and Views [APP-027], the Landscape Strategy includes screening measures such as native woodland shelter belts. The</p>

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	<p>infrastructure in the vicinity of the proposed development.</p>	<p>Landscape Strategy [APP-071 – APP-074], Illustrative Landscape Masterplan [APP-075] and the outline Landscape and Ecological Management Plan [APP-143] collectively show the nature and extent of the proposed landscape measures within the Site as well as the planting schedule and outline maintenance strategy. The final Landscape Strategy and LEMP will be secured by DCO requirement.</p>
<p>Paragraph 2.10.6</p>	<p>Additionally, there are more specific measures that might be taken, and which the Secretary of State could mandate through DCO requirements if appropriate, as follows:</p> <ul style="list-style-type: none"> • landscape schemes, comprising off-site tree and hedgerow planting, are sometimes used for larger new overhead line projects to mitigate potential landscape and visual impacts, softening the effect of a new above ground line whilst providing some screening from important visual receptors. These may be implemented with the agreement of the relevant landowner(s), or the developer may compulsorily acquire the land or land rights in question. Advice from the relevant statutory authority may also be needed; and • screening, comprising localised planting in the immediate vicinity of residential properties and principal viewpoints can also help to screen or 	<p>The cables for the Proposed Development will be installed underground and the substation will be screened to minimise the visual impact of the Proposed Development.</p>

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Paragraph 2.10.7	soften the effect of the line, reducing the visual impact from a particular receptor.	<p>The majority of the land required for the Proposed Development has been secured by the Applicant way of option agreements with the affected landowners. In particular this includes all the land required for the solar arrays, inter array cabling, substation and BESS. In respect of the cable from the substation to the national grid substation there are two landowners which have agreed heads of terms with the legal agreements currently being drafted. It is expected that these agreements will be completed by the end of the examination. In respect of the highway land required for the grid connection cable the Applicant will, in the first instance, rely on the powers available to statutory undertakers pursuant to the New Roads and Street Works Act 1991.</p> <p>However, to ensure that there is no interest in land which can impede the delivery of the Proposed Development (such as unknown interests or the unregistered land parcels identified in the Book of Reference) the Applicant has included the power to acquire the rights to construct, operate and maintain the infrastructure required for the Proposed Development by compulsion. The reasons and justification for these powers are set</p>

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Paragraph 2.10.8	<p>Furthermore, since long-term management of the selected mitigation schemes is essential to their mitigating function, a management plan, developed at least in outline at the conclusion of the examination, and which sets out proposals within a realistic timescale, should secure the integrity and benefit of these schemes. This should also uphold the landscape commitments made to achieve consent, alongside any pertinent commitments to environmental and biodiversity net gain.</p>	<p>out in Section 7 of the Statement of Reasons [AS-011].</p> <p>An oLEMP [APP-143] has been included in this ES submitted in support of the DCO application, with the final LEMP to be secured via draft DCO requirement 10.</p>
Paragraph 2.10.9	<p><i>Noise and Vibration</i></p> <p>Applicants must consider the following measures:</p> <ul style="list-style-type: none"> • the positioning of lines to help mitigate noise; • ensuring that the appropriately sized conductor arrangement is used to minimise potential noise; • quality assurance through manufacturing and transportation to avoid damage to overhead line conductors which can increase potential noise effects; • ensuring that conductors are kept clean and free of surface contaminants during 	<p>ES Chapter 11 Noise & Vibration [APP-031] has assessed the impacts of all aspects of the Proposed Development including substations in accordance with this policy.</p> <p>Paragraph 11.5.1 of the ES Chapter 11 Noise and Vibration [APP-031] describes how the Proposed Development has been designed to ensure that acoustic effects at sensitive receptors are minimised through the optimal location of noise generating plant, such as the BESS and substation. The integration of an earth bund and associated landscaping will help to mitigate against operational noise of the BESS and substation.</p>

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	stringing/installation; and • the selection of quieter cost-effective plants.	<p>Paragraph 11.9.1 summarises the assessment of the likely significant noise and vibration effects resulting from the construction and decommissioning phases of the Proposed Development, arising from construction and decommissioning activities, concluded that effects will be short-term and temporary, and no greater than negligible at the closest NSR to any construction and decommissioning activities, and are therefore not significant in EIA terms.</p> <p>As set out in the ES Chapter 11 Noise and Vibration [APP-031] due to the low level of noise emitted by the Proposed Development when operational, noise impacts on residential properties are not considered to be significant and therefore no amendments to the Site boundary were made in response to potential noise effects. However, the Proposed Development includes the provision of substantial buffers to settlements and individual properties, this is not to mitigate against noise directly but will contribute towards noise reduction.</p>
Paragraph 2.10.14	<p><i>Sulphur Hexafluoride</i></p> <p>The climate-warming potential of SF6 is such that applicants should, as a rule, avoid the use of SF6 in new developments.</p>	<p>At this time, SF-6 use would be limited to the 132Kv circuit breakers at the on-site substation. This is in line with the current standards used by Distribution Network Operators (DNOs). RWE will continue to work with the DNO to avoid the use of</p>

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Paragraph 2.10.15	Where no proven SF6-free alternative is commercially available, and where the cost of procuring a bespoke alternative is grossly disproportionate, the continued use of SF6 is acceptable, provided that emissions monitoring and control measures compliant with the F-gas Regulation and/or its successors are in place.	SF-6 if possible and remain in compliance with adoptable standards.
Secretary of State Decision Making		
Paragraph 2.11.2	<p data-bbox="815 635 1084 667"><i>Landscape and Visual</i></p> <p data-bbox="815 703 1397 890">The Secretary of State should be satisfied that the development, so far as is reasonably possible, complies with the Holford and Horlock Rules (please see paragraphs 2.9.16 - 2.9.19) or any updates to them.</p>	The cables for the Proposed Development will be installed underground to reduce the potential visual impact. As a result, the cable corridor is considered highly unlikely to result in significant landscape and visual effects, as set out in Paragraph 7.5.11 of ES Chapter 7 Landscape and Views [APP-027] .
Paragraph 2.11.3	The Secretary of State should also be satisfied that all feasible options for mitigation – including the rationalisation, reconfiguration, or undergrounding of existing electricity networks infrastructure, have been considered and evaluated appropriately.	The second design objective for the Proposed Development is for it to be sensitively integrated into its landscape setting, and to avoid and minimise adverse landscape and visual effects where possible, as set out in Paragraph 4.3.5 of the Design and Access Statement [APP-229] . As set out in Paragraph 4.3.16 of the Design and Access Statement [APP-229] , the on-site substation and BESS compound have been placed in a central position in the Site, well-screened from surrounding assets by both earth bund and landscaping, to mitigate adverse landscape and visual impacts (including views from heritage
Paragraph 2.11.4	In circumstances where it can be demonstrated that a mitigation measure and/ or technological approach is appropriate and/ or necessary for a project, including to limit landscape and visual	

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	<p>impact as set out above, the Secretary of State should take this into account in decision making.</p>	<p>assets). As set out in Paragraph 7.5.18 of ES Chapter 7 Landscape and Views [APP-027], the Landscape Strategy includes screening measures such as native woodland shelter belts. The Landscape Strategy [APP-071 – APP-074], Illustrative Landscape Masterplan [APP-075] and the outline Landscape and Ecological Management Plan [APP-143] collectively show the nature and extent of the proposed landscape measures within the Site as well as the planting schedule and outline maintenance strategy. The final Landscape Strategy and LEMP will be secured by DCO requirement.</p>
<p>Paragraph 2.11.5</p>	<p>Nationally designated landscapes have specific statutory purposes which help ensure their continued protection. The Secretary of State should have special regard to nationally designated landscapes, where the general presumption in favour of overhead lines should be reversed to favour undergrounding.</p>	<p>There are no nationally designated landscapes within the Order Limits. The nearest National Landscapes (also known as Areas of Outstanding Natural Beauty (AONB)) and National Parks are located more than 35km from the Proposed Development.</p>
<p>Paragraph 2.11.7</p>	<p><i>Noise and Vibration</i></p> <p>The Secretary of State should ensure that appropriate assessment methodologies have been used in the evidence presented to it, and that the appropriate mitigation options have been considered and adopted. Where the applicant can demonstrate that appropriate mitigation</p>	<p>Noise has been assessed, including the potential operational noise from the Substation and can be found in ES Chapter 11 Noise and Vibration [APP-031]. The chapter sets out that all noise measurements were undertaken by a consultant certified as competent in environmental noise monitoring, and, in accordance with the principles of British Standard 7445: 2003: 'Description and</p>

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Paragraph 2.11.8	measures will be put in place, the residual noise impacts are unlikely to be significant.	Measurement of Environmental Noise' (paragraph 11.3.4).
Paragraph 2.11.8	Consequently, noise from overhead lines is unlikely to lead to the Secretary of State refusing an application, but it may need to consider the use of appropriate requirements in the DCO to ensure noise is minimised as far as is practicable.	The Proposed Development does not include any overhead power lines.
Paragraph 2.11.15	<p data-bbox="815 635 1249 667"><i>Electric and Magnetic Fields (EMFs)</i></p> <p data-bbox="815 705 1391 1002">Where a statutory consultee on the safeguarding of technical facilities identifies a risk that the EMF effect of electricity network infrastructure would compromise the effective and safe operation of such facilities, the potential impact and siting and design alternatives will need to have been fully considered as part of the application.</p>	No statutory consultee has raised issues regarding EMF.