



One Earth Solar Farm

Volume 6.0: Environmental Statement [EN010159]

Volume 3: Technical Appendices Supporting ES Volume 2

Appendix 2.2: ES Response to PINs Scoping Opinion

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A.2 Appendix 2.2: ES Response to PINs Scoping Opinion

A.2.1 Introduction

- A.2.1.1. On the 22nd December 2023, the Planning Inspectorate (on behalf of the Secretary of State) issued their formal EIA Scoping Opinion, along with the responses from statutory consultees. The EIA Scoping Opinion from the Planning Inspectorate is included in **ES Volume 3: Scoping opinion [EN010159/APP/6.23]**.
- A.2.1.2. The Scoping Opinion has been considered within the ES, in particular in **Volume 2, Aspect Chapters** within which Chapters 6 to 18 have been based on the elements scoped into the technical assessments. This report summarises the EIA Scoping Opinion for the Proposed Development and where elements have been agreed to be scoped out of the EIA.
- A.2.1.3. Any consultation elements which have been raised and addressed post-scoping, are detailed within the Consultation Report (see **Consultation Report [EN010159/APP/5.1]**). Where the consultations comments have resulted in inclusions to the technical assessment methodologies, these specific consultation details have also been included within Chapters 6 to 17 of **Volume 2, Aspect Chapters**.

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
Description of Proposed Development				
2.1.1	Existing Utilities	<p>Paragraphs 2.24 to 2.28 describe the existing utilities within the Proposed Development site, although it is stated in paragraph 2.28 that utilities searches are ongoing and will inform the design of the Proposed Development. Appendix A of the Scoping Report shows offset distances from existing utilities.</p> <p>The ES should explain the findings of the utility searches, identify any impacts and, where applicable, signpost to where any required mitigation measures are secured.</p>	<p>The Proposed Development has been determined through the assessment of various environmental constraints, and through consultation with stakeholders, landowners, local residents (including Parish Councils and individual homeowners) and utilities asset owners.</p> <p>The design process has incorporated a number of off-sets from features such as drainage ditches, watercourses, water bodies, hedgerows and tree lines, tree canopies, utilities, public rights of way, and residential dwellings, as identified in Volume 5: Design Approach Document [EN01059/APP/5.8] and secured in Volume 5: Outline Design Parameters [EN010159/APP/5.9].</p>	<p>Volume 5: Design Approach Document [EN01059/APP/5.8]</p> <p>Volume 5: Outline Design Parameters [EN010159/APP/5.9]</p> <p>ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]</p> <p>ES Volume 2, Chapter 7: Hydrology and Hydrogeology [EN010159/APP/6.7]</p> <p>ES Volume 2, Chapter 8: Land and Soils [EN01059/APP/6.8]</p>

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			Where relevant, under the Environmental Measures subheading of the Aspect Chapters 6 to 18 (ES Volume 2: Aspect Chapters) details of offsets in response to the utility searches are provided. Further details on existing underground utilities are also discussed in ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5], Chapter 7: Hydrology and Hydrogeology [EN010159/APP/6.7] and Chapter 8: Land and Soils [EN01059/APP/6.8].	
2.1.2	River Trent Cable Crossing	Paragraph 3.29 states that cabling will be required to cross the River Trent however the method of cabling is not provided. The ES should detail the crossing method and ensure this is assessed throughout. Where flexibility is sought, the ES should consider the appropriate worst-case scenario within each of the aspect assessments. The Applicant's attention is drawn to ID 2.2.1 below regarding flexibility.	As set out in in ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5] the cable crossing of the River Trent will include trenchless crossing only and no flexibility in terms of other crossing options is sought. The aspect chapters (ES Volume 2, Aspect Chapters 6 to 18) have considered trenchless crossing within the technical assessments.	ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5] Email correspondence from the MMO included as Appendix A of this report.

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		Paragraph 7.39 highlights that any cable routing under or over the River Trent Main Channel may require environmental permits from the Environment Agency. As noted in the Scoping Report the redline boundary of the Proposed Development crosses the River Trent at a point where it is tidal. The Applicant should therefore also consider whether a Deemed Marine Line (DML) will be required to be included within the Development Consent Order (DCO) to allow for any works within the tidal reaches of the River Trent. The Applicant should consult with the Marine Management Organisation (MMO) in this regard. The Applicant's attention is drawn to the consultation response from the MMO (Appendix 2 of this Opinion).	The MMO have been consulted within regards to the proposed cable crossing and have confirmed the trenchless crossing (using a method such as horizontal direction drilling) under the River Trent will not require a license if at no point it breaches the surface in the tidal area. The trenchless crossing compounds and breach points will not be located within a tidal area, and as such no license is required.	
2.1.3	Panel Types	It is noted that at this stage two panel types are being considered: fixed south-facing and tracker panels. Paragraph 3.10 states that further detail regarding the panel mounting structures will inform the DCO but it is unclear whether the decision regarding the panel type would be made prior to application submission, or whether flexibility would be sought within the DCO. It is assumed that the maximum height of the panels of 3.8m (as stated in paragraph 3.11) includes the height of tracker panels at maximum tilt, however this is not specified. The Applicant's attention is drawn to ID 2.2.1 regarding flexibility.	<p>No flexibility is sought and only fixed south-facing panels are considered.</p> <p>The maximum height of the PV module mounting structure is specified as 3.8m above ground level in ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5].</p>	ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]

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2.1.4	Switchgear	The type of switchgear proposed is not stated in the Scoping Report. The ES should provide detail on the type of switchgear proposed. The Proposed Development should avoid the use of sulphur hexafluoride (SF6)-reliant assets wherever possible. Where this is not possible evidence and reasoning should be provided regarding the alternatives considered. Where SF6 is unavoidable the ES should include commitments to monitor and control fugitive emissions of this pollutant.	The details of the switchgear are included in ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5] , which confirms the technology will not use sulphur hexafluoride (SF6)-reliant assets.	ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]
2.1.5	Battery Energy Storage System (BESS)	Paragraph 3.21 implies that multiple BESSs would be employed across the site and paragraph 3.22 provides the typical dimensions of a containerised battery unit. Although it is noted (in paragraph 3.21) that the locations of the BESS are not yet confirmed, the ES should state the anticipated number of BESS units and their anticipated location(s) within the site, assuming a worst-case scenario where there is uncertainty.	The details of the BESS are included in ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5] , specifically Table 5.4 sets out the BESS parameters which have been used for the basis of the technical assessments. A plan showing the illustrative layout of the BESS compounds is provided in Volume 2: Illustrative Masterplan [EN010159/APP/2.7] and Volume 2: Site Layout Plans [EN010159/APP/2.5] . Following the Rochdale Envelope approach, the number of BESS units has not been presented to account for advancements in BESS technology.	Volume 2: Illustrative Masterplan [EN010159/APP/2.7] Volume 2: Site Layout Plans [EN010159/APP/2.5] ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]

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2.1.6	Substations	It is stated that the number of substations is currently unknown and will be informed by technical and environmental aspects. The ES should explain how the final position has been reached, demonstrating how environmental effects have influenced the decisions made. The Applicant's attention is drawn to ID 2.2.1 below regarding flexibility.	<p>The details of the substations are included in ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5], specifically Table 5.5 sets out the substation parameters which have been used for the basis of the technical assessments. A plan showing the illustrative layout of the substation compounds is provided in Volume 2: Illustrative Masterplan [EN010159/APP/2.7] and Volume 2: Site Layout Plans [EN010159/APP/2.5].</p> <p>The location of the substations have been influenced by the design flood event and the location to sensitive properties (to avoid likely significant effects from noise). This is detailed in ES Volume 1, Chapter 4 [EN010159/APP/6.4].</p>	<p>Volume 2: Illustrative Masterplan [EN010159/APP/2.7]</p> <p>Volume 2: Site Layout Plans [EN010159/APP/2.5]</p> <p>ES Volume 1, Chapter 4: Alternatives and Design Evolution [EN010159/APP/6.4]</p> <p>ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]</p>

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2.1.7	Cabling	<p>A description of the cabling, including the export cable to connect the Proposed Development to the Point of Connection at High Marnham substation, is included within paragraphs 3.25 to 3.30. It is stated (in paragraph 3.27) that the exact method of cabling is not yet determined although open-cut or horizontal directional drilling would be used. It is stated that both low and higher voltage onsite cabling would be used and that higher voltage cables would likely be laid underground in trenches in accordance with British standards. Appendix A shows the potential search area for cable routes to connect the Proposed Development to the High Marnham substation although the specific cable route is not yet determined, and it is not clear whether this export cable would be buried or overhead, although it is noted that the final cable route would be provided within the DCO application.</p> <p>The ES should clarify the cabling method/ methods and ensure this is appropriately assessed within the ES. The Applicant's attention is drawn to ID 2.2.1 regarding flexibility.</p>	<p>As detailed in ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5], the electricity generated by the Proposed Development is to be exported via a 400kV connection between the onsite Substations and the National Grid High Marnham Substation via underground cables. The cabling method used to cross the River Trent will be a trenchless crossing. The grid connection cables will comprise 400kV cables buried within a trench up to 3m BGL, and up to 10m wide. These will be buried in accordance with British Standard and National Grid boundary recommendations, which sets out recommended separation depths to minimise the risks of magnetic field effects on relevant receptors. An outline Export Cable Route Concept Method Statement is provided as part of the DCO submission and includes details on the cabling method and route (see Volume 7: Outline Export Cable Route Concept Method Statement [EN010159/APP/7.13]).</p>	<p>ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]</p> <p>Volume 7: Outline Export Cable Route Concept Method Statement [EN010159/APP/7.13]</p>

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		The ES should also specify the voltage of each of the cables required. In line with relevant guidance (DECC Power Lines: Demonstrating compliance with EMF public exposure guidelines, A Voluntary Code of Practice 2012), cables above 132kV have potential to cause electromagnetic field (EMF) effects. The Inspectorate considers that the ES should demonstrate the design measures taken to avoid the potential for EMF effects on receptors from the cable and substation infrastructure.	In line with PINS Technical Advice page for scoping solar development, ES Volume 3. Appendix 2.4: Electro-Magnetic Fields Impact Report [EN010159/APP/6.21] has been produced which details the type and locations of proposed cables within the Proposed Development (including those over 132kV).	
2.1.8	Land use of cable route	The Scoping Report has not provided information on current land uses along the proposed cable route and whether these uses can be continued during operation should this be the chosen option. The ES should consider the need for jointing and inspection pits which may limit subsequent land use.	The cable route to the Proposed High Marnham Substation is located within the Order limits. These cables will comprise 400kV cables buried within a trench up to 3m BGL, and up to 10m wide. No jointing or inspection pits are required. In Work Area 5 (see Volume 2: Works Plan [EN010159/APP/2.3]) the current land use will be continued following construction. In all other areas, the current land use will not continue due to the operation of the Proposed Development, the proposed uses are shown in the Works Plan.	ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5] Volume 2: Works Plans [EN010159/APP/2.3] Volume 7: Outline Export Cable Route Concept Method Statement [EN010159/APP/7.13]

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			The parameters for the cables are provided in ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5] and details on the route included in Volume 7: Outline Export Cable Route Concept Method Statement [EN010159/APP/7.13].	
2.1.9	Access Points	<p>Paragraph 3.36 states that the primary points of access during operation would be from the A57 and A1133 however Figure 3-6 shows indicative primary access points also from Main Street, Far Road/ Crabtree Lane and Polly Taylor's Road.</p> <p>The ES should be consistent in identifying the proposed points of access and justify their selection. Effort should be made to agree these with relevant consultation bodies.</p>	The location of the access points during operation have been considered and are included within ES Volume 2, Chapter 12: Transport and Access [EN010159/APP/6.12]. The locations of the access points have utilised existing accesses, wherever possible. The locations have been consulted upon with the Host Authorities.	ES Volume 2, Chapter 12: Transport and Access [EN010159/APP/6.12]

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2.1.10	Construction compounds and haul roads	The Scoping Report notes that construction compounds and temporary haul roads are proposed on-site. The ES should indicate where these would be located and what is proposed in these locations during the construction and decommissioning phases to inform the assessment of effects.	ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5] details the Construction and Decommissioning Compounds. The two primary compounds are shown on the Volume 2: Works Plans [EN010159/APP/2.3]. There will be up to 10 satellite secondary construction compounds (Work No. 6B) [EN010159/APP/2.3], which will be similarly split in an equal manner across the east and west of the River Trent. The locations of the satellite construction compounds will be within Works Area 6b [EN010159/APP/2.3]. At this stage the precise locations of the satellite compounds have not been defined, however Work Area 6b [EN010159/APP/2.3] incorporates offsets from sensitive receptors.	ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]. Volume 2: Works Plans [EN010159/APP/2.3] ES Volume 2: Aspect Chapters 6 to 18 [EN010159/APP/6.6 to EN010159/APP/6.17]

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			<p>As the Proposed Development develops, the location of the satellite compounds will be determined based upon environmental and technical factors. The final locations must be within Works Area 6b [EN010159/APP/2.3] which includes offsets from sensitive receptors.</p> <p>Within the ES Volume 2, Aspect Chapters 6 to 18 a worst-case assessment has been undertaken, which has considered the haul roads are located in the closest possible locations to sensitive receptors (i.e. residential properties).</p>	

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2.1.11	Abnormal loads	<p>The Scoping Report states that Abnormal Individual Loads (AIL) may be required for the transportation of large components during construction.</p> <p>The Inspectorate recommends the consideration of water-borne or rail transportation over road transport where feasible, in line with the Overarching NPS for Energy (EN-1). The Applicant's attention is drawn to the consultation response from the Canal and River Trust (Appendix 2 of this Opinion) in this regard.</p>	<p>The use of the river for AIL has been considered and is discussed within Appendix A of ES Volume 3: Appendix 12.2: Transport Assessment [EN010159/APP/6.21]. It is concluded that the Order Limits does not feature any suitable river quay facilities to offload materials, and it is considered that the movement of bulk materials is not feasible. Consultation on the use of waterways for AIL has been undertaken with National Highway. In January 2025 National Highways responded with alternative AIL routing, which the Applicant has provided evidence demonstrating that these alternative options do not work. An alternative AIL routing is provided which considers the use of the Port of Immingham (Route 1) and Goole (Route 2).</p>	<p>ES Volume 2, Chapter 12: Transport and Access [EN010159/APP/6.12]</p> <p>ES Volume 3, Appendix 12.2: Transport Assessment [EN010159/APP/6.21]</p>

2.1.12	Management Plans	<p>Paragraphs 3.53 and 3.54 describe the operational phase including the proposed maintenance activities. No reference is made to an operational phase environmental management plan, although it is noted that a Soils Resource Management Plan, Landscape and Ecological Management Plan (LEMP), and battery safety plan are proposed. The ES should be clear on what management plans would be in place during which phases of the Proposed Development and how these are secured within the DCO.</p>	<p>ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5] details the management plans which are proposed for the Proposed Development. These are also listed in ES Volume 2, Aspect Chapter 6 to 17, under the Environmental Measures subheadings. To ensure clarity on the Management Plans proposed and how the Environmental Measures are secured, ES Volume 1, Chapter 2: EIA Methodology [EN010159/APP/6.2] provides a description of the Commitments Register (see Volume 7: Other Documents [EN010159/APP/7.15]). This Register follows PINS Guidance and identifies how commitments will be secured and implemented, to ensure potential environmental effects arising from the Proposed Development are mitigated as far as possible, in accordance with the mitigation hierarchy, and as set out in the technical assessments detailed in Volume 2: Aspect Chapters. It is noted that the Commitments Register is a 'live' document that will be updated throughout the NSIP planning process.</p>	<p>ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]</p> <p>ES Volume 1, Chapter 2: EIA Methodology [EN010159/APP/6.2]</p> <p>ES Volume 2: Aspect Chapters [EN010159/APP/6.6 to EN010159/APP/6.18]</p> <p>Volume 7: Commitments Register [EN010159/APP/7.15]</p>
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2.1.13	Maintenance	<p>The Scoping Report states that during operation minor maintenance works would take place. The stated definition of maintenance is: <i>“inspect, repair, adjust, alter, remove, refurbish, reconstruct, replace and improve any part of, but not remove, reconstruct or replace the whole of the solar infrastructure (including the BESS)”</i>.</p> <p>Noting that a time-limited consent is not being sought, the ES should ensure that the operational phase has been appropriately assessed to such an extent that the comprehensive replacement of panels and associated infrastructure has been considered, for example in relation to traffic movements and waste generation. The ES should also seek to define limits to the scale of maintenance works, for example the maximum number of panels replaced over a given period, so that any assumptions that underpin traffic predictions and the assessment of effects are clear, and potential effects can be fully understood.</p>	<p>The DCO is seeking time limited consent and the Proposed Development will be operational for up to 60 years, after which time it will be decommissioned. For the purposes of this ES, the technical assessments presented in ES Volume 2, Aspect Chapters, Chapters 6 to 18 [EN010159/APP/6.6 to EN010159/APP/6.18] considers a 60 year lifespan. As such the environment technical topics have assumed the operational phase of the Proposed Development is temporary and the Proposed Development is not considered permanent.</p> <p>As set out in Table 5.5 of ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5] an indicative design life has been provided, whereby the development components are replaced such as the solar PV panels. This lifespan has been assessed within Volume 2, Aspect Chapters (Chapters 6 to 18).</p>	<p>ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]</p> <p>ES Volume 2: Aspect Chapters [EN010159/APP/6.6 to EN010159/APP/6.18]</p> <p>Volume 7: Outline Operational Environmental Management Plan [EN010159/APP/7.5]</p> <p>Volume 7: Outline Site Waste Management Plan [EN010159/APP/7.12]</p> <p>ES Volume 3, Appendix 2.3: Materials and Waste Impact Assessment [EN010159/APP/6.21]</p>

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			<p>Waste generation during operation and maintenance is considered in Volume 7: Outline Site Waste Management Plan [EN010159/APP/7.12]; ES Volume 3, Appendix 2.3: Materials and Waste Impact Assessment [EN010159/APP/6.21]; and Volume 7: Outline Operational Environmental Management Plan [EN010159/APP/7.5].</p> <p>Operational traffic generated due to the replacement of parts during the lifespan of the Proposed Development are considered and detailed in ES Volume 2, Chapter 12: Transport and Access [EN010159/APP/6.12].</p>	

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2.1.14	Site Boundary	<p>Appendix A shows the potential search area for cable routes to connect the Proposed Development to the High Marnham substation. On Appendix A it appears that this area is outside of the 'site boundary'. Figures 2-4, 10-1, and 10-2 also exclude this area from the site boundary whilst all other figures within the Scoping Report include it. There is therefore inconsistency across the figures within the Scoping Report and it is unclear whether the scope proposed takes into account the area for the proposed cable route.</p> <p>The ES should ensure that the site boundary is consistent across all figures as well as with the application plans. Any assessment (including baseline surveys) should be based on the entirety of the site boundary. Where flexibility is sought in the final cable route the Applicant should ensure that the baseline is adequate to ensure that a worse-case scenario is assessed. The Applicant should make efforts to agree the scope of baseline surveys with the relevant consultation bodies. Where it is agreed that surveys are not required to support the submission of the DCO but may be required to ensure that subsequent micro-siting avoids adverse effects, then the mechanism for securing such investigations should be clearly identified.</p>	<p>The technical assessments presented in ES Volume 2 Chapters 6 to 18, Aspect Chapters consider the redline boundary (the Order limits) as submitted with the DCO Application and shown in the drawings as provided in Volume 2: Plans/ Drawings and Sections. The Order Limits are shown in the figures as provided in ES Volume 3, Figures Supporting Volumes 1 and 2 [EN10159/APP/6.20].</p> <p>The scope of baseline surveys has been considered with the relevant consultation bodies where relevant and the details of these consultations are included in ES Volume 2, Aspect Chapters, Chapters 6 to 18.</p>	<p>ES Volume 2: Aspect Chapters [EN010159/APP/6.6 to EN010159/APP/6.18]</p> <p>ES Volume 3, Figures Supporting Volumes 1 and 2 [EN10159/APP/6.20]</p>
EIA Methodology and Scope of Assessment				

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
2.2.1	Flexibility	<p>The Inspectorate notes the Applicant's intention to utilise the 'Rochdale Envelope' approach regarding the design and layout of the Proposed Development.</p> <p>The Inspectorate expects that, at the point an application is made, the description of the Proposed Development is sufficiently detailed to include the design, size (including heights), capacity, technology, and locations of the different elements of the Proposed Development. This should include the footprint and heights (and depths) of the structures (relevant to existing ground levels), as well as land-use requirements for all elements and phases of the Proposed Development. The project description should be supported (as necessary) by figures, cross-sections, and drawings which should be clearly and appropriately referenced.</p> <p>Where flexibility is sought, the ES should clearly set out and justify the maximum design parameters that would apply for each option assessed and how these have been used to inform an adequate assessment in the ES, recognising that this may differ depending on the assessment being undertaken, although the Inspectorate notes the Applicant's intention to assess a reasonable worst-case scenario (as stated in paragraph 5.3). The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the Proposed Development are yet to be finalised and provide relevant justification.</p>	<p>ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5] sets out the parameters used within the technical assessments presented in ES Volume 2, Aspect Chapters Chapters 6 to 18. The Description of the Proposed Development is supported by the documents within Volume 2, Plans / Drawings / Sections [EN010159/APP/2.1 to EN010159/APP/2.9].</p>	<p>Volume 2, Plans / Drawings / Sections [EN010159/APP/2.1 to EN010159/APP/2.9]</p> <p>ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]</p> <p>ES Volume 1, Chapter 2: EIA Methodology [EN010159/APP/6.2].</p> <p>ES Volume 2: Aspect Chapters [EN010159/APP/6.6 to EN010159/APP/6.18]</p>

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			<p>ES Volume 1, Chapter 2: EIA Methodology [EN10159/APP/6.2] includes details of the optionality relating to both the eastern and western BESS and on-site Substation Compounds, which could include either (or a combination) of BESS, on-site substation and solar PV and relevant justification for this, which in essence is at this stage the options are still being considered. The environmental assessments as reported in Chapters 6 to 17 (in Volume 2, Aspect Chapters) have been based on the worst-case scenario and the likely significant effects have been reported. In all technical assessments this includes BESS and on-site substations only, and no solar PV will be located in the compounds.</p>	

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2.2.2	Alternatives	<p>The Scoping Report states that alternatives and design constraints will be described within a separate chapter of the ES to demonstrate how environmental considerations have been taken into account in the Proposed Development design. No further information on the content of this chapter is provided within the Scoping Report.</p> <p>The ES should explain the factors which have influenced site selection and design. For example, the ES should explain how the design evolution of the Proposed Development has ensured that preference has been made for poorer quality agricultural land instead of Best and Most Versatile (BMV) agricultural land.</p>	<p>ES Volume 1, Chapter 4: Alternatives and Design Evolution [EN010159/APP/6.4], includes details on the factors which have influenced site selection and design. A Site Selection Report is appended to Volume 5: Planning Statement [EN010159/APP/5.5] which provides an overview of the site selection process undertaken by the Applicant to identify the location of the Proposed Development.</p>	<p>ES Volume 1, Chapter 4: Alternatives and Design Evolution [EN010159/APP/6.4]</p> <p>Volume 5: Planning Statement [EN010159/APP/5.5]</p>

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			<p>The Order limits were selected based on a number of environmental and social reasonings include: its close proximity to the High Marnham Substation; large, open land with low population density; outside protected landscapes and designated biodiversity sites; flood risk can be mitigated; good accessibility; a high number of land owners willing to provide land; and (at the time of site selection) soil maps showed the area as not being of the highest quality. These factors were considered in the iterative design process along side planning and environmental policy objectives and overall functionality, as well as feedback from stakeholders and public consultation.</p>	

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2.2.3	Study Areas/ Zone of Influence	<p>Paragraph 5.16 states that study areas have been defined individually for each aspect chapter taking into account the geographic scope of the potential impacts. Although it is stated that the proposed study areas are described within chapters 6 to 17 of the Scoping Report, some of the chapters (for example, Hydrology and Hydrogeology and Land and Soils) do not describe the study areas.</p> <p>The ES should clearly set out how study areas have been defined for all aspects, along with a justification for the approach, including references to consultation responses. The Inspectorate agrees that the study areas/ ZOI should be based on the potential for likely significant effects to occur rather than an arbitrary distance as proposed in paragraph 5.16. The study areas and receptors should be depicted on corresponding figures to aid understanding.</p>	<p>The details on each aspect's study area are included within ES Volume 2, Aspect Chapters, Chapters 6 to 18 and are presented as figures in ES Volume 3 [EN010159/APP/6.20]. For the avoidance of doubt, this includes study areas for Hydrology and Hydrogeology and Land and Soils. The justification for the study area is provided in Volume 2, Aspect Chapters, Chapters 6 to 18 and where applicable evidence provided that the study area has been agreed with relevant statutory consultees (for example ES Volume 2, Chapter 10: Cultural Heritage [EN010159/APP/6.10] provides details on the agreement of the study area following a site visit with the host authorities).</p>	<p>ES Volume 2: Aspect Chapters [EN010159/APP/6.6 to EN010159/APP/6.18]</p> <p>ES Volume 3: Figures Supporting Volumes 1 and 2 [EN010159/APP/6.20]</p>

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2.2.4	Assessment Years	It is stated that the ES will assess the operational Proposed Development “for the first full year of operation and the year considered to be when maximum environmental effects occur”. It is unclear whether this represents the same year. The ES should clearly describe the assessment years proposed and provide justification that these represent a worst-case scenario	ES Volume 1, Chapter 2: EIA Methodology includes details of the assessment years. Further details on the assessment years which have been used in the technical assessments (including those for construction and operation) are included Volume 2, Aspect Chapters, Chapters 6 to 18.	ES Volume 1, Chapter 2: EIA Methodology [EN010159/APP/6.2] ES Volume 2: Aspect Chapters [EN010159/APP/6.6 to EN010159/APP/6.18]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
2.2.5	Operational Lifespan	<p>The Scoping Report states (in paragraph 5.22) that an operational lifespan of 45 years is proposed to be assessed however it is stated (in paragraph 3.55) that the operational life of the Proposed Development would not be specified, and the Applicant is not seeking a time-limited consent, noting that this is dependent on whether any effects would justify the time period of the consent being limited.</p> <p>Paragraph 5.22 states that “this is a realistic timeframe based on current practices and will be used as an approximate to assess the likely significant effects from the decommissioning phase”. The ES should provide further justification on how an assessment of 45 years operational lifespan is appropriate considering there is potential for the Proposed Development to operate beyond this time.</p> <p>The Applicant should ensure that the approach to assessment is consistent with the consent being sought. If it is determined that the consent sought is not proposed to be time-limited, the ES should assess effects for the operational phase as permanent to ensure a worst-case scenario is assessed. The assessment of the operational phase should also consider the potential for the components to be replaced to extend the lifespan of the Proposed Development.</p>	<p>The Applicant is now seeking a time-limited consent and the Proposed Development will be operational for up to 60 years, after which time it will be decommissioned and the land returned to its original condition (other than established habitats provided as part of the Proposed Development which are assumed to remain). At the time of Scoping no details were provided on the operational lifespan, as it was unclear what agreements were being made with landowners. For the purposes of this ES, the technical assessments presented in ES Volume 2, Aspect Chapters, Chapters 6 to 18, consider a 60 year lifespan. As such the environment technical topics have assumed the operational phase of the Proposed Development is temporary and the Proposed Development is not considered permanent.</p>	<p>ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]</p> <p>ES Volume 2: Aspect Chapters [EN010159/APP/6.6 to EN010159/APP/6.18]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			As set out in ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5] an indicative design life has been assumed, whereby the development components are replaced. This lifespan has been assessed within the aspect chapters.	
2.2.6	Cumulative Assessment	<p>The Scoping Report states that only projects within 5km will be assessed within the cumulative assessment. The ES should fully justify this search area with reference to relevant guidance and the likely extent of impacts. Effort should be made to agree the methodology for each aspect assessment, including the developments selected, with the relevant consultation bodies and provide evidence of this within the application documents.</p> <p>The Applicant should also consider an iterative cumulative assessment which considers additional schemes as they come forward. The Applicant's attention is drawn to the Inspectorate's 'Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects' in this regard.</p>	<p>Since this time PINs have released further guidance on the approach to cumulative assessment (September 2024), which has been used within ES Volume 2, Chapter 18: Cumulative Effects [EN010159/APP/6.18]. The list of existing and, or approved developments has been agreed with the host authorities and includes schemes beyond 5km.</p> <p>An iterative approach was taken for the consideration of additional schemes as they came forward, this process is described in Section 18.6 within ES Volume 2, Chapter 18: Cumulative Effects [EN010159/APP/6.18].</p>	ES Volume 2, Chapter 18: Cumulative Effects [EN010159/APP/6.18]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
2.2.7	Interactive effects	It is stated (in paragraph 5.35) that " <i>interactive effects will be dealt with either in the relevant technical aspect Chapter...or where they have the potential to affect human health, then within the Health Chapter</i> ". Where interactive effects are relevant to multiple aspect chapters, the ES should use cross-references between chapters where appropriate.	ES Volume 2, Chapter 18: Cumulative Effects [EN010159/APP/6.18] considers the interactive effects, cross referencing other aspect chapters in ES Volume 2, Aspect Chapters, Chapters 6 to 18 during the assessment. ES Volume 2 Chapter 16: Human Health [EN010159/APP/6.16] provides cross references to other aspect chapters in ES Volume 2, Aspect Chapters, Chapters 6 to 18 .	ES Volume 2, Chapter 18: Cumulative Effects [EN010159/APP/6.18] ES Volume 2, Chapter 16: Human Health [EN010159/APP/6.16]
2.2.8	Transboundary	<p>The Inspectorate on behalf of the SoS has considered the Proposed Development and concludes that the Proposed Development is unlikely to have a significant effect either alone or cumulatively on the environment in a European Economic Area State. In reaching this conclusion the Inspectorate has identified and considered the Proposed Development's likely impacts including consideration of potential pathways and the extent, magnitude, probability, duration, frequency and reversibility of the impacts.</p> <p>The Inspectorate considers that the likelihood of transboundary effects resulting from the Proposed Development is so low that it does not warrant the issue of a detailed transboundary screening.</p>	For consistency ES Volume 1, Chapter 2: EIA Methodology [EN010159/APP/6.2] provides the clarification that the transboundary effects have been scoped out of the ES.	ES Volume 1, Chapter 2: EIA Methodology [EN010159/APP/6.2]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		<p>However, this position will remain under review and will have regard to any new or materially different information coming to light which may alter that decision.</p> <p>Note: The SoS' duty under Regulation 32 of the 2017 EIA Regulations continues throughout the application process.</p> <p>The Inspectorate's screening of transboundary issues is based on the relevant considerations specified in the Annex to its Advice Note Twelve, available on our website at http://infrastructure.planninginspectorate.gov.uk/legislation-andadvice/advice-notes/</p>		
2.2.9	Scoping Table	<p>This paragraph states that each aspect chapter of the ES will set out how the methodology responds to the Scoping Opinion. The Inspectorate recommends the use of a table demonstrating how the matters raised in the Scoping Opinion have been addressed in the ES and/ or associated documents is provided. It is also recommended that a table is provided in the ES to set out key changes in parameters/ options of the Proposed Development presented in the Scoping Report to those presented in the ES.</p>	<p>Details included within this Appendix, with cross references made.</p>	<p>ES Volume 3, Appendix 2.2: ES Response to PINs Scoping Opinion [EN010159/APP/6.21].</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
2.2.10	Assumptions, imitations, and uncertainties	Assumptions, limitations, and uncertainties are not listed in chapters 7 and 9 of the Scoping Report. Chapter 17 (specifically paragraph 17.30) states that there "will be a number of assumptions, limitations, and uncertainties associated with the assessment of likely significant effects" however these are not listed in the Scoping Report. The ES should fully describe any assumptions, limitations, and uncertainties for each assessment. Where none are made then this should be clearly stated in the respective ES chapter(s).	ES Volume 2, Aspect Chapters, Chapters 6 to 17 provide a subheading, ' <i>Assumptions, Exclusions and Limitations</i> ', setting out the assumptions, exclusions and limitations which have been considered within their technical assessments.	ES Volume 2: Aspect Chapters [EN010159/APP/6.6 to EN010159/APP/6.17]
2.2.11	Duration of effects	<p>The duration of effects is not defined within the EIA methodology chapter of the Scoping Report (Chapter 5). The duration of effects appears to differ across aspect chapters, for example paragraph 11.54 states that for landscape and visual effects, 'short term' effects are considered to be two years or less, 'medium term' effects are considered to be between two and five years, and 'long-term' effects are considered to be more than five years. Paragraph 16.30 states that for human health less than five years, five to fifteen years, and more than fifteen years are used to describe the same terms respectively.</p> <p>Durations should be determined with reference to relevant guidance and where possible should be applied consistently across topics to allow comparisons and an understanding of concurrent effects. Where adopted definitions differ, justification should be provided.</p>	Where applicable ES Volume 2, Aspect Chapters, Chapters 6 to 18 provides details on the duration of effects, determined using guidance where appropriate, in determining the likely significant effects. To allow for a comparison, each Aspect Chapter includes a summary table of significant environmental effects which considers the duration (short, medium or long-term and temporary or permanent).	ES Volume 2: Aspect Chapters [EN010159/APP/6.6 to EN010159/APP/6.18]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
2.2.12	Professional Judgement	The Scoping Report refers to the use of professional judgement. The ES should clearly identify where professional judgement has been relied upon to determine the level of significance of effects. Any use of professional judgement to assess significance should be fully justified within the ES.	Where applicable ES Volume 2, Aspect Chapters, Chapters 6 to 18 provide details on the use of professional judgement which takes into account factors such as whether the effect is permanent or temporary, its duration and frequency, whether it is reversible, and the likelihood of its occurrence. Details on the professional accreditation of the technical team is provided in ES Volume 1, Chapter 1: Introduction [EN010159/APP/6.1] .	ES Volume 2: Aspect Chapters [EN010159/APP/6.6 to EN010159/APP/6.18] ES Volume 1: Introduction [EN010159/APP/6.1]
Biodiversity				
3.1.1	European and Nationally designated sites	Paragraph 6.34 lists the ecological features requiring detailed assessment however European or Nationally designated sites are not listed. Also, no reference is made to impacts on designated sites within paragraph 6.36 which states the matters scoped in to detailed assessment. It is therefore unclear whether effects on these sites are proposed to be scoped out.	European or Nationally designated sites within the scope of assessment and Zols are listed in Table 6.7 and assessed in Section 6.10 of ES Volume 2, Chapter 6: Biodiversity [EN010159/APP/6.6] . Not all designated sites are scoped in, such as Spalford Warren SSSI due to increases in NOx will be negligible (ES Volume 2, Chapter 13 Air Quality [EN010159/APP/6.13]).	ES Volume 2, Chapter 6: Biodiversity [EN010159/APP/6.6] ES Volume 2, Chapter 13: Air Quality [EN010159/APP/6.13] ES Volume 3, Figure 6.2: Zones of Influence [EN010159/APP/6.20] .

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		<p>Paragraph 6.15 states that no European sites are located within 10km of the site boundary and the closest Site of Special Scientific Interest (SSSI) is located approximately 1.9km away. This is inconsistent with paragraph 2.11 which states that the nearest SSSI is 5km to the southeast of the site. It is therefore unclear whether there are any other SSSIs which have the potential to be affected; Table 6-2 refers to Spalford Warren SSSI and Besthorpe Warren SSSI – please see ID 3.1.2 below.</p> <p>The Inspectorate recommends that ZOI are shown on a figure or figures; the Applicant's attention is drawn to ID 2.2.3 above in this regard. In the absence of further information, such as all designated sites for which an impact pathway exists and the designated features of these sites, the Inspectorate does not agree to scope out this matter at this time. The ES should include an assessment of all European and Nationally designated sites for which an impact pathway exists, including hydrological connectivity and where the site boundary may provide foraging resource of qualifying features of sites. The ES should list all the European, National, and Local designated sites within the selected study areas as has been done for Local Wildlife Sites (LWSs) in paragraph 6.16 of the Scoping Report.</p>	<p>The study area and Zols are shown on Figure 6.2 of ES Volume 3: Figures Supporting Volumes 1 and 2 [EN010159/APP/6.20]. The Zol were determined based on land take area, along with specific environmental changes within this. As a result, Spalford Warren SSSI has a Zol of 0.5km.</p>	

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.1.2	Emissions from plant and traffic serving the site – construction and decommissioning	<p>The Applicant proposes to scope out emissions from construction and decommissioning plant and traffic due to there being no European designated sites within 200m of any roads on which traffic serving the site would lead to a detectable increase in traffic. The Scoping Report also states that during construction and decommissioning the increase in traffic will be temporary and limited, so the extent of any effect will be low, temporary, and reversible.</p> <p>Paragraph 3.45 of the Scoping Report states that the construction site access points and routes are not yet determined however access to the eastern portion of the site will be via the A1133. Table 6-2 notes that there are two SSSIs within 200m of the A1133, but it is stated that this is “unlikely to be a major construction traffic route”. There is therefore inconsistency within the Scoping Report as to whether the A1133 will be used for construction traffic routeing. The Applicant's attention is drawn to ID 2.1.9 in this regard.</p> <p>Considering the lack of certainty regarding the traffic routeing during construction/ decommissioning, and the number of vehicles required during these phases not being provided, the Inspectorate is not in a position to scope this matter out at this stage. The ES should include an assessment of this matter, or the information required to demonstrate the absence of a likely significant effect.</p>	<p>Table 6.7 of ES Volume 2, Chapter 6: Biodiversity [EN010159/APP/6.6] states increased traffic during the construction phase will pass within 200m of this site, but increases in NOx will be negligible due to a low net change in annual average daily traffic (see ES Volume 2, Chapter 13 Air Quality [EN010159/APP/6.13]).</p>	<p>ES Volume 2, Chapter 6: Biodiversity [EN010159/APP/6.6]</p> <p>ES Volume 2, Chapter 13: Air Quality [EN010159/APP/6.13]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.1.3	EMF	<p>EMF effects on ecological features are proposed to be scoped out as the cabling proposed is already existent in many other infrastructure projects across the country and there is no evidence that these have affected ecological features. It is stated that soil heating from cables could occur, but this would be limited to between 1m and 1.5m from the cable.</p> <p>Cabling depths are not provided within the Scoping Report nor is it explicitly stated that cabling would be buried, despite the wording within Table 6-2 suggesting this. Paragraph 3.26 states that the method of onsite cabling, which includes the cable crossing the River Trent, is not yet known.</p> <p>In the absence of further information, such as details on the final cabling method and route, the Inspectorate is not in a position to scope this matter out at this stage. The ES should consider the potential for EMF effects to occur to ecological receptors including those within the River Trent. The ES should also clarify the cabling method required to cross the River Trent and describe any design measures in place which would limit the potential for EMF effects. The Applicant's attention is drawn to the consultation response from the Environment Agency (Appendix 2 of this Opinion) in this regard.</p>	<p>The cabling method used to cross the River Trent will be a trenchless crossing to minimise the effects on this main river. Design measures to reduce the effects of EMF from this cabling method, such as drilling at a minimum of 5m below the river bed, have been included in Table 6.5 of ES Volume 2, Chapter 6 – Biodiversity [EN010159/APP/6.6], and the assessment in Section 6.10 concluded no significant effects. A description of the cabling method can be found in ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5].</p>	<p>ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]</p> <p>ES Volume 2, Chapter 6: Biodiversity [EN010159/APP/6.6]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.1.4	Ecological features	<p>The Scoping Report states that detailed assessment of ecological features will be scoped out where no potential for significant effects is identified following the implementation of embedded mitigation measures.</p> <p>Where mitigation measures are relied upon for avoiding what would otherwise be likely significant effects these effects should be reported within the ES along with the proposed mitigation measures and the mechanism by which they are proposed to be secured.</p>	<p>The ES Volume 2, Chapter 6: Biodiversity [EN010159/APP/6.6] describes the environmental measures and their securing mechanisms within Section 6.8 and the scope of the assessment described in Table 6.7 taking into account the environmental measures.</p>	<p>ES Volume 2, Chapter 6: Biodiversity [EN010159/APP/6.6]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.1.5	Trees	<p>Table 6-1 identifies a ZOI of 0.5km for veteran trees and Appendix A shows the location of existing trees within the Proposed Development site boundary although the status of these trees is not provided.</p> <p>The ES should clearly identify whether there are any veteran trees, ancient trees/ woodland, and/ or trees subject to a Tree Preservation Order within the site boundary. The ES should assess likely significant effects on these and describe any measures in place to mitigate potential likely significant effects on trees, such as suitable buffer zones including root protection zones.</p>	Two veteran trees were found adjacent to the Order Limits, and no ancient woodland was found within the study area, the location and extent of Ancient Woodland is presented in ES Volume 3, Appendix 6.2: Ecology Desk Study [EN010159/APP/6.21]] and ES Volume 3, Appendix 11.6: Arboricultural Report [EN010159/APP/11.6] . A small cluster of trees covered by a Tree Preservation Order (TPO) within the grounds of North Clifton Hall, in the north-east part of the Order Limits, and several TPO's were found in the south east part of the LVIA study area. The location of these trees has been considered within the design, with relevant off-sets and root protection zones accounted for. As such, no likely significant effects are predicted.	<p>ES Volume 3, Appendix 6.2: Ecology Desk Study [EN010159/APP/6.21]</p> <p>ES Volume 3, Appendix 11.6: Arboricultural Report [EN010159/APP/6.21]</p>
3.1.6	Ecological surveys	Paragraph 6.5 states that a range of ecology surveys have been completed, are ongoing, or are planned and these are described in paragraphs 6.6 to 6.14.	Table 6.4 of ES Volume 2, Chapter 6: Biodiversity [EN010159/APP/6.6] describes a record of agreements made with relevant consultation bodies on the extent of baseline data collection and requirements.	ES Volume 2, Chapter 6: Biodiversity [EN010159/APP/6.6]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		<p>The Applicant should seek agreement from relevant consultation bodies regarding the scale, extent, and timing of these surveys to ensure the ecological baseline is robust. Evidence of this consultation should be provided within the application documents.</p> <p>The ES should also describe any assumptions, limitations, and uncertainties associated with the surveys.</p>	<p>Section 6.3 of ES Volume 2, Chapter 6: Biodiversity [EN010159/APP/6.6] outlines the 'Assumptions, Exclusions and Limitations' in the surveys.</p>	
3.1.7	Figures	<p>The Scoping Report does not include a figure showing the designated sites within the vicinity of the Proposed Development site. The Applicant is recommended to include figures within the ES to facilitate understanding of the baseline conditions in respect to ecological sites.</p>	<p>Figures of designated sites are provided within ES Volume 3, Appendix 6.2 Ecology Desk Study [EN010159/APP/6.21] and ES Volume 3, Figure 3.1: Ecological Designations [EN010159/APP/6.20].</p>	<p>ES Volume 3, Appendix 6.2: Ecology Desk Study [EN010159/APP/6.21]</p> <p>ES Volume 3, Figure 3.1: Ecological Designations [EN010159/APP/6.20]</p>
3.1.8	Confidential annexes	<p>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</p>	<p>The badger survey data provided in ES Volume 3, Appendix 6.7 Badger, Otter and Water Vole Baseline has been redacted. Full versions have been provided to relevant stakeholders.</p>	<p>ES Volume 3, Appendix 6.7 Badger, Otter and Water Vole Baseline [EN010159/APP/6.21]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		normal, with a placeholder explaining that a confidential annex has been submitted to the Inspectorate and may be made available subject to request.		
Hydrology and Hydrogeology				
3.2.1	Foul Water	<p>The Applicant proposes to scope out an assessment of the impacts of an increase in foul water flows on the capacity of the surrounding Anglian Water and Severn Trent network and the wastewater treatment works. The reasoning provided is that the Proposed Development would utilise existing foul water infrastructure or would use welfare facilities which are unconnected to the mains.</p> <p>The Inspectorate notes the consultation response from Anglian Water (Appendix 2 of this Opinion) which welcomes the “non-inclusion of provisions in the draft Development Consent Order (DCO) which would allow for a right of connection to the public sewer”.</p> <p>Considering the nature of the Proposed Development the Inspectorate is content to scope this matter out subject to the ES confirming the method of disposal for foul water and demonstrating this would not result in a likely significant effect, particularly with regard to existing</p>	Any foul runoff from the construction site, operational site and during decommissioning would be directed to cesspits with no positive connection to any public foul sewers. The cesspits would be emptied periodically (timeframes to be confirmed) and tankered to the nearest wastewater treatment works. Consultations have been undertaken with the relevant water providers and no likely significant effects are predicted.	ES Volume 2, Chapter 7: Hydrology and Hydrogeology [EN010159/APP/6.7].

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		capacity of wastewater treatment facilities either from existing infrastructure or if unconnected from the mains. The ES should also demonstrate agreement with the relevant consultation bodies.		
3.2.2	Construction and decommissioning	<p>The Applicant proposes to scope out an assessment of effects associated with construction and decommissioning activities namely potential impacts associated with localised flood risk from earthworks, silt laden runoff, chemical spillages, and cement and concrete dust. It is stated that construction and decommissioning activities would be controlled via measures within a Construction Environmental Management Plan (CEMP), which would include a Construction Surface Water Management Plan, and Decommissioning Environmental Management Plan (DEMP). It is also stated that a temporary drainage system may also be implemented for construction.</p> <p>Considering the reliance on mitigation measures, which are as yet unspecified, the Inspectorate does not agree to scope an assessment of these matters out. The ES should provide an assessment of these matters as well as further details on the specific mitigation measures required to avoid likely significant effects.</p>	<p>Impacts as a result of the construction and decommissioning stages have been considered in relation to hydrology and hydrogeology (see Section 7.6 of ES Volume 2, Chapter 7: Hydrology and Hydrogeology [EN010159/APP/6.7]).</p> <p>Section 8.4 of ES Volume 2, Chapter 8: Land, Soil and Groundwater [EN010159/APP/6.8] outlines the baseline characteristics with respect to hydrogeology (groundwater). An assessment of potential impacts on groundwater receptors is provided in Section 8.6 (ES Volume 2, Chapter 8: Land, Soil and Groundwater [EN010159/APP/6.8]).</p>	<p>Section 7.6 of ES Volume 2, Chapter 7: Hydrology and Hydrogeology [EN010159/APP/6.7]</p> <p>Section 8.4 and Section 8.6 of ES Volume 2, Chapter 8: Land, Soil and Groundwater [EN010159/APP/6.8]</p> <p>Volume 7, Outline Construction Environmental Management Plan [EN010159/APP/7.4]</p> <p>Volume 7, Outline Decommissioning Environmental Management Plan [EN010159/APP/7.6]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			Details of mitigation measures that relate to the protection of groundwater receptors are included in the Volume 7, Outline Construction Environmental Management Plan [EN010159/APP/7.4] and Volume 7, Outline Decommissioning Environmental Management Plan [EN010159/APP/7.6] .	
3.2.3	Mitigation – offsets	The Scoping Report states that suitable offsets will be provided to ensure that ecological corridors are maintained and access for maintenance works is provided. Information on the offsets proposed should be provided in the ES along with details on how this is secured within the DCO. The offset distances should be agreed with relevant consultation bodies where possible.	<p>A minimum 10m offset is to be provided between ordinary watercourses and any built development.</p> <p>A minimum of 16m offset is to be provided between the River Trent and any built development. Note that the offsets to the River Trent actually extend far beyond the 16m minimum (see Section 7.5 of ES Volume 2, Chapter 7: Hydrology and Hydrogeology [EN010159/APP/6.7]). Volume 2, Work Plans [EN010159/APP/2.3] and Volume 2, Illustrative Masterplan [EN010159/APP/2.7] take account of the offsets, which have been discussed and agreed with the Environment Agency</p>	<p>Section 7.5 of ES Volume 2, Chapter 7: Hydrology and Hydrogeology [EN010159/APP/6.7]</p> <p>Volume 2: Works Plans [EN010159/APP/2.3]</p> <p>Volume 2: Illustrative Masterplan [EN010159/APP/2.7]</p> <p>Volume 7: Other Documents, Commitments Register [EN010159/APP/7.15]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			These have been secured through the Volume 7: Commitments Register [EN010159/APP/7.15] .	
3.2.4	Water quality	<p>The Scoping Report states that a detailed assessment of effects of the Proposed Development on the quality and quantity of surface water runoff will be undertaken. It is stated that a sustainable drainage system (SuDS) would be implemented to ensure that the quantity and quality of runoff will match the greenfield scenario.</p> <p>The ES should fully describe the SuDS and measures in place to limit impacts on water quality, including potential leakage from the BESS and firewater, as well as any chemicals required to clean PV panels should these be proposed.</p>	<p>Section 7.5 of ES Volume 2, Chapter 7: Hydrology and Hydrogeology [EN010159/APP/6.7] sets out how runoff rates will be restricted and references SuDS that are to be included to provide water quality benefits. Also, SuDS features will be lined to prevent the potential for contaminated fire water to infiltrate to the ground.</p> <p>Further detail and quantification of runoff rates and water treatment is provided in the Flood Risk Assessment (Appendix 7.2) [EN010159/APP/6.21].</p>	<p>Section 7.5 of ES Volume 2, Chapter 7: Hydrology and Hydrogeology [EN010159/APP/6.7]</p> <p>ES Volume 3, Appendix 7.2: Flood Risk Assessment [EN010159/APP/6.21]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			<p>ES Volume 3, Appendix 7.2: Flood Risk Assessment [EN010159/APP/6.21] sets out how potential contaminated runoff from the BESS areas, through the use of a penstock shut off valve downstream and the basins have been sized accordingly to accommodate this runoff. For clarity, no chemicals are proposed as part of the cleaning of the panels.</p>	
3.2.5	Water Framework Directive (WFD) – assessment	<p>The Scoping Report states that should the ES show that there will be no significant effects and the works would not cause or contribute to the deterioration of the status of the existing watercourses or jeopardise the watercourses achieving good status, a WFD assessment would not be undertaken in support of the application.</p> <p>The Inspectorate is of the opinion that further information is required detailing why a full assessment is not required, such as a Stage 1 WFD Screening assessment. The Applicant should agree the conclusions of the WFD assessment with the Environment Agency and provide evidence of this within the application documents.</p> <p>The Applicant's attention is drawn to the Inspectorate's 'Advice Note Eighteen: The Water Framework Directive' as well as the consultation</p>	<p>Following discussions with the Environment Agency, a Stage 1 WFD Screening Assessment has been undertaken and included within ES Volume 3, Appendix 7.4: Stage 1 Water Framework Directive Screening Assessment [EN010159/APP/6.21]. The screening shows that no further assessment is required. The Applicant is discussing the results of the screening with the Environment Agency with a view to recording its agreed position in a Statement of Common Ground.</p>	<p>ES Volume 2, Chapter 7: Hydrology and Hydrogeology [EN010159/APP/6.7]</p> <p>ES Volume 3, Appendix 7.4: Stage 1 Water Framework Directive Screening Assessment [EN010159/APP/6.21]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		response from the Environment Agency (Appendix 2 of this Opinion) in this regard. The ES should explain the relationship between the Proposed Development and any relevant water bodies in relation to the current relevant River Basin Management Plan.		
3.2.6	Methodology – significance	<p>The methodology for determining the significance of effects has not been explained in this chapter of the Scoping Report.</p> <p>The ES will need to set out how any likely significant effects have been determined, by fully explaining how the baseline has informed the assessment and the method used for determining likely significant effects based on the impacts from the Proposed Development and the sensitivity of receptors considered in the assessment. Any use of professional judgement to assess significance should be fully justified within the ES.</p>	Section 7.3 of ES Volume 2, Chapter 7: Hydrology and Hydrogeology [EN010159/APP/6.7] sets out the methodology for the assessment for determining significance and explains the baseline, then describes the impacts from the proposed development and the sensitivity of receptors and magnitude of the predicted impacts, and that where professional judgement has been used this is fully justified within the chapter.	Section 7.3 of ES Volume 2, Chapter 7: Hydrology and Hydrogeology [EN010159/APP/6.7]
Land and Soils				

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.3.1	Physical damage to the soil – operation	<p>The Applicant proposes to scope out physical damage to soil during operation on the basis that there is likely to be limited trafficking and disturbance of soil during the operational phase of the Proposed Development and risk of soil damage is unlikely to occur.</p> <p>Considering the characteristics of the Proposed Development the Inspectorate agrees that damage to soil is unlikely to occur during operation. Therefore, this matter can be scoped out subject to further details on the operational phase, including type and number of vehicles required for on-site maintenance, including potential replacement of panels to extend the operational lifespan, being provided within the ES to justify this.</p>	During the operation phase, up to 10 LGV trips per day, on average, and will require up to 12 HGV trips potentially per day. This is a low number of vehicle trips/movements occurring and is well below the number of movements assessed for the construction phase and significantly below the overall IEMA guidance thresholds.	<p>ES Volume 3, Appendix 12.2: Transport Assessment [EN010159/APP/6.21]</p> <p>Volume 7: Operational Environmental Management Plan [EN010159/APP/7.5]</p>
3.3.2	Land and groundwater contamination – construction and decommissioning phases	The Applicant proposes to scope out land and groundwater contamination for all phases on the basis that the site has historically been used for agricultural purposes. The Applicant considers that measures set out in the CEMP would ensure that no likely significant effects will occur from existing contamination during groundworks in the construction phase.	<p>Section 8.6 includes an assessment where land contamination is likely to occur as a result of the Proposed Development. The assessment concluded that land contamination during construction, operation and decommissioning are not significant.</p> <p>ES Volume 3, Appendix 8.2: Preliminary Risk Assessment [EN010159/APP/6.21] includes the details of the PRA.</p>	<p>ES Volume 2, Chapter 8: Land and Soils [EN010159/APP/6.8]</p> <p>ES Volume 3, Appendix 8.2: Preliminary Risk Assessment [EN010159/APP/6.21].</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		The Inspectorate is not content to scope this matter out. Previous agricultural usage does not mean that existing contamination does not exist on-site. The Scoping Report makes no reference to a Preliminary Risk Assessment (PRA) and so it is not clear whether this would be conducted to determine the risks relating to contamination. As such, there remains a risk that burial pits, fuel/ oil or agrichemical spills, or areas of waste burial may be present. The ES should be supported by the findings of a PRA and where land contamination is identified, the ES should assess significant effects where they are likely to occur.		
3.3.3	Land and groundwater contamination – operation	Considering the characteristics of the operational phase of the Proposed Development, the Inspectorate is content that land and groundwater contamination is unlikely to result in significant effects and therefore this matter can be scoped out of further assessment. However, the ES should describe any measures in place to reduce the potential for contamination during operation, such as measures to prevent discharge, leakage, or fire from the BESS and any chemicals required for washing of PV panels if proposed.	Measures to address contamination are outlined in the Volume 7: Other Documents, Outline Operational Environmental Management Plan [EN010159/APP/7.5] . Measures consist of, but are not limited, no chemicals being used in washing solar PV panels, drip trays, bunding or double- skinned tanks of fuels and oils, and spill kits being provided in areas of fuel/oil storage.	Volume 7: Other Documents, Outline Operational Environmental Management Plan [EN010159/APP/7.5] Volume 7: Outline Battery Safety Management Plan [EN010159/APP/7.11]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			Volume 7: Outline Battery Safety Management Plan [EN010159/APP/7.11] incorporates measures for dealing with fire events, including minimising the effects of fire, dealing with potentially contaminated firewater and preventing release of potentially contaminative materials.	

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.3.4	Baseline surveys	<p>The ES should clearly identify the area of BMV land across the Proposed Development site. This should be provided per grade and should also differentiate between subgrades 3a and 3b.</p> <p>Auger measurements taken to inform the Agricultural Land Classification (ALC) survey by the Applicant should ensure that a sufficient number of augers are used across the site to accurately inform the assessment in line with relevant guidance and/ or standards. The Inspectorate advises that the ES should consider Natural England's Technical Information Note (TIN)049 or justify why they consider their surveying methodology approach is sufficient in the ES.</p>	<p>Section 8.4 of ES Volume 2, Chapter 8: Land and Soils [EN010159/APP/6.8] provides a breakdown of the percentage coverage of different soils grades across the Order Limits, following an ALC survey which was in line with Natural England's Technical Information Note (TIN)049. From this, the percentage of BMV and non-BMV land was determined. Of the land which is defined as ecological enhancement areas and mitigation 42% of this is identified as BMV, with 58% non-BMV. For areas allocated for substations and BESS sites, 81% of this land is identified as BMV, with 19% non-BMV. In regard to solar areas, 57% of this land is identified as BMV, with 43% non-BMV.</p> <p>Approximately one auger/sample location was taken per hectare, with some additional larger trial holes.</p>	<p>ES Volume 3, Appendix 8.3: Agricultural Land Classification Survey Report [EN010159/APP/6.21].</p> <p>ES Volume 2, Chapter 8: Land, Soil and Groundwater [EN010159/APP/6.8]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.3.5	Determination of significant effects – agricultural land	<p>Paragraph 8.14 of the Scoping Report states that any agricultural land loss from the Proposed Development would be temporary and paragraph 8.18 states that potential significant adverse effects are considered where there is a permanent loss of over 20 ha or more of BMV agricultural land.</p> <p>Considering a time-limited consent is not being sought, and the operational lifespan is assumed to be 45 years, the Inspectorate is of the opinion that the operational phase cannot reasonably be considered temporary. On this basis the Applicant should assess the impact of the Proposed Development on the effective loss of agricultural land for the duration of the Proposed Development's lifetime including construction, operation, and decommissioning. The Applicant's attention is drawn to ID 2.2.5 above.</p> <p>The ES should demonstrate whether the proposal allows for continued agricultural use and/ or can be co-located with other functions to maximise the efficiency of land use. The ES should also demonstrate how any retained agricultural land will be available for future productive use and consider the potential economic effects of any changes in land use patterns resulting from the Proposed Development and this should be cross-referenced with the Socio-Economics chapter of the ES. The Applicant should define the assessment criteria in line with relevant guidance and/ or agreement from relevant consultation bodies.</p>	<p>The DCO is seeking time limited consent and the Proposed Development will be operational for up to 60 years, after which time it will be decommissioned. At the time of Scoping no details were provided on the operational lifespan, as it was unclear what agreements were being made with landowners. Given a time-limited consent is being sought, the effects are considered to be temporary.</p> <p>With regards to the effective loss of agricultural land, the impact of BMV and soils have been discussed with Natural England, and an outline Soil Management Plan [EN010159/APP/7.10] submitted with the application. This sets out how soils will be preserved and available for future productive use. Further assessment relating to soil and agricultural land during construction, operation and maintenance and decommissioning are provided in ES Volume 2, Chapter 8: Land, Soil and Groundwater [EN010159/APP/6.8] in Tables 8.2, 8.4 and 8.6.</p>	<p>ES Volume 2, Chapter 17: Socio-Economics [EN010159/APP/6.17].</p> <p>ES Volume 1, Chapter 4: Alternatives and Design Evolution [EN010159/APP/6.4]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			ES Volume 1, Chapter 4: Alternatives and Design Evolution [EN010159/APP/6.4] provides details on why at this stage continued agricultural use and/ or the use of other functions to maximise the efficiency of land use is not considered viable.	
3.3.6	Minerals	As stated in Lincolnshire County Council's consultation response (Appendix 2 of this Opinion), parts of the site are located within a Minerals Safeguarding Area. This is not referenced within the Scoping Report. The ES should assess the likely significant effects of the Proposed Development on the sterilisation of important mineral resources. The Applicant should seek agreement from the Minerals Planning Authority regarding the approach to assessment of this matter.	<p>The effect of sterilisation of resources is not considered during construction due to the phase's short duration. During operation the assessment in Section 8.6 of ES Volume 2, Chapter 8: Land, Soil and Groundwater [EN010159/APP/6.8] concludes the impact of sterilisation of resources in Mineral Safeguarding Areas (MSA) is not significant.</p> <p>Volume 7: Minerals Safeguarding Assessment [EN010159/APP/7.3] provides a comprehensive assessment on the impact of the Proposed Development on the MSA. This report shows the Proposed Development would not sterilise any resources.</p>	<p>Volume 7: Minerals Safeguarding Assessment [EN010159/APP/7.3]</p> <p>Section 8.6 of ES Volume 2, Chapter 8: Land, Soil and Groundwater [EN010159/APP/6.8]</p>
Buried Heritage				

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.4.1	Operational phase	The Applicant proposes to scope out an assessment of the operational phase on the basis that below ground work would not occur during operation. The Inspectorate is content with this approach considering any significant effects on buried assets would occur during construction.	It was agreed that this matter could be scoped out of the ES. No action required.	N/A
3.4.2	Decommissioning	<p>The Scoping Report states that it is unlikely that decommissioning would impact on buried archaeological assets. It is unclear on what basis this conclusion has been made. The Inspectorate considers that the potential for decommissioning stage effects should be assessed, for example, the ES should consider the potential for harm due to removal of piles and any future requirement for deep ploughing.</p> <p>It is also noted that a DEMP will include measures to ensure no likely significant effects occur and this will be secured via DCO requirement. The Inspectorate would expect to see an outline DEMP as part of the application documents.</p>	<p>An assessment of the likely significant effects arising from decommissioning, and of the relevant Environmental Measures, has been carried out as part of the ES Chapter.</p> <p>A well-designed decommissioning process would not cause any ground disturbance in excess of the construction phase, and any element associated with the Proposed Development will be removed using methods and extents similar to that of the construction phase. As a result, buried archaeological remains already removed during construction would not experience any further effects as a result of decommissioning.</p>	<p>Section 9.5 and Section 9.6 of ES Volume 2, Chapter 9: Buried Heritage [EN010159/APP/6.9]</p> <p>Volume 7: Outline Decommissioning Environmental Management Plan [EN010159/APP/7.6]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			<p>Potential harm to buried archaeological features unknown at the time of writing will be discussed with stakeholders and taken into consideration during the archaeological fieldwork and design to reduce impacts.</p> <p>Volume 7: Outline Decommissioning Environmental Management Plan [EN010159/APP/7.6] is submitted as part of the DCO application, which includes details of mitigations measures for archaeology.</p>	
3.4.3	Field investigations	<p>It is noted that physical assessment, namely trial trenching and/ or geophysical survey, is proposed for areas of higher archaeological potential.</p> <p>The Applicant should ensure the baseline is sufficiently robust to represent the existing environmental conditions of the entire site. The Applicant should make efforts to seek agreement from relevant consultation bodies regarding the extent, nature, and timing of field investigations and provide evidence of this within the application documents. The Applicant's attention is drawn to ID 2.1.14 above in this regard.</p>	<p>A proportionate trial trenching evaluation has been carried to inform the ES chapter and the DCO. Together with the DBA and the geophysical survey, the field evaluation provided a robust baseline collection for the Order Limits.</p>	<p>Section 9.3 and Section 9.6 of ES Volume 2, Chapter 9: Buried Heritage [EN010159/APP/6.9]</p> <p>ES Volume 3, Appendix 9.6: List of Buried Heritage Assets Scoped Out [EN010159/APP/6.21]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			The methodology for the archaeological works has been agreed with Historic England and the Archaeological Advisory Team to the Local Planning Authorities ahead of the commencement of the works.	
Cultural Heritage				
3.5.1	The Cross in St Peter and St Paul's Churchyard, the Scheduled Monument at Kettlethorpe	<p>The Applicant proposes to scope out impacts to this Scheduled Monument on the basis that the visual and perceptual separation from the site means this asset is unlikely to be affected.</p> <p>The Applicant's attention is drawn to the consultation response from Historic England (Appendix 2 of this Opinion) which advises that this asset is considered together with the closely associated Church. In the absence of agreement with Historic England and the relevant Local Planning Authorities (LPAs), the Inspectorate does not agree to scope this matter out at this stage. However, should this be subsequently agreed with the relevant consultation bodies, and evidence of this is provided within the application documents, this matter can be scoped out.</p>	Further assessment undertaken as part of the PEIR process on the Site's contribution to the asset's value and the potential for significant effects. This considered both visual analysis (Zones of Theoretical Visibility and winter fieldwork) and non-visual aspects to setting, in line with Historic England guidance. Findings were presented to Historic England and LCC (the relevant consultation bodies who raised this issue with PINS) as part of the PEIR process and agreed to be scoped out in Statutory Consultation comments (July 2024) on the basis of lack of visibility and lack of potential effects.	Scoped out assets confirmed in Table 10.6 of ES Volume 2, Chapter 10: Cultural Heritage [EN010159/APP/6.10]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.5.2	Grade II listed buildings outside of the 1km study area	<p>The Applicant proposes to scope out impacts to these assets due to the nature of these assets being predominantly farm buildings where the contribution of their immediate rural settings would not be affected due to distance from the Proposed Development site.</p> <p>No further information is provided regarding the specific heritage assets to be scoped out, their heritage settings, and their location in relation to the Proposed Development site. On this basis the Inspectorate is not content to scope out an assessment of this matter at this stage. The ES should include an assessment of this matter, or the information required to demonstrate the absence of a likely significant effect such as agreement from relevant consultation bodies. The Applicant's attention is drawn to the consultation response from Historic England (Appendix 2 of this Opinion) in this regard.</p>	<p>Further assessment undertaken on the Site's contribution to the setting and value of Grade II listed assets located beyond 1km. Several assets in East Drayton have subsequently been included in the scope of assessment. And selected assets have been scoped out on the basis that:</p> <ul style="list-style-type: none"> • No associative, experiential or functional relationship between assets and the Site. • Limited or no intervisibility with the Site. • Site currently does not contribute to value of assets and so unlikely for significant effects to arise. • The scope of assessment has been agreed by all relevant consultees (Historic England, LCC, NCC, WLDC, BDC, NSDC) in written comments (July 2024). 	<p>Scoped out assets confirmed in Table 10.6 of ES Volume 2, Chapter 10: Cultural Heritage [EN010159/APP/6.10]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.5.3	Heritage assets where their setting predominantly comprises their respective villages	<p>The Applicant proposes to scope out impacts on heritage assets (Grade II listed assets and non-designated heritage assets) for which their setting comprises their respective village, namely assets within Thorney, Normanton on Trent, Darlton, and Dunham-on-Trent.</p> <p>No further explanation is provided as to why the heritage settings of these assets would not be impacted by the Proposed Development. It is noted, in paragraph 10.22, that effects of construction activities (for example increases in noise, dust and traffic movements) on the tranquillity of character/setting of a heritage asset have the potential to result in significant effects and are therefore proposed to be scoped in. It is unclear why the approach stated in paragraph 10.22 does not apply for these specific assets.</p> <p>In the absence of further information, such as the specific assets proposed to be scoped out and justification on how the settings of these assets would not be affected, the Inspectorate does not agree to scope this matter out at this stage and the ES should include an assessment of these matters. For the assessment of setting, the study area should be agreed with the relevant stakeholders and informed by the visual analysis.</p>	<p>Following receipt of the Scoping Opinion, further assessment has been undertaken of the value and contribution of setting to value of all heritage assets has informed a revised assessment scope to include selected assets within these settlements. This considered both visual analysis (Zones of Theoretical Visibility and photography) and non-visual aspects to setting, in line with Historic England guidance.</p> <p>The scope of heritage assets to be assessed has been agreed by all relevant consultees (Historic England, LCC, NCC, WLDC, BDC, NSDC) in written comments (July 2024) and are assessed within the Cultural Heritage ES Chapter.</p> <p>As such, this comment has been addressed through the inclusion and assessment of relevant assets within these settlements, the provision of further information to scope out selected assets within these settlements, and the agreement of the scope of assessment with relevant stakeholders.</p>	<p>Table 10.6 and Section 10.6 of ES Volume 2, Chapter 10: Cultural Heritage [EN010159/APP/6.10]</p> <p>ES Volume 3, Appendix 10.2: Cultural Heritage Desk-Based Assessment [EN010159/APP/6.21]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.5.4	All heritage assets in Newton-on-Trent and Kettlethorpe	<p>The Applicant proposes to scope out these assets on the basis that the A57 Dunham Road separates the Proposed Development site from these assets. The location of these assets is shown on Figure 10-1.</p> <p>Considering the proximity of these assets to the site boundary, and within the defined 1km study area, as well as the fact that setting of a heritage asset should consider more than just intervisibility, the Inspectorate does not agree to scope this matter from further assessment. The Applicant's attention is drawn to consultation responses from Lincolnshire County Council and West Lindsey District Council (Appendix 2 of this Opinion) in this regard.</p>	<p>Following receipt of the Scoping Opinion, further assessment has been undertaken of the value and contribution of setting to value of all heritage assets. This considered both visual and non-visual aspects to setting, in line with Historic England guidance. As a result, selected assets within Newton-on-Trent have been scoped into assessment due to proximity and drawing from visual analysis (i.e. Zone of Theoretical Visibility), and exclusion of Kettlethorpe agreed with LCC and WLDC and Historic England in written comments received [20 March 2024].</p>	<p>Scoped at Table 10.6 of ES Volume 2, Chapter 10: Cultural Heritage [EN010159/APP/6.10]</p> <p>Newton on Trent assets assessed at Section 10.6 of ES Volume 2, Chapter 10: Cultural Heritage [EN010159/APP/6.10]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.5.5	Heritage assets where power infrastructure is already present in their wider settings	<p>The Applicant proposes to scope out an assessment of these assets on the basis that power infrastructure is already very present in their wider settings and the addition of solar panels and cable routes is unlikely to materially affect their heritage significance. The specific assets proposed to be scoped out are not provided although it is noted that this would include all heritage assets in Low Marnham. It is stated that heritage assets within High Marnham are in closer proximity to power infrastructure but "it is because of that proximity that the potential changing nature of this infrastructure...may materially affect their settings" as such assets in High Marnham are proposed to be scoped in for further assessment.</p> <p>Based on the information provided it is unclear whether the Proposed Development has the potential to materially affect the settings of heritage assets in Low Marnham as well as High Marnham. As such, the Inspectorate is not in a position to scope this matter out at this stage. The ES should include an assessment of this matter, or the information required to demonstrate the absence of a likely significant effect, such as agreement from relevant consultation bodies. The Applicant's attention is drawn to the consultation response from Historic England (Appendix 2 of this Opinion) regarding this matter.</p>	<p>Following receipt of the Scoping Opinion, further assessment has been undertaken of the value and contribution of setting to value of all heritage assets in these settlements. This considered both visual and non-visual aspects to setting, in line with Historic England guidance. Selected assets within High Marnham and Low Marnham have been scoped into the assessment and are assessed within the Cultural Heritage ES Chapter. Several assets have been scoped out on the basis of this further research due to lack of anticipated visual or perceptual effects.</p> <p>The scope of heritage assets to be assessed has been agreed by all relevant consultees (Historic England, NCC, BDC) during consultation and confirmed in written comments (July 2024).</p>	<p>Scoped at Table 10.6 of ES Volume 2, Chapter 10: Cultural Heritage [EN010159/APP/6.10]</p> <p>Relevant assets assessed at Section 10.6 of ES Volume 2, Chapter 10: Cultural Heritage [EN010159/APP/6.10]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.5.6	Heritage receptors	<p>The Scoping Report identifies (in paragraphs 10.18 and 10.19) designated and non-designated heritage assets which have the potential to be affected by the Proposed Development.</p> <p>As noted in the consultation response from the Canal and River Trust (Appendix 2 of this Opinion), Fledborough Viaduct is identified (in paragraph 10.14) as a non-designated heritage asset within the study area but is not listed in paragraph 10.19 as a non-designated heritage asset which is likely to be affected by the Proposed Development. Paragraph 10.22 states that this asset is proposed to be scoped in for detailed assessment. There is therefore inconsistency across the Scoping Report.</p> <p>The Applicant should seek to agree the heritage assets for inclusion and exclusion within the assessment with the relevant consultation bodies and provided evidence of this consultation within the application documents.</p>	Scope of designated and non-designated heritage assets for assessment has been agreed with the relevant consultant bodies (Historic England, LCC, NCC, WLDC, BDC, NSDC) in written comments received (July 2024).	<p>Scoped out assets confirmed in ES Volume 3, Appendix 10.2: Cultural Heritage Desk-Based Assessment [EN010159/APP/6.21].</p> <p>Consultation correspondence in Table 10.5 of ES Volume 2, Chapter 10: Cultural Heritage [EN010159/APP/6.10].</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.5.7	Zone of Theoretical Visibility (ZTV)	It is stated that a ZTV, used as part of the Landscape and Visual Impact Assessment (LVIA), will be used to inform the cultural heritage assessment. This ZTV should be based on the worst-case scenario of the Proposed Development, for example the maximum height of tracker panels and infrastructure components such as BESS, substations, and any overhead lines. Where there are elements of the Proposed Development with different heights, the Applicant should consider using multiple ZTVs to assess the potential visibility for all components of the Proposed Development.	ZTV data was prepared as part of the LVIA based on a worst-case scenario of the maximum heights of all individual components of the Proposed Development. ZTVs were prepared for a bare earth and a screened scenario, the latter taking into account screening by buildings and substantial tree cover, but not including foliage, more isolated tree cover and small structures, i.e. fences. The latter was used as the basis to understand the theoretical visibility of the Proposed Development in the context of both designated and non-designated heritage assets. The methodology is explained in full within Chapter 11: Landscape and Visual.	ZTV shown within ES Volume 3 Figure 10.3: Designated Heritage Asset ZTV Mapping with 1km and 2km Radius and Figure 10.4: Non-Designated Heritage Asset ZTV Mapping with 1km and 2km Radius [EN010159/APP/6.20] ZTV methodology explained in ES Volume 2, Chapter 11: Landscape and Visual [EN010159/APP/6.11]
Landscape and Visual				
3.6.1	National and Local landscape designations	The Applicant proposes to scope out an assessment of National and Local landscape designations on the basis that there are no such	There are no statutory landscape designations within the Study Area.	Section 11.4 of ES Volume 2, Chapter 11: Landscape and Visual [EN010159/APP/6.11]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		designations across, or close to, the Proposed Development site. It is not clear what "close to" is defined as in this context and no figure is provided showing the location of the nearest designations. However, the Inspectorate is content to scope this matter out subject to this being substantiated with evidence in the ES, such as through a ZTV.		
3.6.2	Lighting – construction and decommissioning	<p>The Applicant proposes to scope out an assessment of lighting effects for the construction and decommissioning phases. The reasoning provided is that any lighting during construction and decommissioning would be directional, temporary, only used during working hours, and would be designed to minimise light spill "in so far as it is reasonably practicable". This is proposed to be set out in a CEMP and DEMP.</p> <p>No further detail is provided on the proposed lighting strategy during construction/ decommissioning or the receptors which could be affected. As such the Inspectorate does not agree to scope out this matter. The ES should clearly explain the lighting strategy proposed and the measures in place to avoid or limit lighting impacts on human and ecological receptors.</p> <p>Furthermore, the proposed working hours are not specified within the Scoping Report. The extent of any lighting during construction/decommissioning to occur during and beyond the daylight hours is</p>	<p>With reference to the potential for lighting effects during construction, the Volume 7 Outline Construction Environmental Management Plan [EN010159/APP/7.4] provides detail regarding lighting that was not available at during scoping, namely:</p> <ul style="list-style-type: none"> - Construction working hours will be 7.00 - 19.00 hours Monday to Saturday. - Limited works outside normal working hours cannot be discounted, for example to complete some trenchless crossings. - Construction temporary lighting will be in the form of mobile lighting towers with a power output of 15kilo volt-amperes. 	<p>ES Volume 2, Chapter 11: Landscape and Visual [EN010159/APP/6.11]</p> <p>Volume 7 Outline Construction Environmental Management Plan [EN010159/APP/7.4]</p> <p>Volume 7 Outline Decommissioning Environmental Management Plan [EN010159/APP/7.6]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		therefore unclear. Accordingly, the ES should provide an assessment of lighting effects during construction and decommissioning, including a night-time assessment, or the information required to demonstrate the absence of a likely significant effect.	<ul style="list-style-type: none"> - All construction lighting will be deployed in accordance with the following recommendations to prevent or reduce the impact on human and ecological receptors: <ul style="list-style-type: none"> a) The use of lighting will be minimised to that required for safe site operations, b) Lighting will utilise directional fittings to minimise outward light spill and glare (e.g. via the use of light hoods/cowls which direct light below the horizontal plane, preferably at an angle greater than 20° from horizontal); and c) Lighting will be directed towards the interior of the Order Limits rather than towards the boundaries. <p>Similarly, the Volume 7 Outline Decommissioning Environmental Management Plan [EN010159/APP/7.6] sets out that:</p>	

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			<ul style="list-style-type: none"> - Decommissioning works will generally be limited to daylight hours only, with focussed task specific lighting provided where this is not practicable. - No visible lighting will be needed for the security system. - Lighting will be directional with care to minimise potential for light spillage beyond the site particularly towards houses, live traffic, and habitats, and will be designed with reference to legislation and guidance at the time, in so far as it is reasonably practicable. 	

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			<p>Given the controls in place during construction and decommissioning, lighting would not be present in a single location for a duration exceeding that to complete a given task (for instance completion of a trenchless crossing). The directional fittings required to be used would prevent light spill towards visual receptors (people).</p> <p>The use of lighting would therefore not be of a duration, geographical extent or permanence (the three considerations of landscape and visual magnitude of impact) required to contribute to a significant adverse landscape or visual effect. As such a night time assessment has not been undertaken, however the potential for incidental use of lighting has been considered in the construction and decommissioning scenarios in ES Volume 2, Chapter 11: Landscape and Visual [EN010159/APP/6.11].</p>	

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.6.3	Lighting – operation	<p>The Scoping Report states that during operation lighting would be motion-triggered or turned on manually during emergencies. Paragraph 3.33 states that the Proposed Development would not be permanently lit however the substation and BESS compounds will be “lit when manned” or used in an emergency. It is noted that a quantitative lighting assessment is proposed to be scoped out, but the effect of lighting will be considered “as part of the Proposed Development, rather than a standalone assessment”. It is therefore unclear whether an assessment of lighting effects is proposed to be scoped out or not.</p> <p>For the avoidance of doubt, the Inspectorate is content that a standalone quantitative assessment of operational lighting can be scoped out of further assessment provided that any potential effects, including those relating to intermittent lighting sources such as motion-activated security lighting, are assessed within other aspect chapters of the ES such as LVIA and ecology. The ES should signpost any control measures to ensure that lighting would only be used for emergency usage and motion-triggered. Clarification should be provided as to what the phrase “when manned” means in terms of frequency of usage and whether there is potential for the Proposed Development to be permanently lit should a member of staff be present. This should be appropriately described within the Lighting Strategy.</p>	<p>No external lighting will be permanently operated across the Order Limits, as set out in Volume 7 Outline Operational Environmental Management Plan [EN010159/APP/7.5]..</p> <p>Temporary lighting is assessed for the operational phase in ES Volume 2, Chapter 6: Biodiversity [EN010159/APP/6.6] and ES Volume 2, Chapter 11: Landscape and Visual [EN010159/APP/6.11].</p>	<p>Volume 7 Outline Operational Environmental Management Plan ES Volume 2, Chapter 6: Biodiversity [EN010159/APP/6.6]</p> <p>ES Volume 2, Chapter 11: Landscape and Visual [EN010159/APP/6.11]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.6.4	Study area	<p>The Scoping Report states that a study area of 2km has been selected based on the local topography and view distances to the Proposed Development. However, paragraph 11.47 implies that the ZTV mapping is yet to be undertaken and paragraph 11.48 states that viewpoints are subject to agreement with the LPAs. It is unclear on what basis this study area has been selected however it is noted (in paragraph 11.54) that the extent of the study area is also subject to agreement from the LPAs.</p> <p>Figures showing the extent of visibility are not provided within the Scoping Report. Considering the ZTV is yet to be conducted, the Inspectorate considers it is premature to limit the study area to 2km. The ES should fully justify the study area selected based on the potential for significant effects to occur, such as through a ZTV study and/ or fieldwork. The ZTV should be based on the maximum extent of infrastructure components; the Applicant's attention is drawn to ID 3.5.7. The Applicant should make efforts to agree the LVIA study area with the relevant consultees and provide evidence of this within the ES.</p>	The 2km study area has been agreed in consultation with Bassetlaw District Council, Nottinghamshire County Council, and West Lindsey District Council	ES Volume 3, Appendix 11.5: Landscape and Visual Impact Assessment Consultation Summary [EN010159/APP/6.21]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.6.5	Receptors navigating the River Trent	Table 11-1 lists landscape and visual receptors. Transient receptors such as people travelling on the Public Rights of Way (PRoW) network and local road network are listed however no consideration is given to receptors navigating the River Trent. Although it is noted that receptors will be agreed through consultation with the LPAs, the ES should consider the potential for significant effects on users of the River Trent. The Applicant's attention is drawn to the consultation response from the Canal and River Trust (Appendix 2 of this Opinion) in this regard.	Users of the River Trent would not experience significant adverse effects given the offset of any works from the river and the existing elevated flood defences which prevent intervisibility between the river and the wider Order Limits. Users of the River Trent were therefore scoped out through consultation, after the Scoping Opinion was issued, with the Canal and River Trust.	ES Volume 2, Chapter 11: Landscape and Visual [EN010159/APP/6.11]
3.6.6	Demolition Environmental Management Plan	It is assumed that the reference within Table 11-2 to a Demolition Environmental Management Plan is a typographical error and should be the Decommissioning Environmental Management Plan. However, should this not be the case the ES should clarify the contents of the Demolition Environmental Management Plan and how this relates to the other management plans. The Applicant's attention is drawn to ID 2.1.12.	For clarity this was an error and no Demolition Environmental Management Plan is proposed as part of the Proposed Development. Volume 7: Outline Decommissioning Environmental Management Plan [EN010159/APP/7.6] provides details of the decommissioning management measures.	Volume 7: Outline Decommissioning Environmental Management Plan [EN010159/APP/7.6].

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.6.7	Glint and Glare	<p>It is noted that a separate glint and glare assessment is proposed to be undertaken and the potential for glint and glare impacts to contribute to landscape and visual effects will be considered.</p> <p>The Inspectorate is content with this approach provided any significant effects resulting from glint and glare are reported within the ES, such as within the landscape and visual aspect chapter. The Applicant should seek agreement from the relevant consultation bodies regarding the receptors to be considered within the glint and glare assessment, such as considering potential impacts on boaters, gliders using Darlton Gliding Club, Gamston Airport, as well as residential properties and road users.</p>	<p>The effects and results of the glint and glare assessment are identified in Volume 7: Glint and Glare Assessment [EN010159/APP/7.16] which has found with the proposed environmental measures (to include temporary screening with early planting, and landscaping at a height of at least 4m) there is no likely significant effects for glint and glare occurring to sensitive receptors within the locality at sensitive uses (including at Darlton Gliding Club, who have been consulted upon).</p> <p>Cross-reference to the Glint and Glare assessment, including the environmental measures to mitigate glint and glare impacts, is made within ES Volume 2, Chapter 11: Landscape and Visual [EN010159/APP/6.11].</p>	<p>Volume 7: Glint and Glare Assessment [EN010159/APP/7.16]</p> <p>ES Volume 2, Chapter 11: Lands and Visual [EN010159/APP/6.11]</p>
Transport and Access				

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.7.1	Operational phase	<p>The Scoping Report states that during operation there will be a limited number of transport trips, associated with maintenance of solar arrays and the BESS, and as such an assessment of the operational phase is not proposed. It is stated (in paragraph 12.20) that traffic associated with this phase will be insufficient to trigger the 30% threshold for assessment set out in the Institute of Environmental Management and Assessment (IEMA) guidance 'Environmental Assessment of Traffic and Movement' (2023). Specific numbers and types of traffic anticipated for the operational phase are not provided within the Scoping Report. It is unclear whether this takes into account traffic movements associated with the comprehensive replacement of panels to extend the operational lifespan since a time-limited consent is not being sought.</p> <p>The Inspectorate is content to scope this matter out subject to the ES confirming the operational vehicle types and numbers (with reference to thresholds within guidance), as well as proposed access/transport routes, to justify this position, including from the replacement of infrastructure components during operation; the Applicant's attention is drawn to ID 2.2.5 above in this regard.</p> <p>The assessment should also consider whether there are any highway links of high sensitivity where traffic flows would increase by 10%, in</p>	<p>Details on the predicted transport movements during operation, construction and maintenance and decommissioning are presented in Chapter 12: Transport and Access [EN010159/APP/6.12]. During the operation phase, up to 10 LGV trips per day, on average, and up to 12 HGV trips potentially per day will be generated. This has been scoped out of the assessment, as per the PINs scoping response. Details and routes of the vehicles and routes generated during construction and decommissioning are also provided in Chapter 12.</p>	ES Volume 2, Chapter 12: Transport and Access [EN010159/APP/6.12]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		line with the approach set out within the IEMA guidance and stated in paragraph 12.27 of the Scoping Report.		
3.7.2	Public Rights of Way (PRoW)	<p>Appendix A shows PRoW within and adjacent to the site boundary. Paragraph 3.40 states that PRoW within the site boundary would be retained and incorporated into the design of the Proposed Development although these may be closed or diverted on a temporary basis.</p> <p>Users of PRoW are not listed as an important receptor within paragraph 12.18. The ES should clarify the PRoW which are to be diverted/ closed during construction and assess the potential for likely significant effects to occur from access to these routes by users of the PRoW network, noting that landscape and visual impacts on PRoW users are to be considered in the Landscape and Visual chapter (as stated in paragraph 11.56).</p>	<p>PRoW users have been considered within the receptors assessed in ES Volume 2, Chapter 12: Transport and Access [EN010159/APP/6.12].</p> <p>Volume 7: Outline Public Rights of Way Management Plan [EN01059/APP/7.14] sets out the strategy in terms of the management the PRoW during all phases of the Proposed Development. All PRoWs are assumed to remain open throughout the construction phase.</p>	<p>ES Volume 2, Chapter 12: Transport and Access [EN010159/APP/6.12]</p> <p>Volume 7: Outline Public Rights of Way Management Plan [EN010159/APP/7.14]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.7.3	Receptors navigating the River Trent	<p>The Scoping Report lists the receptors which are likely to be affected by the Proposed Development. Boat users navigating along the River Trent are not listed here.</p> <p>Considering the proximity of the Proposed Development to the River Trent, and the requirement to cross the river, the method of which is not stated in the Scoping Report, the ES should assess the potential for likely significant effects in terms of access to occur on boat users where these are likely to occur. The Applicant's attention is drawn to the consultation response from the Canal and River Trust (Appendix 2 of this Opinion) in this regard.</p>	River users have been considered within the receptors assessed in ES Volume 2, Chapter 12: Transport and Access [EN010159/APP/6.12] . Given there are no new over river crossing provided as part of the Proposed Development, there is no potential impact on boat / vessel users on the River Trent, and as such the effects are not significant.	ES Volume 2, Chapter 12: Transport and Access [EN010159/APP/6.12]
Air Quality				
3.8.1	Construction and decommissioning plant emissions	<p>The Applicant proposes to scope out an assessment of emissions from plant associated with construction and decommissioning as significant effects are not likely to occur. It is stated that this is in line with Institute of Air Quality Management (IAQM) guidance (namely 'Guidance on the assessment of dust from demolition and construction' (2023)) and suitable mitigation measures for site plant from this guidance would also be implemented.</p> <p>This guidance states that consideration should be given to the number of plant and their operating hours and locations to assess</p>	Potential impacts of emissions from plant are assessed qualitatively, based on likely proximity to receptors. Further details on construction plant are also provided in ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5] .	<p>ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5].</p> <p>Section 13.6 of ES Volume 2, Chapter 13: Air Quality [EN010159/APP/6.13]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		whether a significant effect is likely to occur. Details of the plant proposed and the location of construction activities, or the location of sensitive receptors are not provided within the Scoping Report. On this basis, the Inspectorate does not agree that this matter can be scoped out at this stage. An assessment of effects should be included unless robust justification is provided to demonstrate that such machinery would not give rise to significant air quality effects.		
3.8.2	Operational phase	<p>The Applicant proposes to scope out an assessment of the operational phase. It is stated that “the operation of the Proposed Development will not result in any direction emissions to air”. The basis of this statement is not clear considering it is noted that some traffic movements are required during operation.</p> <p>Considering the characteristics of the Proposed Development, the Inspectorate is content that operational traffic is unlikely to exceed thresholds of relevant guidance (namely Environmental Protection UK (EPUK)/ Institute of Air Quality Management (IAQM) guidance: ‘Land-Use Planning & Development Control: Planning for Air Quality (2017)’ requiring detailed assessment and therefore this matter can be scoped out. Nevertheless, the ES should clarify the number and</p>	Operational trip rates are compared to construction trip rates and relevant screening criteria, as requested in the Scoping Opinion. During the operation phase, up to 10 LGV trips per day, on average, up to 12 HGV trips per day are likely to be generated. Given these are lower than during construction, and to occur in a later year when air quality is likely to have improved further, therefore a detailed assessment is not required. This is justified in the ES.	Section 13.3 of ES Volume 2, Chapter 13: Air Quality [EN010159/APP/6.13]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		type of traffic movements required during operation to the justify this, including movements associated with any replacement of infrastructure components during operation. The ES should justify any assumptions made.		
3.8.3	Ecological effects – construction and decommissioning	<p>The Applicant proposes to scope out an assessment of ecological effects. The reasoning provided is that there are no European sites within 200m of roads on which a detectable rise in traffic is predicted for construction and decommissioning and although there are two SSSIs within 200m of the A1133, any effects would be temporary in nature. It is stated that the same applies to LWSs.</p> <p>The number and type of vehicle movements are not stated in the Scoping Report and the construction access routes are not yet confirmed, as noted in ID 2.1.9 and 3.1.2. However, considering the characteristics of the Proposed Development the Inspectorate is content to scope this matter out subject to the number and type of vehicle movements and proposed transport routes relative to the SSSIs and LWSs being provided to demonstrate that any significant effects are not likely to occur, along with any construction/ decommissioning control measures being set out within the CEMP / DEMP.</p>	Two Sites of Special Scientific Interest (SSSI) within 200m of the affected road network have been identified; Spalford Warren and Besthorpe Warren, which are both within 200 m of the A1133, to the south of the Order Limits. The changes in traffic changes on the roads have been qualitatively assessed in the context of the existing movements on these roads. The impacts show there are no likely significant effects.	Section 13.3 of ES Volume 2, Chapter 13: Air Quality [EN010159/APP/6.13] .
Carbon and Climate Change				

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.9.1	Carbon emissions that form a very small component of the carbon footprint of the Proposed Development – construction and operation	<p>The Applicant proposes to scope out an assessment of carbon emissions which contribute a very small component of the Proposed Development's total carbon footprint, namely the treatment and disposal of waste materials and water use. The Scoping Report states that these emissions would together contribute less than 5% of the total carbon footprint of the Proposed Development and in line with IEMA Guidance (2022) these can be excluded from the assessment.</p> <p>On the basis that together these emissions would contribute very minimally to the Proposed Development's carbon emissions, and this is in line with relevant guidance, the Inspectorate agrees that this matter can be scoped out. However, the ES should provide sufficient information to justify this, such as the emissions of these components, by type and quantity, to demonstrate that relevant thresholds for assessment are not exceeded.</p>	<p>The GHG assessment includes all emissions sources associated with the Proposed Development. A small number of minor activities have been scoped out, consistent with guidance published by IEMA which recommends that activities with GHG emissions that individually are less than 1% and in total equal less than 5% of the lifecycle emissions of a development can be scoped out of an assessment as the effects are not significant. This includes water usage, waste generation, and land use change. Within ES Volume 2, Chapter 14: Carbon and Climate Change [EN010159/APP/6.14], justifications on these elements are provided, as well as the environmental measures and securing mechanism to ensure there are no significant effects. .</p>	<p>Section 14.4 of ES Volume 2, Chapter 14 Carbon and Climate Change [EN010159/APP/6.14].</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.9.2	Carbon emissions from decommissioning	<p>The Applicant proposes to scope out an assessment of the decommissioning phase on the basis that at the point of decommissioning, which is assumed to be at least 45 years in the future, the UK would have reached net zero and therefore it is likely that there will be new technology and recycling facilities in place which would mean decommissioning would be net zero.</p> <p>The ES should provide an assessment of greenhouse gas (GHG) emissions for the lifetime of the Proposed Development including decommissioning. As such, the Inspectorate does not agree that this matter can be scoped out.</p> <p>The ES should clearly set out how impacts to/ from climate change are to be assessed for the decommissioning phase. Where future decarbonisation in the manufacturing sector is proposed to be taken into account, the ES should clearly explain where guidance has been used to determine that this is an acceptable approach, justify the relevant projection scenario, and identify any limitations or uncertainties associated with such future projections. Where uncertainty remains, the Applicant should consider whether it would be more appropriate to conduct the assessment based on current carbon emissions to assess a worst-case scenario, as has been proposed for the assessment of emissions for repair, maintenance, and replacement of the Proposed Development during its lifetime, as stated in paragraph 14.24.</p>	<p>The GHG assessment set out in ES Volume 2, Chapter 14: Carbon and Climate Change [EN010159/APP/6.14] includes a whole lifecycle assessment of the Proposed Development including emissions generated during the construction, operation and decommissioning phases. Details of the technical methodology are provided in ES Volume 3, Appendix 14.2: Greenhouse Gas Assessment Technical Methodology [EN010159/APP/6.21].</p> <p>The CCR assessment considers the construction, operational and decommissioning phases of the Proposed Development.</p>	<p>ES Volume, Appendix 14.2: Greenhouse Gas Assessment Technical Methodology [EN010159/APP/6.21].</p> <p>PART B: CLIMATE CHANGE RESILIENCE ASSESSMENT of ES Volume 2, Chapter 14: Carbon and Climate Change [EN010159/APP/6.14].</p> <p>ES Volume 7: outline Decommissioning Environmental Management Plan [EN010159/APP/7.6]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		The Inspectorate would expect to see a DEMP, agreed with the LPAs, secured through the inclusion of an outline DEMP or similar with the application.	<p>As set out in the 'Assumptions, Exclusions and Limitations' subheading of ES Volume 2, Chapter 14: Carbon and Climate Change [EN010159/APP/6.14], assumptions have been made on the rate of future decarbonisation of electricity generation in line with the Department for Energy Security and Net Zero, as well as the rate of future decarbonisation of transport in line with the Department for Transport guidance. A worst-case approach is undertaken and no decarbonisation for the replacement of equipment is included (i.e. the same values from the construction period are assumed for the replacement of equipment).</p> <p>ES Volume 7: outline Decommissioning Environmental Management Plan [EN10159/APP/7.6] is included as part of the DCO submission.</p>	

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.9.3	Emissions	It is stated that the term 'carbon' is used to describe all GHG emissions. The ES should clarify which specific GHG emissions would be produced by the Proposed Development. Schedule 4 of the EIA Regulations states that an ES should provide an estimate of the type and quantity of emissions. This should include consideration of SF6 emissions. The Applicant's attention is drawn to ID 2.1.4 in this regard.	<p>The combined effect of all GHG emissions are presented as CO2e and will account for the seven GHGs included in the UNFCCC's Kyoto Protocol: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF6), and nitrogen trifluoride (NF3).</p> <p>The Proposed Development will not result in direct emissions of SF6 as the electrical switchgear used for the Proposed Development does not use SF6.</p>	Section 14.4 of ES Volume 2, Chapter 14 Carbon and Climate Change [EN010159/APP/6.14].
3.9.4	Mitigation	It is stated that "best practice principles" will be used to avoid and reduce carbon emissions. Any relevant mitigation measures identified from the assessment should be clearly described in the ES and secured through the DCO.	Mitigation measures embedded in the Proposed Development to mitigate the effects of climate change are set out in this ES Chapter.	Section 14.6, Table 14.14, Table 14.15 and Table 14.16 of ES Volume 2, Chapter 14 Carbon and Climate Change [EN010159/APP/6.14].

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.9.5	In-combination assessment	The Scoping Report makes no reference to an in-combination climate change impact assessment. The ES should assess the potential for climate change to exacerbate likely significant effects associated with the Proposed Development.	Part C of of ES Volume 2, Chapter 14 Carbon and Climate Change [EN010159/APP/6.14] includes an In-Combination Climate Change Impact Assessment, which assesses the extent to which potential future climate change alters the environmental effects assessed by other Environmental Impact Assessment (EIA) disciplines such as (but not limited to) flood risk, air quality, and noise and vibration. The assessment shows there are no likely significant effects for construction, operation and maintenance and decommissioning.	PART C: In- Combination Climate Change Impact of ES Volume 2, Chapter 14 Carbon and Climate Change [EN010159/APP/6.14] .
Noise and Vibration				

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.10.1	On-site construction and decommissioning traffic vibration	<p>The Applicant proposes to scope out an assessment of vibration effects from on-site construction and decommissioning traffic. The Scoping Report states that “experience suggests” that construction and decommissioning traffic movements will not generate significant levels of vibration at the locations of sensitive receptors, however there are no apparent surveys/ evidence to substantiate this. The number and type of construction/ decommissioning vehicles proposed are not provided within the Scoping Report nor is a figure showing the location of sensitive receptors and proposed on-site haul routes. The Applicant's attention is drawn to ID 2.1.9 and ID 2.1.10.</p> <p>In the absence of further information, the Inspectorate is not in a position to scope this matter out at this stage. Accordingly, the ES should include an assessment of this matter, or the information required to demonstrate the absence of a likely significant effect, such as providing evidence that the type and number of vehicles would not exceed relevant thresholds in guidance requiring detailed assessment.</p>	Noise from construction traffic, which takes account of noise effects from road traffic sounds, such as engine noise and tyres on road surfaces, as well as vibration from construction traffic have been assessed based on the methodologies set out in appropriate assessment guidance, including DMRB LA 111, IEMA and ENIA Guidelines and BS 5228-2.	<p>Section 15.3 of ES Volume 2, Chapter 15 Noise and Vibration [EN010159/APP/6.15]</p> <p>ES Volume 3, Appendix 15.3: Construction Noise and Vibration Assessment [EN010159/APP/6.21]</p>
3.10.2	Operational traffic	The Applicant proposes to scope out noise and vibration from operational traffic as very minimal road traffic would be generated by the site during operation.	During the operation phase, up to 10 LGV trips per day, on average, and up to 12 HGV trips potentially per day will be generated. As per the scoping response this has been Scoped Out of the ES.	N/A

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		Considering the characteristics of the Proposed Development the Inspectorate agrees that this matter can be scoped out of further assessment provided that the ES confirms the anticipated type and number of vehicle trips likely to be generated during operation, as well as the proposed access routes to justify this, including movements associated with any replacement of infrastructure components during operation.		
3.10.3	Cable routes	<p>The Applicant proposes to scope out noise and vibration from cable routes as no noise or vibration will be generated by cable routes within the site during operation.</p> <p>The Inspectorate agrees this matter can be scoped out of the assessment as once operational the cables are unlikely to be a significant source of noise or vibration.</p>	Scoped Out	N/A
3.10.4	Operational vibration from solar PV arrays	<p>The Applicant proposes to scope out an assessment of vibration effects from the operation of the solar PV arrays on the basis that they do not use any equipment that generates significant vibration during operation.</p> <p>The Inspectorate has considered the nature and characteristics of the Proposed Development and agrees that this matter can be scoped out of the assessment.</p>	Scoped Out	N/A

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.10.5	Noise exposure from construction plant	<p>It is stated that the magnitude of change in noise exposure from construction plant is not proposed to be considered on the basis that "no permanent activities" are proposed for construction. It is unclear whether this wording means that this matter is proposed to be scoped out. As stated in paragraph 5.27 of the Scoping Report, generally the significance of an effect is considered as the combination of the sensitivity of a receptor and the predicted magnitude of change. Considering the magnitude of change for this matter is not proposed to be considered, the ES should clearly explain how the significance of effects is determined. Furthermore, duration of an impact is generally considered as one factor in determining the magnitude of change; the ES should consider the full range of contributing factors to magnitude of change.</p> <p>The ES should assess the potential for noise exposure arising from construction plant to result in likely significant effects at sensitive receptors, particularly as the construction phase is anticipated to last approximately 18 months in duration. For the avoidance of doubt, the ES should consider and report both temporary and permanent effects.</p>	Potential noise and vibration effects from construction plant have been assessed.	<p>Section 15.3 of ES Volume 2, Chapter 15 Noise and Vibration [EN010159/APP/6.15].</p> <p>ES Volume 3, Appendix 15.3: Construction Noise and Vibration Assessment [EN010159/APP/6.21]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.10.6	Baseline noise survey	<p>Paragraph 15.17 states that it is currently anticipated that up to seven monitoring locations will be used to inform the baseline noise survey. The location of these monitoring locations is not shown on a figure.</p> <p>Paragraph 15.5 states that the existing High Marnham 275 kV substation and associated electricity grid infrastructure is likely a source of some baseline noise but also states that this source is not included in the strategic noise mapping data and cannot be readily quantified without site-specific noise surveys. Where further details on the baseline noise surveys are provided (paragraphs 15.16 and 15.17) there is no reference to the substation. It is therefore unclear whether noise monitoring is proposed near to the High Marnham substation or whether baseline noise from the substation would be sufficiently captured within monitoring at other locations.</p> <p>The Applicant should seek agreement from relevant consultation bodies regarding the number and location of monitoring locations to ensure that a robust baseline assessment has been undertaken. Evidence of this consultation should be provided within the application documents. The location of monitoring locations should be depicted on a supporting plan.</p>	<p>The relevant Local Authorities were consulted on the baseline survey approach and proposed monitoring positions prior to the survey. Feedback received was incorporated into the baseline survey approach. Details on the monitoring locations are included in the 'Existing Baseline' subheading of ES Volume 2, Chapter 15: Noise and Vibration [EN010159/APP/6.15] and ES Volume 3, Appendix 15.2: Baseline Noise Survey [EN010159/APP/6.21].</p>	<p>Section 15.3 of ES Volume 2, Chapter 15 Noise and Vibration [EN010159/APP/6.15].</p> <p>ES Volume 3, Appendix 15.2: Baseline Noise Survey [EN010159/APP/6.21]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.10.7	Tracker panels – operation	<p>The Scoping Report states that there is potential for adverse noise impacts associated with the operation of the Proposed Development from ancillary equipment such as substations and battery storage equipment. The potential for noise emissions from tracker panels is not listed in paragraph 15.15 despite these being an option for the solar mounting structures (as stated in paragraph 3.9).</p> <p>The ES should consider the potential for tracker panels to cause noise emissions which could be perceptible to sensitive receptors and should either assess these accordingly where significant effects are likely to occur or provide evidence of noise emission levels to demonstrate that significant effects would not occur at sensitive receptor locations.</p>	Tracker panels are not proposed for use as part of the development, therefore the assessment of noise from tracker panel motors is no longer relevant.	N/A
Human Health				
3.11.1	Health related behaviours – <ul style="list-style-type: none"> • risk taking behaviours; and • diet and nutrition. 	<p>The Applicant proposed to scope out an assessment of risk-taking behaviours on the basis that all on-site personnel would be professional workers and all contractors and operators on-site will have strict health and safety protocols enforced. The Inspectorate is content to scope this matter out.</p> <p>The Applicant proposes to scope out an assessment of impacts from diet and nutrition, including access to healthy affordable food. The</p>	Scoped Out	N/A

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		Scoping Report states that the Proposed Development will result in the long-term reduction in agricultural land, but as the site represents less than 0.0001% of the UK's Utilised Agricultural Area it is unlikely to significantly affect the availability and affordability of food. On the basis that any impacts on BMV agricultural land are assessed in the Land and Soils ES chapter, the Inspectorate is content to scope this matter out.		
3.11.2	<p>Social environment –</p> <ul style="list-style-type: none"> • housing and access to good quality affordable housing; • relocation; • community safety; • community cohesion, social participation, interaction and support; and • community severance and community engagement. 	The Applicant proposes to scope out an assessment of impacts on the social environment. The Scoping Report states that the Proposed Development will not result in the loss of any dwellings, and the majority of the workforce are expected to already be residents of the East Midlands region. It is stated that the Proposed Development does not involve any population displacement or relocation and will not require compulsory purchase of homes or community facilities. Health and safety measures are proposed to be in place which would limit the potential for impacts on community safety, including from crime. These are proposed to be secured through a CEMP. The Inspectorate agrees that these matters can be scoped out of further assessment provided that cross-references are made to other ES aspect chapters where appropriate, such as LVIA where impacts relating to 'psychological severance' are proposed to be assessed as stated in Table 16-2.	Community safety, community severance and community engagement are scoped out of specific assessment within the Health ES chapter as agreed with the Planning Inspectorate, albeit there are cross-references to other ES Chapters and the predicted likely significant effects (including the hydrology and hydrogeology; land and soils; landscape and visual; transport and access; air quality; noise and vibration; and socio-economics assessments) within ES Volume 2, Chapter 16 Human Health [EN010159/APP/6.16] .	ES Volume 2, Chapter 16: Human Health [EN010159/APP/6.16]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.11.3	Economic environment – <ul style="list-style-type: none"> • employment and income; and • education and training. 	<p>Table 16-2 states that employment and income and education and training are proposed to be scoped out. These matters are also included in Table 16-3 as matters which are proposed to be scoped in and therefore it is unclear whether these matters would be assessed or not, noting that this is also proposed to be assessed in the Socio-Economics ES chapter.</p> <p>As noted in Table 16-3 the Proposed Development presents education, training, and employment opportunities. As such, the Inspectorate considers that these matters should be assessed within the ES. Schedule 4 of the EIA Regulations states that both positive and negative effects should be reported within an ES.</p>	Employment and income for vulnerable groups (during all phases), including how the Proposed Development affects socio-economic status and working conditions, as well as opportunities through apprenticeships and training are detailed in the Socio-economics chapter. No actions required.	ES Volume 2, Chapter 17: Socio-economics [EN010159/APP/6.17].
3.11.4	Economic environment – <ul style="list-style-type: none"> • regeneration; • connections to jobs; and • tourism and leisure industries. 	<p>The Applicant proposes to scope out an assessment of impacts on the health determinants associated with the economic environment namely regeneration, and tourism and leisure.</p> <p>It is also stated that connection to jobs is unlikely to be significantly affected by the Proposed Development as the majority of the workforce are expected to currently reside in the East Midlands region, however there is potential to scope this matter into the Human Health ES chapter if the Transport and Access ES chapter indicates a significant impact.</p>	The Transport and Access chapter does not identify a significant impact with regards to the workforce connections to jobs, as such this is scoped out of the health assessment. No actions required.	ES Volume 2, Chapter 17: Socio-economics [EN010159/APP/6.17].

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		The Inspectorate is content with this approach however the Applicant's attention is drawn to ID 3.12.7 below.		
3.11.5	Bio-physical environment – <ul style="list-style-type: none"> water quality or availability; and land quality and use. 	<p>The Scoping Report states that the Hydrology and Hydrogeology ES chapter will assess how the Proposed Development affects water resources, and that the Land and Soils ES chapter will assess how the proposals will affect land quality. If either of these assessments indicate significant effects to human health, then these matters may be scoped into the Human Health ES chapter.</p> <p>The Inspectorate is content with this approach.</p>	Cross-references have been made to effects assessed in other ES chapters in Volume 2 which could have implications for human health.	ES Volume 2, Chapter 16: Human Health [EN010159/APP/6.16].
3.11.6	Bio-physical environment – <ul style="list-style-type: none"> air quality (operation). 	<p>The Applicant proposes to scope out an assessment of air quality impacts during the operational phase on the basis that the implementation of a CEMP would mean no significant dust or traffic emissions would arise.</p> <p>It is unclear why measures in a CEMP would be used during the operational phase and whether instead this should refer to an operational phase management plan. The Applicant's attention is drawn to ID 2.1.12.</p>	The Applicant now refers to an 'operational phase management plan' rather than a CEMP. The Transport and Access Chapter includes details about the type and number of vehicles and proposed access routes during the operational phase to demonstrate thresholds in relevant guidance are not exceeded.	ES Volume 2, Chapter 16: Human Health [EN010159/APP/6.16]. ES Volume 2, Chapter 12: Transport and Access [EN010159/APP/6.12].

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		Considering the characteristics of the Proposed Development, the Inspectorate is content that the operational phase is unlikely to lead to significant health effects from air quality emissions and therefore this matter can be scoped out of further assessment. However, the ES should provide further details on the type and number of vehicles, and proposed access routes, proposed during the operational phase to demonstrate these does not exceed the thresholds requiring detailed assessed as set out in guidance (namely IAQM/ EPUK). The Applicant's attention is drawn to ID 3.8.2 above.		
3.11.7	Bio-physical environment – • radiation.	<p>The Applicant proposes to scope out an assessment of effects from EMF. The Scoping Report states that long-standing exposure limit and health protection guidelines for EMF have been developed by the International Commission on Non-ionizing Radiation Protection and these have a high safety margin. It is stated that the Proposed Development will comply with these guidelines. It is noted (in Table 16-3) that impacts of EMF radiation on mental wellbeing are proposed to be assessed.</p> <p>As noted in ID 2.1.7 above, the voltage of the on-site and export cables is not provided within the Scoping Report, and it is not clear whether cables would be buried or overhead. Cables above 132kV have the potential to cause EMF effects.</p>	EMFs are assessed as a health determinant. ES Volume 3: Appendix 2.4: Electro-Magnetic Fields Impact Report [EN010159/APP/6.21]) provides details on the location, routing and voltages of cables, along with a risk assessment to any human and ecological sensitive receptors. The assessment shows there are no likely significant effects from EMF associated with the Proposed Development. This EMF Report is referenced in ES Volume 2, Chapter 16: Human Health [EN010159/APP/6.16] .	<p>Assessment is set out in Section 16.6 of ES Volume 2, Chapter 16: Human Health [EN010159/APP/6.16].</p> <p>ES Volume 3, Appendix 2.4: Electro-Magnetic Fields Impact Report [EN010159/APP/6.21]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		Given the uncertainty surrounding cabling design and proximity to receptors, the ES should address the risks to human health arising from EMF, including cumulatively with existing infrastructure, taking into account relevant technical guidance. The Inspectorate considers that the ES should set out the design measures to be implemented to avoid the potential for likely significant effects in line with relevant guidance.		
3.11.8	Institutional and built environment– <ul style="list-style-type: none"> health and social care services; and quality of built environment and natural environment. 	<p>The Applicant proposes to scope out an assessment of health and social care services on the basis that the Proposed Development would not result in the loss or provision of any dwellings and associated population. The Inspectorate agrees that this matter can be scoped out on this basis.</p> <p>It is stated that impacts on the quality of the built and natural environments will be considered in the Landscape and Visual ES chapter, with mitigation measures secured to minimise impacts. The Inspectorate agrees with this approach.</p>	The Applicant proceeded with the agreed approach.	ES Volume 2, Chapter 11: Landscape and Visual [EN010159/APP/6.11].
3.11.9	Institutional and built environment– <ul style="list-style-type: none"> health and social care services; and quality of built environment and natural environment. 	The Applicant proposes to scope out an assessment of health and social care services on the basis that the Proposed Development would not result in the loss or provision of any dwellings and associated population. The Inspectorate agrees that this matter can be scoped out on this basis.	This matter was scoped out of assessment in Human Health because no significant change was indicated.	N/A

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		It is stated that impacts on the quality of the built and natural environments will be considered in the Landscape and Visual ES chapter, with mitigation measures secured to minimise impacts. The Inspectorate agrees with this approach.		
3.11.9	Local business activity	<p>Table 16-3 states that the economic effects of the Proposed Development on changes to local business activities, such as diversification of agricultural land and growth of rural businesses, will be assessed in the Socio-Economics ES chapter with effects in health terms considered in the Human Health ES chapter. It is stated that this matter may be scoped out of the Human Health ES chapter if the Socio-Economics chapter indicates no significant change in local business activity.</p> <p>The Inspectorate is content with this approach.</p>	This matter was scoped out of assessment in Human Health because no significant change was indicated.	N/A
3.11.10	Decommissioning methodology	Paragraph 16.23 states that the methodology will be the same for all phases of the Proposed Development. Whilst paragraph 16.24 states that "both direct and indirect effects will be considered across the construction and operation phases", it does not refer to the decommissioning phase. It is therefore unclear what the proposed approach includes assessing decommissioning effects. The ES should clearly describe the methodology used for each phase of the development. Effort should be made to agree the assessment approach with relevant consultation bodies.	Effects during the decommissioning phase are assessed using the methodology set out in Section 16.3.	Methodology is set out in Section 16.3 of ES Volume 2, Chapter 16: Human Health [EN010159/APP/6.16].

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
Socioeconomics				
3.12.1	Demand for school places	<p>The Applicant proposes to scope out effects on school places as the operational phase of the Proposed Development is not expected to result in a permanent increase in local population and the demand for school places should not be affected. No reference is made to the construction or decommissioning phases, although it is noted (in paragraph 3.43) that the construction phase is anticipated to last approximately 18 months.</p> <p>Considering the characteristics of the Proposed Development, the Inspectorate agrees that this matter can be scoped out of the assessment on this basis. However, further detail on the number of people proposed to be employed during each of the phases should be specified within the ES to justify this.</p>	As requested in Scoping Opinion, the number of people employed during the different phases have been described and assessed.	ES Volume 2, Chapter 17 Socio-Economics [EN010169/APP/6.17]
3.12.2	Baseline conditions	<p>The Scoping Report does not describe how the baseline will be established for recreational and community facilities and open space. The Inspectorate recommends the use of surveys of the PRoW affected to ensure that the baseline usage of the PRoW has been considered.</p> <p>The ES should provide details of all desk- and field-based sources of information used to support the assessment. Effort should be made to agree the methodology for establishing the baseline conditions with relevant consultation bodies.</p>	All publicly available baseline data that was deemed relevant to the assessment is set out in Section 17.4.	ES Volume 2, Chapter 17 Socio-Economics [EN010169/APP/6.17]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			A usage survey of the existing PRowS has not been undertaken as part of the baseline, as such surveys pose several methodological challenges which may mean the usage data may not be reliable, such as weather conditions, time of year, whether they are undertaken during school holidays. Also, no data on PRow usage is held by the County Councils and Sustrans. A worst-case approach was undertaken which considered all PRow were extensively used.	
3.12.3	Environmental measures and mitigation	This chapter of the Scoping Report omits reference to mitigation measures although it is noted (in paragraph 17.17) that the Proposed Development is likely to have beneficial effects, and paragraph 17.18 lists the opportunities for the Proposed Development to provide beneficial socioeconomic effects. The ES should describe how these measures would be implemented and the mechanism by which they are secured.	Further details of specific mitigation measures, and how they are secured, are provided. ES Volume 2, Chapter 17: Socio-Economics [EN010159/APP/6.17] makes reference to the Volume 7, Outline Skills, Supply Chain and Employment Plan [EN010159/APP/7.8] which details educational opportunities through apprenticeships and training.	ES Volume 2, Chapter 17 Socio-Economics [EN010169/APP/6.17] Volume 7, Outline Skills, Supply Chain and Employment Plan [EN010159/APP/7.8]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.12.4	Workers	Paragraph 17.21 states that impacts of temporary employment during construction, and permanent employment during operation, will be assessed. The ES should provide the anticipated number of jobs proposed to be created for each of the phases of the Proposed Development as well as any plans in place to promote local employment, training, and education and explain how these will be secured through the DCO.	As requested in Scoping Opinion, the number of people employed during the different phases have been described and assessed.	ES Volume 2, Chapter 17 Socio-Economics [EN010169/APP/6.17]
3.12.5	Significant effects	The ES should clearly explain the criteria used to determine the significance of effects such as when establishing how a change becomes "noticeable" and what constitutes a "moderate number of receptors" and how this differs from a minor effect with a "minor change" and "a small number of receptors". Any use of professional judgement to assess significance should be fully justified within the ES; the Applicant's attention is drawn to ID 2.2.12.	In the absence of published significance criteria or technical guidance for socio-economics, the criteria used have been described and explained.	Paragraph 17.3.29 to 17.3.32 of ES Volume 2, Chapter 17 Socio-Economics [EN010169/APP/6.17]
3.12.6	Severance	The ES should assess the impacts during the construction and operational phases of potential severance issues for farmers and other landowners. Where relevant, measures should be secured within the DCO to ensure farmers and other landowners' ability to access their land is not hindered.	Severance has been scoped out, as land owners have signed a Heads of Terms agreement which ensures no severance.	Paragraph 17.3.34 of ES Volume 2, Chapter 17 Socio-Economics [EN010169/APP/6.17]

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.12.7	Tourism and leisure	<p>No reference is made to tourism and leisure within Chapter 17 of the Scoping Report despite Table 16-2 referring to Chapter 17 regarding this matter. It is stated (in Table 16-2) that the Proposed Development is not expected to have any significant effects on the tourism sector however this is not substantiated and the existing tourism in the area is not described.</p> <p>The ES should describe the existing baseline environment with regards to tourism and leisure and provide an assessment of this matter where significant effects are likely to occur.</p>	The impacts on tourism and leisure are assessed throughout the ES Chapter 17 including a description of the existing baseline.	ES Volume 2, Chapter 17 Socio-Economics [EN010169/APP/6.17]
Environmental Topics Scoped Out				
3.13.1	Glint and Glare	<p>The Applicant proposes to undertake a detailed standalone glint and glare assessment which will form a technical appendix to the ES. It is stated that modelling will be used to inform the design of the Proposed Development and a description of the relevant design measures and safety considerations will be included within the Proposed Development description chapter of the ES.</p> <p>The Inspectorate is content with this approach provided that any potential effects identified through the glint and glare assessment are reported appropriately within the ES, such as within the LVIA chapter. The Applicant's attention is drawn to ID 3.6.6 above.</p>	The effects and results of the glint and glare assessment are identified in Volume 7: Glint and Glare Assessment [EN010159/APP/7.16] and shows with the environmental measures, there is no likely significant effects for glint and glare occurring to sensitive receptors within the locality.	<p>Volume 7: Glint and Glare Assessment [EN010159/APP/7.16]</p> <p>Volume 7, Outline Landscape and Ecology Management Plan [EN010159/APP/7.7]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			Embedded mitigation measures for glint and glare consist of screening in the form of vegetation and (until the vegetation is at 4m above ground level (agl)) temporary screening as wooden hoarding or similar. These measures are outlined in Volume 7, Outline Landscape and Ecology Management Plan [EN010159/APP/7.7] .	
3.13.2	Risk of Major Accidents and Disasters	<p>The Applicant proposes to scope this matter out on the basis that significant effects are unlikely to occur. It is stated that the Proposed Development would be designed and operated in accordance with legislative requirements. It is also stated that solar infrastructure is of low susceptibility to the impact of natural disasters.</p> <p>Schedule 4 of the EIA Regulations requires a description of the expected significant adverse effects deriving from the vulnerability of the Proposed Development to risk of major accidents and/ or disasters. Whilst the Inspectorate is content that a standalone aspect chapter on Major Accidents and Disasters is not required, the ES should include a description of this matter and any measures in place to reduce the risk of significant effects.</p>	Table 2.1 of ES Volume 1: EIA Methodology [EN010159/APP 6.2] describes Major Accidents and Disasters. This provided details of the potential risks and the management plans in place to ensure there are no likely significant effects.	<p>ES Volume 1: EIA Methodology [EN010159/APP 6.2]</p> <p>Volume 7, Outline Construction Environmental Management Plan [EN010159/APP/7.4]</p> <p>ES Volume 7: Outline Operational Environmental Management Plan [EN010159/APP/7.5]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
		<p>The Scoping Report highlights that battery storage is the highest risk component of the Proposed Development. The Inspectorate considers that the risk of battery fire/ explosion should be assessed in the ES, including where any measures designed to minimise impacts on the environment in the event of such an occurrence are secured. The Inspectorate should be provided with details of the proposed battery storage management plan as part of the application documents. The Applicant should make efforts to agree these with the relevant consultation bodies, such as the fire and rescue services.</p> <p>The Scoping Report makes no reference to other potential risks of major accidents and disasters such as flood risk or unexploded ordnance (UXO). The ES should justify why these matters have not been assessed.</p>	<p>Volume 7, outline Construction Environmental Management Plan [EN010159/APP/7.4]; Volume 7 outline Operational Environmental Management Plan [EN010159/APP/7.5], and Decommissioning Environmental Management Plan [EN010159/APP/7.6] have been produced, detailing the measures, such as works will be undertaken in accordance with relevant health and safety legislation, that will be implemented to ensure that major accidents are avoided. During operation, safety processes will be reviewed, and if required, updated to ensure that the operations do not increase the risk or result in a major accident. The oCEMP also takes into account the management of unknown risks, such as the provision of an Unexploded Ordnance (UXO) Risk Management Plan prior to construction, as well as the management of environmental factors such as flood risk.</p>	<p>Volume 7. Outline Decommissioning Environmental Management Plan [EN010159/APP/7.6]</p> <p>Volume 7: Outline Decommissioning Environmental Management Plan [EN010159/APP/7.11]</p> <p>Volume 7, outline Battery Safety Management Plan [EN010159/APP/7.11]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			<p>Volume 7, outline Battery Safety Management Plan [EN010159/APP/7.11], has been produced detailing the regulatory guidance reviewed and how these will be responded to, so as to ensure that all safety concerns around the BESS element of the Proposed Development are addressed in so far as is reasonably practicable.</p> <p>Initial discussion with the Fire and Rescue Service have been held and they will be invited to comment further following the grant of the DCO.</p>	




PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
3.13.3	Waste	<p>It is stated that a standalone chapter on waste is not proposed although the production of waste and its transportation will be considered where relevant in the ES such as the traffic and transport chapter.</p> <p>Noting that the operational life of the Proposed Development is not proposed to be specified the Inspectorate considers that the ES should assess the likely significant effects from waste during the operation phase, as well as the decommissioning phase to the extent that it is possible at this time. The ES should include estimates, by type and quantity, of expected residues and emissions and quantities and types of waste produced during the construction and operation phases in line with Schedule 4 of the EIA Regulations. As such, the Inspectorate is not content to scope this aspect out.</p>	<p>ES Volume 3, Appendix 2.3: Materials and Waste Impact Assessment [EN010159/APP/6.21] includes an assessment of waste during construction, operation and maintenance, and decommissioning has been undertaken to the extent that is practicable at this time. This estimates, by type and quantity, of expected residues and emissions and quantities and types of waste produced. The result shows there is no likely significant effect from the Proposed Development.</p>	<p>ES Volume 3, Appendix 2.3: Materials and Waste Impact Assessment [EN010159/APP/6.21]</p> <p>ES Volume 7: Outline Site Waste Management Plan [EN010159/APP/7.12]</p>

PINS ID	Topic	Inspectorate's Comments - Issue Raised	How Addressed	Where Addressed within the ES (where relevant)
			<p>ES Volume 7: Outline Site Waste Management Plan [EN010159/APP/7.12] sets out the likely effects and commitments to reduce the generation of waste and to divert waste from landfill. This will ensure that waste arisings will be effectively controlled, and that good Site management practice will be implemented to minimise the generation of waste and maximise the reuse or recycling of waste materials that arise from all phases of the Proposed Development where practicable.</p>	
3.13.4	Wind microclimate	<p>The Applicant proposes to scope this matter out considering the low-rise nature of the Proposed Development is unlikely to impact on wind conditions.</p> <p>Considering the characteristics of the Proposed Development the Inspectorate is content that this matter can be scoped out of further assessment notwithstanding that the resilience of the Proposed Development to climate change should be assessed, as is proposed in paragraph 14.9 of the Scoping Report.</p>	<p>The Proposed Development's resilience to climate change has been assessed in ES Volume 2, Chapter 14 Carbon and Climate Change [EN010159/APP/6.14]. The assessment concluded no significant effects at any stage of the Proposed Development.</p>	<p>ES Volume 2, Chapter 14 Carbon and Climate Change [EN010159/APP/6.14]</p>

Appendix A: Marine Management Organisation Correspondence

20/06/2024, 12:15

Webmail :: RE: One Earth Solar Farm

Subject **RE: One Earth Solar Farm**
From SM-MMO-SH - MFA Marine Consents (MMO) <marine.consents@marinemanagement.org.uk> 
To info@oneearth solar farm.co.uk <info@oneearth solar farm.co.uk>
Copy [REDACTED]@aecom.com> , [REDACTED]
<[REDACTED]@logikagroup.com> 
Date 20/06/2024 12:01

Hello

No idea what HDD is and you don't reference it?

Work on crossing the bridge, would be vertically above the tidal range, so would be licensable.
Directional drilling, under the river, if at no point does it breach the surface in the tidal area, would not be licensable.

If you need more formal pre-application advice/meeting etc you would be advised to submit a formal enquiry (ENQ) via the MMO's online system, which would be chargeable.

Regards

Andy

[REDACTED] Administration Officer Business Support Team | Marine Management Organisation |

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Our MMO Values: Together we are **Accountable**, **Innovative**, **Engaging** and **Inclusive**





one earth
solar farm