



# Mallard Pass

Solar Farm

## Mallard Pass Solar Farm

### Applicant's Responses to ExA's First Written Questions (ExQ1)

**Deadline 2 (15th June 2023)**

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EN010127/APP/9.7

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Infrastructure Planning (Examination Procedure) Rules 2010

Planning Act 2008

**The Infrastructure Planning  
(Applications: Infrastructure Planning (Examination Procedure)  
Rules 2010**

**Mallard Pass Solar Farm  
Development Consent Order 202[x]**

**9.7 Applicant's Response to the ExA's First Written Questions**

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## Introduction

- 1.1.1 This report responds to the Examining Authority's (ExA's) First Written Questions, issued on 23 May 2023 **[PD-008]**. It responds to each of the questions posed to the Applicant. The Applicant has not responded to questions posed to specific Interested Parties but will review those responses once available and may comment on those at Deadline 3.
- 1.1.2 Section 2 of this report is tabularised to include the ExA's questions and response to each question as follows:
- Design, Parameters, and other details of the Proposed Development (19 questions)
  - Environmental Statement (General) (5 questions)
  - Need (6 questions)
  - Site Selection and Alternatives (9 questions)
  - Air Quality and Emissions (2 questions)
  - Biodiversity, Ecology and Natural Environment (including Habitats Regulations Assessment (HRA) (18 questions)
  - Habitats Regulations Assessment (3 questions)
  - Compulsory Acquisition, Temporary Possession and Other Land or Rights Considerations (12 questions)
  - Draft Development Consent Order (dDCO) Articles (22 questions)
  - Schedule 1 – Authorised Development (1 question)
  - Schedule 2 – Requirements (8 questions)
  - Schedule 3 – Legislation to be disapplied (1 question)
  - Schedule 16 – Procedure for discharge of requirements (3 questions)
  - Historic Environment (14 questions)
  - Land Use and Soils (12 questions)
  - Landscape and Visual (19 questions)
  - Noise and Vibration (9 questions)
  - Socio-economic Effects (7 questions)
  - Transportation and Traffic (14 questions)
  - Water Environment (12 questions)
  - Other matters or issues (6 questions)

## Topic 1.0 Design, Parameters, & other details of the Proposed Development

ExQ1	Respondent	Question	Applicant's Response
Q1.0.1	The Applicant	The Works Plans [AS-003] include a Limits of Deviation Legend on each plan which provides a key to identifying which Works are proposed within the different areas of the Order limits. For clarity and ease of use, please update the Works Plans to include a notation of which Work Nos. are proposed for each area of works within the Order limits. For example, in a similar way to the Works Plans submitted for the recent Longfield Solar Farm Development Consent application.	The Work Plans have been updated and submitted at Deadline 2.
Q1.0.2	The Applicant	<p>The Project Parameters are set out in Volume 2 Appendix 5.1 of the Environmental Statement (ES) [AS-012]. In some respects, these differ from the parameters that are set out in the Project Description of the ES [AS-010]. For example, Table 5.7 of the Project Description include additional parameters for the onsite substation compound (such as details of a 400/30kV transformer and harmonic filters) that are not included in the Appendix 5.1 Project Parameters.</p> <p>a) For each component of the Proposed Development, please review the project parameters in both these documents to ensure full consistency and clarity as to what is proposed and what the parameters would be. Where differences remain, please explain the reason for this.</p>	<p>a) Solar Stations - Table 1 within Appendix 5.1 <b>[AS-012]</b> sets out the maximum height parameters for the Solar Stations. The configuration and/or the technology to be used within the Solar Stations is not yet known and will be determined at the detailed design stage to allow for the Proposed Development to make use of best available technology maximising the efficiency of power generation (as per Design Guidance C1.1 within the Design and Access Statement <b>[APP-204]</b>). Given the size and scale of <u>components</u> within the Solar Station and a maximum height set by a parameter, it is not considered necessary to set a parameter for the width and length of these components within that Appendix. Table 5.3, 5.4, 5.5, 5.6 within the ES <b>[AS-010]</b> have been updated to clarify that the length and width of these components is not a parameter but provide indications of typical lengths and widths for such equipment.</p> <p>Onsite Substation and Ancillary Buildings - Table 1 within Appendix 5.1 <b>[AS-012]</b> sets out the maximum parameters that have been used for the purposes of the assessment. Whilst Table 5.7 does include further information on the individual elements within the Onsite Substation Compound these are all within the maximum parameters within Table 1 within Appendix 5.1. As an example, the LVIA assesses the maximum parameter of 13m, including the ZTV modelling (see para 6.3.13 of the Landscape and Visual Impact Assessment <b>[APP-036]</b>). If the height or mass of any of the individual components were to</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>b) Given the inconsistencies in the scope of the parameters within these documents, confirm on what basis and using which parameters the ES has assessed the Proposed Development?</p>	<p>increase but within the parameters set out in Appendix 5.1, this would not alter the conclusions of the LVIA. It is therefore not necessary to include the parameter dimensions for the smaller individual elements in relation to the Onsite Substation. Table 5.7 within the ES <b>[AS-010]</b> has been updated to clarify that the measurements provided for the smaller individual elements are not parameters but provide indications of typical lengths and widths for such equipment.</p> <p>Primary and Secondary Construction Compounds – The location and limit of deviation for the Primary and Secondary Construction Compounds is set by Work No 5 on the Works Plans <b>[AS-003]</b>. Because of their temporary nature and the soil management measures set out within the outline Soil Management Plan (oSMP) <b>[PDA-007]</b> (i.e., the size of the compound within that limit of deviation), the Land and Soils assessment <b>[APP-042]</b> has concluded that there would be a negligible, temporary and not significant impact on ALC.</p> <p>Fencing and CCTV – Table 5.11 and 5.12 within the ES <b>[AS-010]</b> include details on the depth of the fence and CCTV poles. In both cases the indicative depths provided are less than the maximum depth of the piles set out in Table 5.1 of the ES. The ES has been based upon the maximum depth of the Mounting Structure piles and therefore it is not necessary to include this information as a parameter. Tables 5.11 and 5.12 within the ES have been updated to clarify that these measurements are indicative.</p> <p>b) The ES has assessed the parameters set out within Appendix 5.1 <b>[AS-012]</b>, which are considered to be the worst-case scenario.</p>
Q1.0.3	The Applicant	<p>The last sentence of Paragraph 1.3.1 of the Project Parameters document <b>[AS-012]</b> refers to the Design Guidance set out in Section 5 of the Design and Access Statement <b>[APP-204]</b>.</p> <p>It appears that this should refer to section 4.5 of the Design and Access Statement (as defined in the relevant Interpretation of the draft Development Consent Order (dDCO) <b>[APP-017]</b>). Please amend as appropriate.</p>	<p>Appendix 5.1 <b>[AS-012]</b> has been amended accordingly and submitted at Deadline 2.</p>

ExQ1	Respondent	Question	Applicant's Response
Q1.0.4	The Applicant	<p>Table 5.7 of the Project Description [AS-010] in the ES and the Project Parameters [AS-012] set out the parameters of the proposed onsite substation and ancillary buildings. Figure 5.5 of the ES [APP-125] also provides an Illustrative Onsite Substation Layout.</p> <p>a) Provide illustrative elevations (from each side) of the proposed onsite substation and ancillary buildings, notating each individual part/component that is likely to be required. Please also provide indicative photographs of the appearance of elements of existing substations that would be similar to those intended to be used for the Proposed Development.</p> <p>b) Noting the sloping nature of the site of the proposed onsite substation, indicate through illustrative cross section drawing(s) how the levels of the substation and ancillary buildings would be likely to relate to the existing and surrounding ground levels.</p>	<p>a) Illustrative elevations and indicative photographs have been submitted with this procedural deadline in <b>Appendix A</b>. It is important to note that these elevations are illustrative and may change as technology advances. The key parameter from a visual perspective is the 13m height parameter, which have been assessed.</p> <p>b) The Landscape and Visual Impact Assessment [<b>APP-172</b>] and photomontage E [<b>APP-172</b>] have been based upon the Primary Substation Compound being a level platform. The photomontage illustrates the components as if they were set upon a level platform, set back 12m from the road (in accordance with the parameter set out in Appendix 5.1 of the ES [<b>APP-053</b>] and assumes for the purposes of the assessment no cut into the existing ground levels, with the exception of the removal of topsoil as part of the site preparation works. This represents a worst-case scenario. The levels are a matter for detailed design following selection of electrical equipment and its associated configuration.</p>
Q1.0.5	The Applicant	<p>Paragraph 12.4.18 of the ES [APP-042] refers to an area of 100sqm per Solar Station.</p> <p>a) The illustrative 'top views' of solar stations included in Figures 5.3 (a to c) [APP121- APP123] show a footprint area significantly less than 100sqm. Please explain why an area of 100sqm is required with an indicative drawing of how this might be utilised?</p>	<p>a) The top-down views included within in Figures 5.3 (a to c) [<b>APP-121 to 123</b>] illustrate the layouts of different configurations of the electrical equipment located at a Solar Station. As set out in Table 5.6 of the ES [<b>AS-010</b>] and Appendix 5.1 [<b>AS-012</b>], there will be one storage container per 30MW of installed capacity co-located at a Solar Station. An area of 100sqm has been used as a worst case scenario for the size of Solar Station with a co-located Storage Container, for the purposes of Land Use and Soils Assessment [<b>APP-042</b>]. The configuration of the electrical components and the storage containers will be determined at the detailed design stage and may not require 100sqm to</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>b) Are separate parameters needed for Solar Stations?</p> <p>c) What is the maximum number of Solar Stations that would be likely to be needed for the Proposed Development?</p>	<p>be sealed over, as illustrated on Plate 4 within the ES <b>[AS-010]</b>, where only the immediate surrounds of the Solar Station consist of a permeable surface.</p> <p>b) Table 1 within Appendix 5.1 <b>[AS-012]</b> sets out the maximum height parameters for the Solar Stations. The configuration and/or the technology to be used within the Solar Stations is not yet known and will be determined at the detailed design stage to allow for the Proposed Development to make use of best available technology maximising the efficiency of power generation (Design Guidance C1.1 within the Design and Access Statement (DAS) <b>[APP-204]</b>). Given the size and scale of components within the Solar Station and a maximum height set by a parameter, it is not considered necessary to set a parameter for the width and length of these components, as these will be co-located with the PV Arrays and seen in the context of a PV Array rather than as an individual element.</p> <p>c) The maximum number of Solar Stations will be dependent on two factors:</p> <ol style="list-style-type: none"> <li>1) The type of technology chosen at the time of procurement; and</li> <li>2) The installed DC capacity of the Proposed Development.</li> </ol> <p>The dDCO <b>[APP-017]</b> does not propose an upper limit on installed DC capacity. The illustrative layouts (Figures 5.1a and 5.1b <b>[APP-116 and APP-117]</b>) illustrate the distribution of Solar Stations for a Fixed South Facing and Single Access Tracker layouts. The number of Solar Stations will be determined by the number of PV Modules installed which in turn will determine the number of PV Strings. The number of PV Strings will in turn determine the number of String Inverters / String Transformers or Central Inverter/Central Transformers. The assumptions within the illustrative layouts have been based upon:</p> <ul style="list-style-type: none"> <li>• 30 PV Modules per PV String for FSF and 30 or 45 PV Modules per PV String;</li> <li>• 13 PV Strings per String Inverter and 32 String Inverters per String Transformer; or</li> <li>• 302 PV Strings per 1 Central Inverter and 1 Central Inverter per Central Transformer.</li> </ul> <p>Flexibility is sought to allow the Proposed Development to make use of best available technology maximising the efficiency of power generation. As technology</p>



ExQ1	Respondent	Question	Applicant's Response
			<p>evolves the ratio of PV Modules per PV String per Inverter per Transformer may be altered to provide better efficiencies.</p> <p>The location of the Solar Stations at the detailed design stage will be in accordance with the Design Guidance set out within Section 4.5 of the DAS <b>[APP-204]</b> in order to reduce visual, residential and recreational amenity effects on receptors.</p>
Q1.0.6	The Applicant	<p>The locations of the primary and secondary construction compounds are shown within Work No 5 of the Works Plans <b>[AS-003]</b> and indicatively on Figure 5.12 <b>[APP-132]</b>.</p> <p>a) Please provide indicative layouts of the primary and secondary construction compounds.</p> <p>b) The primary construction compound is proposed in the same location as the onsite substation. Provide further details, including any illustrative phasing, for how the footprint of the onsite substation compound could be partially use as the primary construction compound.</p>	<p>a) This level of information cannot be provided at this time as the configuration and layout of the construction compounds will be determined by the appointed Contractor. Plate 9 within Chapter 5 of the ES <b>[AS-010]</b> provides a photographic example of a construction compound on a solar farm. The ES has assessed the impacts associated with these compounds such as land use and soils, traffic movements, noise, air quality and water quality, and mitigation has been secured through the outline Construction Environmental Management Plan (oCEMP) <b>[PDA-005]</b> and outline Construction Traffic Management Plan (oCTMP) <b>[APP-212]</b>. The layout of the construction compound will not have a material bearing on the assessment of effects. The Noise Assessment <b>[APP-040]</b> has assessed the impact of the construction compound on the nearest residential receptors on the basis that works are ongoing at the closest point (paragraph 10.8.2) and, with mitigation measures in place, concluded that there will be a negligible effect.</p> <p>b) The extent of Works No. 2 and Works No. 5, as shown on the Work Plans <b>[APP-006]</b>, overlap one another, and the limit of deviation allows for their placement anywhere within Field 19 as shown on Figure 3.2 <b>[APP-112]</b>. The maximum footprint of the Onsite Substation compound will be 2ha as set out in Appendix 5.1 <b>[AS-012]</b> of the ES. The works have been shown to overlap so as to allow flexibility for the contractor, at the detailed design stage, to sequence the works to utilise the hardstanding and/or ancillary buildings within the Onsite Substation compound for temporary offices or laydown, prior to the substation being commissioned. Illustrative phasing cannot be provided at this point as it will be for the contractor to consider this as part of the construction phasing for the Proposed Development as a whole and when the Substation needs to come 'online'. This approach aligns with the Design Guidance (C3.2) within Section 4.5 of the Design and Access Statement <b>[APP- 204]</b> which requires contractors to consider sustainable resource and waste management measures to use material resources efficiently and reduce wate at source.</p>

ExQ1	Respondent	Question	Applicant's Response
Q1.0.7	The Applicant	<p>Paragraph 4.9.3 of the Transport Statement [APP-074] states that internal routing will be implemented "where possible" within the Solar Photovoltaic (PV) Site to avoid vehicles needing to use the Local Road Network (LRN). Design Guidance set out in the Design and Access Statement [APP-204] includes the following: "PL3. 14 - Solar Stations and Access Tracks to be located on lower grade agricultural land as far as practically possible." The Illustrative/Indicative Layout Plans [APP-007 to APP-010] identify "Proposed Internal Access Tracks"</p> <p>Please can the Applicant clarify how the alignment of the proposed internal access tracks has taken the Design Guidance into account in order to minimise the impact on Best and Most Versatile (BMV) agricultural land?</p>	<p>The alignment of the access tracks shown on Figures 5.1a to 5.1d [<b>APP-116 to APP-119</b>] have sought to maximise the use of existing access tracks within the Solar PV Area to reduce the impact on BMV agricultural land. The illustrative layouts are a worst-case representation of the minimum pitch for the PV Tables (as set out in Appendix 5.1 [<b>AS-012</b>]) within any particular field within the Solar PV Site. The layout of the PV Tables within the Solar PV Site will be optimised at the detailed design stage to take account of the chosen technology that will make use of best available technology maximising the efficiency of power generation (Design Guidance C1.1). At the detailed design stage, the location of the Solar Stations and Access Tracks should be considered so as to avoid placement within areas of BMV where possible [<b>PL3.14</b>] and without unnecessarily impacting the achievement of other elements of the Design Guidance such as not locating Solar Stations within Flood Zone 2 or 3 [<b>PL3.3</b>]. It will not be possible to locate all Solar Stations and the Associated Access tracks outside areas of BMV in all cases as they will need to be located in areas of BMV where a Solar Station is required as a result of the number of PV Strings in a particular area.</p>
Q1.0.8	The Applicant	<p>Paragraph 1.3.1 of Appendix 6.5 (Landscape and Visual – Amenity and Recreation Assessment) of the ES [APP-058] sets out details of the four new proposed permissive paths. Whilst these are shown on Figure 6.11 (Green Infrastructure Strategy Plan) [APP-173], they are not particularly clear.</p> <p>a) Please therefore provide a separate plan showing the four new proposed paths and the existing Public Rights of Way.</p> <p>b) Provide further details of the process for the planning, implementation (including timing) and maintenance of</p>	<p>a) A separate series of plans (<b>Appendix B</b>) has been submitted for Deadline 2 showing existing Public Rights of Way (PRoW) and proposed permissive paths.</p> <p>b) New permitted paths would be accessible on a phased basis post construction of the adjacent PV site area development parcel. They will be marked out as part of the construction process. Implementation and maintenance of new permissive paths will be implemented as set out in the detailed LEMPs in accordance with the framework set out within the outline LEMP at Section 3.1.13 [<b>APP-210</b>] and as required by Requirement 7(2)(h) of the dDCO, and so the LPAs will be able to consider that in approving the detailed LEMPs. As set out in the outline LEMP, the paths would be grassed and not surfaced. The legal status of the paths would be as permissive routes, not legally permanent definitive rights of way. They would be open to walkers, horse riders and off-road cyclists. Motorised vehicles would not be permitted.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>these new paths. What would be their legal status and would there be any restrictions on their use?</p>	
Q1.0.9	The Applicant	<p>Numerous concerns have been raised by local residents in Relevant Representations and at Open Floor Hearings 1 and 2 in relation to the potential effects of the Proposed Development on health and wellbeing. The Applicant explains in its response to the Relevant Representations [PDA-012] that the relevant assessments in the ES conclude that no likely significant adverse effects are expected to arise from these topics.</p> <p>Taking account of the interaction between and potential combined effects, along with the general concerns raised by Interested Parties on this matter, set out and explain in further detail how the Proposed Development (including its construction, operation and decommissioning) would be likely to affect the well-being and mental health of residents living in the locality of the Order Limits.</p>	<p>Effects on Human Health were scoped out of the Environmental Statement as a specific topic in agreement with PINS, as per the Scoping Opinion <b>[APP-050]</b>.</p> <p>It is not considered appropriate to attempt to assess either the current or predicted future mental health status of residents living in the locality of the Order limits, as every person will have different subjective and objective reactions, thoughts, and feelings towards changes to, or influences upon, their environment, whatever those changes or influences may be caused by or attributed to.</p> <p>Achieving good design outcomes through good design process has been at the core of the Proposed Development. Good design has been founded on the Vision for the Proposed Development set out at the very start of the project, as explained in the DAS <b>[APP-204]</b>. This Vision included seeking to 'Respect and enhance features in the landscape and promoting connectivity'.</p> <p>The design of the Proposed Development has grown and been refined as a result of technical analysis and assessment, design evolution and importantly stakeholder feedback. Throughout the design process the Applicant has sought to respond sensitively and transparently to matters raised by residents and the delivery of a sensitive, well-designed proposal that delivers benefits beyond clean, renewable energy. This is explained in the DAS, but at a more detailed level, responding to particular receptor concerns, in the Residential Visual Amenity Assessment (RVAA) <b>[APP-057]</b> and the Amenity and Recreation Assessment <b>[APP-057]</b>.</p> <p>The Applicant considers that the following assessment topics would impact upon the health and wellbeing of residents:</p> <ul style="list-style-type: none"> <li>• visual impacts, including residential amenity, glint and glare and utilising recreational resources such as PRoWs;</li> <li>• noise and air quality effects during construction of the Proposed Development, including from construction traffic; and</li> <li>• traffic impacts during construction impairing residents' ability to enjoy the recreational resource and concerns about safety generally.</li> </ul>

ExQ1	Respondent	Question	Applicant's Response
			<p>The ES has considered all of these topics and concluded that, with the mitigation in place as set out in the submitted management plans, the parameters and Design Guidance, and through the operation of the DCO requirements:</p> <ul style="list-style-type: none"> <li>• as set out above, minimising visual impacts, including understanding the journeys that recreational users might take between villages, has been a core part of the scheme design development, with mitigation planting, setbacks, and parcel removals introduced to account for surrounding receptors and to avoid glint and glare effects. Whilst it is recognised that there are some paths that are immediately adjacent to the Proposed Development, the design has sought to take account of the topography and apply setbacks to reduce impacts. The Applicant considers that for the residents of Essendine and the surrounding villages, its package of measures, and the compartmentalisation of the Proposed Development, will mean that there will not be an industrialisation of the landscape and the recreational resource will still be able to be enjoyed by residents. The RVAA concludes that the Residential Value Amenity Threshold is not broken for any residential receptor, and the Glint and Glare assessment concludes that no likely significant effects will arise;</li> <li>• no likely significant effects are anticipated to arise from noise and air quality effects during construction with the measures set out in the oCEMP <b>[APP-207]</b> in particular being considered; and</li> <li>• Chapter 9: Highways and Access of the ES <b>[APP-039]</b> specifically considers impacts to pedestrian and cyclist amenity and fear and intimidation and no significant effects are assessed to arise. The measures set out in the oCTMP <b>[APP-212]</b>, including the provision of passing places, the access strategy for HGV routes and workers; and the delivery times for HGVs have all been developed to minimise impacts, and have been agreed with the relevant local highways authorities.</li> </ul> <p>Taking all of this into account, the Applicant considers that the well-being and mental health of residents in the locality will not be affected by the Proposed Development.</p>
Q1.0.10	The Applicant	Paragraph 5.13.1 of Chapter 5 (Project Description) of the ES <b>[APP-035]</b> states	i) As set out in the Environmental Statement <b>[APP-035]</b> the construction phase is likely to take 24 months. The sequencing of the construction

ExQ1	Respondent	Question	Applicant's Response										
		<p>that the construction phase is anticipated to take 24 months with the final programme being dependent on the detailed design and potential environmental constraints on the timing of construction activities.</p> <p>Please provide an indicative programme in table or Gantt chart form for the proposed construction phase based upon the information and design currently known for the Proposed Development, including (i) variables that might be necessary to deal with potential environmental or other constraints and (ii) any site phasing arrangements.</p>	<p>programme is not known at this stage as this will be dependent on a number of factors such as availability of supply, environmental conditions etc. In that context, the Applicant has provided below some indicative timescales for the construction of different elements of the Proposed Development.</p> <table border="1" data-bbox="1077 424 2096 1098"> <thead> <tr> <th data-bbox="1077 424 1671 491">Construction Phase</th> <th data-bbox="1671 424 2096 491">Approximate Duration</th> </tr> </thead> <tbody> <tr> <td data-bbox="1077 491 1671 558">Site Preparation</td> <td data-bbox="1671 491 2096 558">130 days</td> </tr> <tr> <td data-bbox="1077 558 1671 965">           PV Array (30MW) including:           <ul style="list-style-type: none"> <li>• Pile Marking and installation of Mounting Structures (Plate 11a <b>[APP-035]</b>)</li> <li>• Installation of Mounting Structures (Plate 11c &amp; d <b>[APP-035]</b>)</li> <li>• Installation of PV Modules (Plate 12 <b>[APP-035]</b>)</li> <li>• Installation of Inverters</li> <li>• Installation of Transformers</li> <li>• Installation of cabling &amp; trenching</li> <li>• Installation checks and verification</li> </ul> </td> <td data-bbox="1671 558 2096 965">400 days</td> </tr> <tr> <td data-bbox="1077 965 1671 1032">Onsite Substation</td> <td data-bbox="1671 965 2096 1032">200 days</td> </tr> <tr> <td data-bbox="1077 1032 1671 1098">Testing and Commissioning</td> <td data-bbox="1671 1032 2096 1098">150 days</td> </tr> </tbody> </table> <p>It should be noted that the construction timescales set out above are not sequential and the timeframes for each of the components will overlap within one another. For example, a number of 30MW blocks of PV Arrays will be constructed concurrently which will also overlap with the construction of the Onsite Substation and will allow similar activities to be undertaken across the site as required. The indicative timescales set out above demonstrate that there is sufficient flexibility within the 24 month programme to accommodate variables that may arise such as the availability of supply of materials, labour and / or environmental conditions. For example, if the</p>	Construction Phase	Approximate Duration	Site Preparation	130 days	PV Array (30MW) including: <ul style="list-style-type: none"> <li>• Pile Marking and installation of Mounting Structures (Plate 11a <b>[APP-035]</b>)</li> <li>• Installation of Mounting Structures (Plate 11c &amp; d <b>[APP-035]</b>)</li> <li>• Installation of PV Modules (Plate 12 <b>[APP-035]</b>)</li> <li>• Installation of Inverters</li> <li>• Installation of Transformers</li> <li>• Installation of cabling &amp; trenching</li> <li>• Installation checks and verification</li> </ul>	400 days	Onsite Substation	200 days	Testing and Commissioning	150 days
Construction Phase	Approximate Duration												
Site Preparation	130 days												
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ExQ1	Respondent	Question	Applicant's Response
			<p>soils conditions were too wet in one part of the site, work could halt in that particular area to allow conditions improve. The 24 month construction programme has flexibility to accommodate these variables.</p> <p>ii) The Applicant has not yet determined the site phasing arrangements. This will be determined following the appointment of an Engineering, Procurement and Construction Contractor and is in any event controlled by Requirement 6.</p>
Q1.0.11	The Applicant (a), Local Planning Authorities (b) and Mallard Pass Action Group (b)	<p>Paragraph 5.13.8 of the ES [APP-035] sets out the core construction hours which would run from 07:00 to 19:00 Monday to Saturday, and no working on Sundays or Bank Holidays.</p> <p>a) Please provide further explanation and justification for these proposed core hours, including the start/finish times and the continuation of construction working hours until 19:00 on Saturdays.</p> <p>b) The Local Planning Authorities and Mallard Pass Action Group are requested to provide their comments on the acceptability of the Applicant's proposed core construction hours.</p>	<p>Noise and vibration from construction and decommissioning activities have been assessed in accordance with the guidance of BS 5228 Parts 1 and 2. The assessment has determined that noise and vibration construction effects associated with the Project would be negligible to minor adverse and not significant. This takes into account the proposed working hours which are based on the standard construction hours set out in BS 5228 Part 1, Annex E.</p> <p>The oCEMP [APP-207] sets out further detail on the proposed working hours and the management of noisy activities beyond 13:00 on Saturdays. The proposed working hours will be agreed with the Local Authority and Section 61 Consents (as set out at paragraph 2.6.4) would be obtained which would include agreed construction noise limits for nearby noise sensitive receptors. Noise disturbance will be minimised as far as reasonably practicable through the use of Best Practical Means with reference to relevant guidance in BS 5228.</p> <p>The start and finish times directly equate to the proposed working hours; works will start at 07:00 and finish at 19:00 under the core working hours.</p> <p>The continuation of construction activities until 19:00 on Saturdays are justified given that the following activities will be excluded on Saturday afternoons (13:00 to 19:00):</p> <ul style="list-style-type: none"> <li>• Works likely to generate substantial levels of noise (including earthworks, trench construction and any piling)</li> <li>• HGV deliveries and movements</li> </ul> <p>Only other construction activities that are unlikely to generate high noise levels (e.g., site access and inductions, light vehicle movements etc.) may continue during these hours. Furthermore, if percussive piling is used within close proximity of Noise Sensitive Receptors (NSRs), this will be restricted to no more than two</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>periods of four hours each with at least one hour of no piling between these four-hour periods and restricted to the hours of 08:00 to 18:00 Monday to Friday and 08:00 to 12:00 on Saturdays.</p> <p>Horizontal Directional Drilling (HDD) could be required outside of the assumed day-time construction hours (i.e., evening, Sundays, Bank Holidays or at night) and would be agreed with the relevant planning authority as set out in paragraph 2.7.2 of the oCEMP. Table 3.5 of the oCEMP sets out that trenchless/HDD works will be completed in the shortest practical timescale and night-time noise generation minimised. To minimise the potential impacts on noise sensitive receptors, HDD will be at a minimum distance of 500m from the nearest residential property. If night-time operation is required, the closest residents to the works shall be notified of the start and completion of the works. The HDD plant would be installed and operated such that noise levels do not exceed a level of 45dB LAeq at the closest neighbouring noise-sensitive locations during night-time operation. Depending on the plant used, location, pit depth etc., this may require acoustic screening using temporary solid barriers with a height of at least that of the drilling equipment, located in proximity (around 10m or less) of the trenchless drilling work.</p>
Q1.0.12	The Applicant	<p>Paragraph 5.7.7 of the ES [APP-035] explains that three cable routes/methods are being considered for crossing the East Coast Mainline railway, the locations of which are shown in Figure 5.8 [APP-128].</p> <p>a) Please provide an update on the progress being made to determining the final option, including when the final decision will be made on which option to pursue.</p> <p>b) Set out in more detail the works that would be required in association with each option, including the full extent of cabling and any associated works in connection with Option 3 (cables to be routed within the bridge deck of adopted highway along the A6121).</p>	<p>a) The Applicant has made substantial progress in the option selection. The Applicant has now obtained up-to-date engineering records from Network Rail for the brick arch structure option and has undertaken a detailed survey. The Applicant is actively considering the routing of the cable underneath the railway to the bridge carrying the East Coast Mainline known as Bridge 198. The proposal, which has been discussed with the Network Rail Asset Protection team, is to route the new cable on a cable tray support system through the centre arch of Bridge 198; the engineering proposal is being drafted for approval by Network Rail. In tandem, the Asset Protection Agreement is being progressed with Network Rail to allow the solution to be implemented.</p> <p>b) The Applicant is pursuing the brick arch option at present. The detail of this option is to accommodate the high voltage cables on a free-standing cable tray system through the centre arch of Bridge 198 of the East Coast Main Line without reliance on excavation or attachment to the structure - this allows a more risk-free installation. This has been discussed in principle with Network Rail.</p>

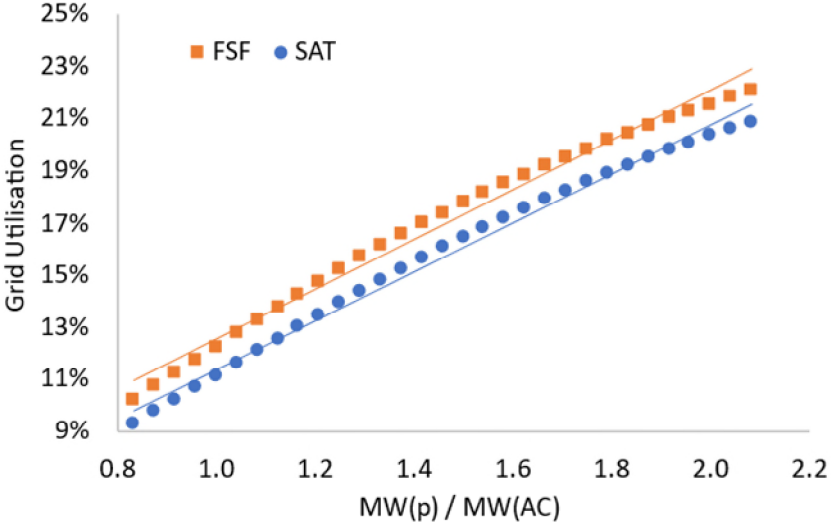
ExQ1	Respondent	Question	Applicant's Response
		<p>c) For Option 3 through Essendine, provide details of the likely duration and phasing of the cabling works within the overall construction process, the implications for pedestrians and traffic, including any traffic/pedestrian management measures that would be required in connection with the works and any access implications for residential properties.</p> <p>d) Please set out any constraints, advantages and disadvantages for each option along with a summary of the environmental effects of each option.</p>	<p>c) Option 3 is not actively being pursued and, if the brick arch option is viable, Option 3 will be abandoned.</p> <p>Option 1 would provide a more direct route between the PV Arrays and the Onsite Substation avoiding lengthy cable runs and trenching. In engineering terms this option carries the least risk of approvals from Network Rail. This would avoid the need to HDD underneath the East Coast Mainline and would increase the distance between noise sensitive receptors located in Essendine and HDD equipment which would still be required to pass the cables beneath the West Glen River. The Applicant is currently in discussions with Cadent regarding protective provisions as a gas main is also routed through one of the railway arches.</p> <p>Option 2 would also provide a more direct route between the PV Arrays and the Onsite Substation avoiding lengthy cable runs and trenching, but would require possessions for the works, the potential of unforeseen ground conditions and introduce the need for a lengthy settlement monitoring regime.</p> <p>Option 3 requires substantial cable runs, requiring large amounts of trenching either side of the railway, in comparison to Options 1 and 2. This route would also interact with a greater number of other utility providers.</p> <p>Options 2 and 3 would avoid the need to trench cables within the highway through Essendine Village and consequently construction impacts such as noise, dust and temporary traffic controls associated with the installation of the cables would be avoided.</p> <p>Option 3 would avoid the need for HDD underneath the East Coast Mainline Railway and the West Glen River. This would avoid the need for undertaking HDD and cabling works within Field 20 <b>[APP-112]</b> which is located within the flood plain.</p>
Q1.0.13	The Applicant	Paragraph 5.10.1 of the ES [APP-035] states that where a cable crosses a hedgerow, the hedgerow will be reinstated post construction.	<p>a) Reinstatement in the context of this work would mean replanting the relevant areas with whips of appropriate species, to replace and reflect the individuals being lost through construction. Reinstatement will also include monitoring and maintenance of newly planted species, as necessary to ensure that an equivalent hedgerow is established in the place of what was removed.</p>

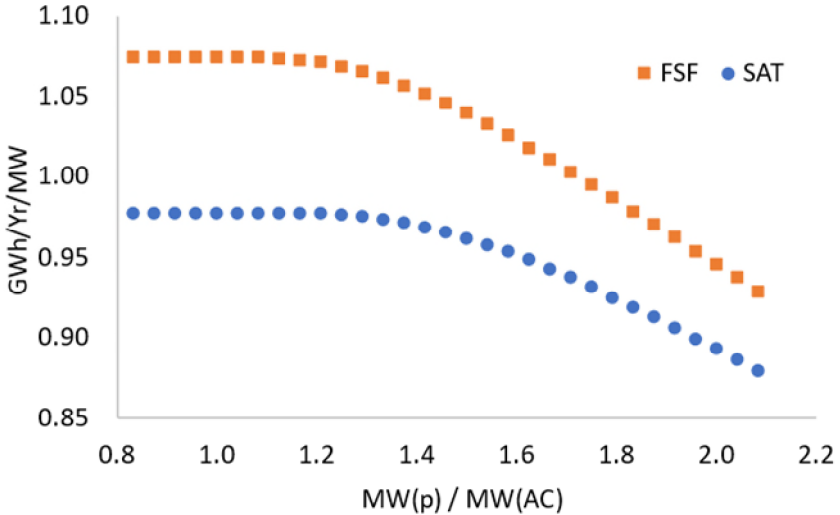


ExQ1	Respondent	Question	Applicant's Response
		<p>a) What does 'reinstated' mean in this context?</p> <p>b) To preserve existing hedgerows, can cables be laid underneath existing hedgerows without removing them, thereby preserving the hedgerow concerned?</p>	<p>a) Yes, they can, if conditions allow. Alternative methods of construction, such as 'moling' of cables (i.e., HDD), will be explored prior to construction when an Engineering Procurement and Construction (EPC) contractor is formalised. The oCEMP [APP-207] sets out when HDD can be used and identifies noise control measures where HDD would not be considered appropriate (Table 3-5).</p>
Q1.0.14	The Applicant	<p>The key notations on each of the inset plans of the Green Infrastructure Strategy Plans Key Plan in the Outline Landscape and Ecology Management Plan [APP-210] are missing. Please provide an updated plan including the missing key notations.</p>	<p>This seems to be due to a corruption of the uploaded file on the PINS website. The Applicant has submitted an updated oLEMP, which provides a replacement uncorrupted file with all key notations included, at Deadline 2.</p>
Q1.0.15	The Applicant	<p>Paragraph 3.10.125 of the revised draft National Policy Statement (NPS) for Renewable Energy Infrastructure (EN-3) (March 2023) states that: "Applicants should consider using, and in some cases the Secretary of State may require, solar panels to comprise of (or be covered with) anti-glare/anti-reflective coating with a specified angle of maximum reflection attenuation for the lifetime of the permission". Table 2 of the Glint and Glare Study [APP-104] states that the following surface material has been modelled for the tracker solar panels: "smooth glass without an ARC (anti-reflective coating)".</p> <p>Table 1 of the Glint and Glare Study provides corresponding technical information for fixed solar panels but it does not specify the surface material modelled. Section 7.2 of the study states that the following surfaces "could be modelled"; "smooth glass without an anti-</p>	<p>There is a typo in the list of surfaces that could be modelled presented in Section 7.2, the first bullet point should read: 'smooth glass <b>with</b> an anti-reflective coating'.</p> <p>The 'smooth glass without an anti-reflective coating' surface has been modelled in the glint and glare study. This surface produces glare with the highest glare intensities compared to the other materials listed in Section 7.2 and is therefore considered the most conservative surface type. Paragraph 15.4.53 of Chapter 15 of the ES [APP-045] confirms this and explains that should the panels chosen at the time of construction be specified with anti-reflective coating, then the anticipated effects will be less than those assessed in the ES.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>reflective coating, light textured glass without an anti-reflective coating, light textured glass with an antireflective coating or deeply textured glass". The latter is not believed to be commercially viable for solar panels currently, according to the study.</p> <p>Can the Applicant confirm the surface modelled for both tracker panels and fixed panels and their reasons for the surface chosen with specific reference to each of the options identified in the Glint and Glare Study? [APP-104].</p>	
Q1.0.16	The Applicant	<p>The Grid Connection Statement [APP-205] states that an agreement to export 240MW (AC) of electricity to the grid has been reached with National Grid. Paragraph 1.4 of the Grid Connection Statement states that the parameters applied for in this Development Consent application allow for the generation of up to 350 MW (DC) to account for degradation of panels over time, seasonal and daily variations of solar irradiance, and loss of power in the conversion from AC to DC.</p> <p>Can the Applicant explain in further detail on what calculations this additional 110MW has been made?</p>	<p>Paragraph 3.10.46 of the March 2023 Draft Revised National Policy Statement for Renewable Energy Infrastructure (NPS EN-3), and Footnote 84 to that paragraph, describes "Overplanting" as "the situation in which the installed generating capacity or nameplate capacity of the facility is larger than the generator's grid connection".</p> <p>Overplanting is also discussed at Section 7.7 of the Statement of Need [APP-202], which includes at Figure 7.5 an illustration of the effect of overplanting on daily generation output during a low-irradiation and a high-irradiation day.</p> <p>The Applicant aims to make greatest use of the existing and available grid connection at National Grid's Ryhall substation, which means designing a scheme which will generate the greatest volume of low-carbon energy over the lifetime of the Proposed Development.</p> <p>The Applicant has requested consent for a project which includes the installation of over 50MW(p) of solar generation capacity. The parameters applied for in this Development Consent Order (DCO) application allow for the generation of an indicative 350 MW (DC) layout which is deliverable within those parameters, but 350 MW(DC) does not constitute a limit to the size of the scheme and, if consented, a detailed design phase will deliver the aims of the Proposed Development within the approved parameters.</p> <p>The figures below show the results of an analysis of the average annual output of a solar scheme per MW installed (y-axis) as a function of the overplanting ratio (x-axis), for a Fixed South Facing (FSF – orange) scheme and a Single Axis Tracker</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>(SAT – blue) layout. Although these figures have not been configured to the Proposed Development's parameters, the conclusions are applicable to all solar schemes generally (excluding the impacts of location-specific parameters).</p> <p>A scheme which is not overplanted has a MW(p) / MW(AC) ratio of 1.0. In a scheme which is overplanted that ratio is greater than 1.0. As the overplanting ratio increases, "unusable" solar generation at times of high irradiation and early in the scheme's operational life increases, but those losses may be compensated for by more output in times of lower irradiation and more generally later in operational life – as illustrated in Figure 7.5 of the Statement of Need [APP-202].</p> <p>The first figure below shows grid utilisation (being total MWh exported through the grid connection during the life of the project, divided by the maximum MWh export possible through the connection during the life of the project).</p> <p>The points show the lifetime grid utilisation for schemes of between 200 MW(p) and 500 MW(p) installed on a 240 MW(AC) grid connection, at 10 MW(p) increments under either an FSF (orange) or a SAT (blue) layout.</p> <p>The orange and blue lines are straight lines of best fit through each "curve" of points, which help identify the gradient of the curve which passes through each point, and where that gradient changes.</p> <p>As the overplanting ratio increases, so too does Grid utilisation. However, beyond an overplanting ratio of approximately 1.5 (where the coloured points are furthest above the same colour straight trend lines), the incremental benefit of overplanting on grid utilisation reduces (the points start to return down towards the straight line, and ultimately fall below it).</p>

ExQ1	Respondent	Question	Applicant's Response
			 <p>The second figure below shows that the average annual output of the scheme over its operational life on a per MW installed basis also decreases as overplanting ratio increases. But beyond an overplanting ratio of c.1.3, the curve between the points starts to turn downwards more steeply than it did for a lower overplanting ratio, implying an increasing inefficiency as overplanting ratio increases beyond c. 1.3.</p> <p>This analysis does not seek to establish “hard and fast” rules around overplanting, but together they do point to a quantifiable basis for suggesting that the “optimum” overplanting ratio for a solar scheme, may lie between 1.3 and 1.5, depending on the local characteristics of the site in question, such as topography and archaeological, agricultural land and other environmental factors which may reduce the scope for overplanting.</p>

ExQ1	Respondent	Question	Applicant's Response
			 <p>The Mallard Pass grid connection agreement is for 240 MW(AC), which implies an optimum installed generation capacity of between 320 and 360 MW(DC) in relation to average annual output, and grid utilisation, over the lifetime of the Proposed Development.</p> <p>The Application includes indicative 350MW layouts, for both FSF and SAT (with string and central inverters) at <b>[APP-007 – APP-010]</b>. The output is based on example ways in which the site may be laid out within the parameters, and which makes use of an effective overplanting ratio. The final design and layout will be a reflection of the available technology (and overplanting ratio) arranged in accordance with the assessed parameters.</p> <p>It should also be noted that revised draft NPS EN-3 indicates that along with associated infrastructure, a solar farm requires between 2-4 acres for each MW output (paragraph 3.10.8). The solar PV site is approximately 420ha (see Chapter 5 of the ES, Project Description <b>[AS-010]</b>) which translates to 1,038 acres and would deliver a capacity of between 260-519 MW if applying only the range set out in draft NPS EN-3. This suggests that any overplanting ratio of between 1.08 and 2.16 (in relation to the MW grid connection capacity), would deliver a MW output at the Proposed Development which is within the range expected of a site of this size.</p>

ExQ1	Respondent	Question	Applicant's Response
			Therefore, a design which delivers an overplanting ratio of between 1.3 - 1.5 (or 312MW – 360MW) lies well within the range set out in draft NPS EN-3
Q1.0.17	The Applicant	<p>Paragraph 5.4.4 of the Project Description [APP-035] of the ES states that the DC generating capacity of each PV (photovoltaic) Module will depend on advances in technological capabilities at the time of construction. Paragraph 5.4.6 goes onto explain that for the purposes of enabling an assessment, the ES has assumed 530,303 panels would be required to deliver approximately 350MW of installed DC capacity.</p> <p>a) Whilst the choice of PV Module is currently unknown, on the basis of the maximum parameters assessed in the ES, what generating capacity for each individual PV Module would be required in order to provide for the indicated installed DC capacity?</p> <p>b) Please provide further details of the range of generating capacity for the PV Modules that are currently available on the market for solar farms?</p> <p>c) Based on the technological information currently available to the Applicant, and taking account of expected technological advances prior to the procurement of the PV Modules, how might the generating capacity of the final PV Modules to be used for the Proposed Development affect the total number of panels required for the Proposed</p>	<p>The Applicant has requested consent for a project which includes the installation of over 50MW(p) of solar generation capacity. The parameters applied for in this DCO application allow (for the purposes of enabling an assessment) for the generation of up to 350 MW (DC) based on an indicative layout which is deliverable within those parameters, but 350 MW(DC) does not constitute a limit to the size of the scheme and, if consented, a detailed design phase will seek to deliver the aims of the Proposed Development within the parameters requested. For the avoidance of doubt, this may mean installing more, or less, than 350 MW(DC) of generation capacity.</p> <p>a) For the purposes of assessment, a scheme of 350MW which includes 530,303 panels has been proposed. The generating capacity for each PV module is therefore <math>350,000,000 / 530,303 = 660</math> Watts per panel.</p> <p>b) The following table lists eight solar panels which are available on the open market at the time of writing this response, and includes the manufacturer, size (height and width of panel) and power output. The panels listed in the table range from 410W to 670W while the power density of the panel (measured in W/m<sup>2</sup>, final column) ranges from 207 W/m<sup>2</sup> to 223 W/m<sup>2</sup>. Critically therefore, this table demonstrates that currently the key determinant of the power of an individual panel is its size. The Applicant includes, at <b>Appendix C</b>, a download of a web page which firstly lists the most powerful panels available globally. as at January 2023, and secondly lists the most powerful panels which in January 2023 were in production or were expected soon to be released into global markets. At the time of writing, however, the availability and release dates for the panels into regional markets had not been confirmed. Noting that all unreleased panels are no more than 2.4m high x 1.35m wide, implies that the range of power density across the population of unreleased panels listed ranges from 182 W/m<sup>2</sup> to 230 W/m<sup>2</sup>. The size of panel remains the key driver of panel power in newly released products.</p>

ExQ1	Respondent	Question	Applicant's Response																																													
		<p>Development and their coverage across the site?</p> <p>d) What implications might the choice of PV Module and its generating capacity have on the extent of land that is proposed to be the subject of the proposed compulsory acquisition powers?</p>	<table border="1" data-bbox="1077 217 2110 528"> <thead> <tr> <th>Manufacturer</th> <th>Power (W)</th> <th>Size (mm x mm)</th> <th>Efficiency</th> <th>W/m<sup>2</sup></th> </tr> </thead> <tbody> <tr> <td>Canadian Solar</td> <td>670</td> <td>1303 x 2384</td> <td>21.6%</td> <td>216</td> </tr> <tr> <td>Canadian Solar</td> <td>410</td> <td>1134 x 1722</td> <td>20.7%</td> <td>210</td> </tr> <tr> <td>Trina</td> <td>505</td> <td>1098 x 2176</td> <td>21.1%</td> <td>211</td> </tr> <tr> <td>JA Solar</td> <td>410</td> <td>1134 x 1722</td> <td>21.0%</td> <td>210</td> </tr> <tr> <td>AS Solar</td> <td>500</td> <td>1051 x 2130</td> <td>20.8%</td> <td>223</td> </tr> <tr> <td>Kingsmill</td> <td>550</td> <td>1134 x 2279</td> <td>21.3%</td> <td>213</td> </tr> <tr> <td>Kingsmill</td> <td>450</td> <td>1038 x 2094</td> <td>20.7%</td> <td>207</td> </tr> <tr> <td>Kingsmill</td> <td>670</td> <td>1303 x 2384</td> <td>21.6%</td> <td>216</td> </tr> </tbody> </table> <p>c) Solar panel output increases as a product of panel size (area) and panel efficiency. Any increase in panel output due to increasing the size of the panel will not materially affect their coverage across the site because the total area of panels in the Proposed Development will be the same. Figure 10.2 of the Statement of Need [APP-202] shows that the efficiency of solar cell technology has increased over the last 40 years and that Crystalline-Si, Multi-Function and Thin-Film technology cell efficiencies have increased broadly linearly. The Applicant therefore anticipates that over the period of possible module procurement for the scheme, e.g., until 2025/26, module efficiency will continue to increase at best linearly. Manufacturers are constantly improving their technology and Appendix C shows that one is currently developing a 715W module which is the same physical dimensions of the existing 670W panel and therefore represents at most an 7% increase in generation capacity for the same physical footprint. However, utility scale PV plant equipment is advancing, and it is difficult to predict what the future capacity of a PV module will be. Designs can only incorporate products which are already available in the market and optimisation can be performed at a later stage if equipment becomes more efficient. By installing more efficient panels, the Applicant may install less panels but the total coverage across the site is not expected to change significantly if this was the case. Further, the Applicant may unlock opportunities to enhance the overall efficiency of the scheme at the detailed design stage, for example by spacing the panels out more (increasing the pitch) within the extent of Work No 1, in order to reduce shadowing effects or removing inefficient corners of fields that reduce infrastructure requirements. It is therefore not a given that the installation of higher efficiency panels will result in reduced land take. In order to capture the benefits associated with using the</p>	Manufacturer	Power (W)	Size (mm x mm)	Efficiency	W/m <sup>2</sup>	Canadian Solar	670	1303 x 2384	21.6%	216	Canadian Solar	410	1134 x 1722	20.7%	210	Trina	505	1098 x 2176	21.1%	211	JA Solar	410	1134 x 1722	21.0%	210	AS Solar	500	1051 x 2130	20.8%	223	Kingsmill	550	1134 x 2279	21.3%	213	Kingsmill	450	1038 x 2094	20.7%	207	Kingsmill	670	1303 x 2384	21.6%	216
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ExQ1	Respondent	Question	Applicant's Response
			<p>most appropriate technology available for the site, panel procurement will take place at the appropriate stage of the development plan and flexibility in design is required to ensure that the Proposed Development is developed to its full potential once the installed technology has been selected.</p> <p>d) Following on from part c) above, the choice of PV Module and its generating capacity may, to a limited degree, have a bearing on the extent of land that is proposed to be the subject of the proposed compulsory acquisition powers, but this is not a given and the choice of panel is only one of a number of factors to consider when determining the extent of land required for the project. For example, layout optimisation, ground conditions, ecological and heritage constraints, are likely to have a greater bearing on land requirement than panel choice. See also the response to Q1.0.18 below.</p>
Q1.0.18	The Applicant	<p>Paragraph 5.4.8 of the ES [APP-035] explains that at the detailed design stage, it may transpire that the full extent of land, as shown as Works No 1 on the Works Plans [AS-003], is not required and that this would be confirmed through the production of the detailed Landscape Environmental Management Plans (LEMP) through a DCO Requirement.</p> <p>a) Please explain in further detail how the process for assessing and determining which areas within the Order land would be utilised for Works No 1, including how the relevant environmental considerations would be taken into account.</p> <p>b) How would such an assessment be properly framed in the Outline and Detailed LEMP?</p> <p>c) What implications might this have for the proposed compulsory acquisition powers sought in the draft DCO, taking into account the requirements</p>	<p>a) Works No 1 depicts the maximum extent of the of the Solar PV Arrays in accordance with the minimum offsets to landscape and ecological features and designations as set out in Table 5.10 of the ES [APP-035]. At the detailed design stage, should the full extent of Works No 1 not be required because of the detailed layout of the PV Tables, the perimeter fence line would be adjusted to avoid unnecessary fencing and reduce the use of materials, in accordance with the Design Guidance (C3.2). For example, the illustrative layouts [APP-016] to [APP-019], indicate different scenarios for areas of grassland within the maximum extents of Works No 1 which are not covered by PV Tables due to the length and arrangement of PV Tables. The ES has accounted for the worst case of those scenarios for each topic and assessed accordingly. Any changes to that layout can therefore only be an improvement to those assessments.</p> <p>The consideration of which layout is taken forward will be dependent on technological advances and the detailed engineering design following development of a better understanding of the ground conditions on site and the detailed archaeological investigations undertaken pursuant to Requirement 8 of the dDCO [APP-017]. The design will then be taken forward further to the parameters, the outline LEMP and the Design Guidance in the DAS, which have been developed to account for environmental constraints. Ultimately approval of the layout will be approved by the LPAs pursuant to Requirement 6 of the dDCO.</p>



ExQ1	Respondent	Question	Applicant's Response
		<p>of Section 122 of the Planning Act 2008?</p>	<p>As part of undertaking the detailed design, the fence line would be realigned to suit the designed PV Tables which would represent an increase to the minimum offsets to landscape and ecological features and designations. The detailed LEMP would set out how an increase to these areas would be managed in landscape/ecological terms, as an increase from the mitigation proposals already accounted for within the ES and a reduction in effects from built development. Should the realignment of the boundary of Works Number 1 occur where a new landscape boundary is being created, for example within Fields 27 and 29, the proposed landscape boundary would also be realigned to correspond with the realigned fence line allowing for a greater of agricultural land to be retained.</p> <p>b) An assessment is not required as it is not a case of comparing one field with another. The text provided within paragraph 5.4.8 of the ES is referring to the reduction in the maximum extents within an individual fields parcel. The paragraph has been amended below (and in the updated Chapter submitted at Deadline 2) to explain that it should be read as follows:</p> <p><i>“At the detailed design stage, subject to the chosen technology / configuration / topography etc it may transpire that the full extent of the land within an individual field parcel, as shown as Works No 1, is not required. If this is the case, then any areas of Works No 1, within an individual field parcel, that are surplus to requirements will remain in agricultural use and / or will be used for additional habitat creation. This would be confirmed through the production of the detailed LEMPs, secured by DCO Requirement.”</i></p> <p>As such, the LEMPs would therefore not be setting out an assessment but would be setting out the consequences of the final design chosen, incorporating the landscape/ecological measures to be put in place in the marginal land.</p> <p>c) As described above any land that would be surplus would be around the edge of a field parcel containing PV Arrays, and therefore would not be able to be practically accessed or utilised by the farmers who currently occupy that land both generally, or in conjunction with their retained land. It would also likely be of such a small size to not be viable to be farmed either. As a result, it is considered that the land would be severed, and there are therefore no implications for proposed compulsory acquisition powers sought in the draft DCO.</p>

ExQ1	Respondent	Question	Applicant's Response
Q1.0.19	Lincolnshire County Council, Rutland County Council, South Kesteven District Council, Environmental Agency, Natural England, Lincolnshire Wildlife Trust, and any other Interested Party.	Question not for The Applicant	

## Topic 1.1 Environmental Statement (General)

ExQ1	Respondent	Question	Applicant's Response
Q1.1.1	The Applicant	The significant effects reported in the ES Non-Technical Summary (NTS) [APP-106] are inconsistent with those reported in the ES as significant effects are only reported in relation to landscape and visual. Can the Applicant provide an updated NTS which is consistent with the conclusions set out in the ES?	The significant effects reported in the NTS are correct. The inconsistency is within Chapter 17: Summary of Significant Effects and Mitigation <b>[APP-047]</b> where in Table 17-1 the moderate adverse effect associated with permanent sealing of the land is incorrectly reported as significant. An updated Chapter 17 Summary of Significant Effects and Mitigation has been provided and submitted at Deadline 2.
Q1.1.2	The Applicant	Appendix 6.2 of the ES (Landscape and Visual Assessment Methodology) [APP-055] provides a definition of the duration of short-term, medium-term, long-term and permanent effects. Other ES aspect chapters do not define these terms and these are not provided within ES Chapter 2 (Overview of Environmental Impact Assessment (EIA) Process) [APP-032]. Please can the Applicant define the duration of effects?	The duration of effects is only defined where relevant to a particular technical assessment such as landscape and visual where mitigation depends on the growth rates of planting. Generally, construction effects are considered to be short-term and operational effects are considered to be long-term.
Q1.1.3	The Applicant	Paragraph 2.5.7 of the ES Chapter 2 (EIA Methodology) [APP-032] explains that the decommissioning assessment is based on an assumption that decommissioning would take place after 40 years of operation, but it is noted that the dDCO would allow decommissioning to take place before or after this date. Furthermore, since the Applicant is not seeking a time limited consent there is potential that decommissioning may not occur. Can the Applicant comment on the implications for the conclusions of relevant ES assessment, for example the	<p>The ES assessments have all assumed permanent impacts from the Proposed Development given the lack of a committed time frame and so the conclusions would apply for an over 40-year time frame.</p> <p>However, the Planning Statement has sought to set these impacts in context – that it is the case that technology has an operational lifespan, and it is noted that the definition of maintain in the draft DCO <b>[PDA-003]</b> means that the Applicant cannot wholesale replace the Proposed Development. As such, it will come to an end but, given the possibilities of technological enhancement, a time limit has not been imposed. Therefore, while a time limited consent is not sought, it is anticipated that the Proposed Development will be decommissioned at some point in the future.</p> <p>Whilst the EIA has assessed the operational impacts of the Proposed Development as permanent, it is the case that any impacts that are caused by the</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>assessment of impacts to agricultural land, should the operational lifespan of the Proposed Development extend beyond 40 years?</p>	<p>Proposed Development related to the use of the land are considered to be reversible, pursuant to the management plans secured by the DCO Application.</p> <p>It is also noted that the conclusion of the operational phase of the Proposed Development will hold for the lifetime of the development, whatever that may be, given the requirements to implement the mitigation measures set out in the detailed management plans in the draft DCO. If they were not continued to be implemented, then that would be a breach of the draft DCO. The draft DCO has been amended at Deadline 2 to make it clear that the measures in the management plans must be implemented and maintained for the lifetime of the Proposed Development (where relevant) in accordance with the approved detailed management plans.</p>
Q1.1.4	The Applicant	<p>Paragraph 12.1.28 of the ES Appendix 12.8 [APP-095] states that soil excavated during construction will be stored in 'low mounds' for the duration of the operational phase for reuse upon decommissioning. The outline Operational Environmental Management Plan [APP-208] includes a provision to maintain these mounds. Paragraph 6.2 of the Outline Soil Management Plan [PDA-007] states that these mounds would be up to 1.5m in height. The specific quantity of soil to be excavated is not provided within the ES, nor is the location of the soil mounds.</p> <p>a) Can the Applicant confirm whether the soil mounds are proposed to be stored within the Order limits and the anticipated volume and locations of soil to be excavated, along with clarification of any effects associated with this?</p> <p>b) If soil is proposed to be stored in mounds off-site can the Applicant confirm whether its transportation has</p>	<p>a) The soil mounds are proposed to be stored within the Order Limits. The volumes of soils to be excavated is a matter of detailed design as it will depend on the length of access tracks and number of solar stations etc but the principle of where the soil will be stored is secured through the outline Soil Management Plan (oSMP) at paragraph 4.23 and 5.2 [PDA-007]. Given the type of works and limited extent of works that will give rise to the need for soil mounds, there will be sufficient available land within the Order limits such that soils will be stored in close vicinity to where it is excavated, so it is unlikely to require transportation via heavy goods vehicles on the local road networks with associated transport, noise and air quality effects. The oSMP requires that temporary soil heaps will be stored at least 10 metres from watercourses to avoid any related adverse effects. The limited height of the soil mounds avoids the potential for any adverse landscape and visual effects. Furthermore, the mitigation measures secured through the outline Construction Environmental Management Plan (oCEMP) [PDA-005] are considered sufficient to avoid any significant adverse effects and as such detailed assessment of estimated volumes of soil volumes is not necessary.</p> <p>b) The soil is not proposed to be stored offsite as set out in the oSMP.</p> <p>c) The soil is not proposed to be stored offsite and is to be stored in close proximity to where it is was stripped, minimising transportation of soils on the highway, as set out in the oSMP.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>been taken into account within the relevant assessments such as transport and air quality?</p> <p>c) Has the transportation of soil been included within the estimated construction vehicles summary presented in Table 2-1 of the Outline Construction Traffic Management Plan [APP-121]?</p>	
Q1.1.5	Applicant, Lincolnshire County Council, Rutland County Council, South Kesteven District Council	<p>Appendix 2.4 of the ES [APP-052] presents the Cumulative Long List and Figures 2.1 [APP-109] and 2.2 [APP-110] present the Cumulative Developments Shortlisted for Cumulative Effects Assessment.</p> <p>Are any updates required to these lists taking account of any recent or missing proposals?</p>	<p>The cumulative development search was finalised in November 2022, prior to the submission of the DCO.</p> <p>We will discuss with the LPAs to understand the extent of the updates that may be required to this list since that time. Once this is understood, we will inform the ExA as to if and when an update to the list will be provided.</p>

## Topic 1.2 Need

ExQ1	Respondent	Question	Response
Q1.2.1	The Applicant, any Interested Party	Paragraph 4.3.9 of the Applicant's Statement of Need [APP-202] refers to the then unpublished 'Skidmore Review'. Following its recent publication on 13 January 2023 as 'Mission Zero Independent Review of Net Zero', comments are invited on any implications this review may have in respect of the consideration of the Proposed Development.	<p>Mission Zero was published in January 2023 by Rt Hon Chris Skidmore MP, Chair of government's Independent Review of Net Zero. The report was commissioned to ask how the UK might deliver its own net zero targets in a manner that was more affordable, more efficient, and in a pro-business and pro-enterprise way. Mission Zero recognises the importance of taking action on net zero. It also recognises the fact that the energy transition is a new economic reality, particularly amid the global reality of the energy security crisis and rising gas and fossil fuel prices in 2022.</p> <p>Mission Zero reconfirms the global importance of the UK's commitment to achieve net zero and makes recommendations which should be taken forwards now, alongside other wider recommendations. It states that the UK should be proud of the steps it has taken so far to achieve net zero, and that climate change and the economy are intertwined. The UK must however move quickly, not only to protect and secure delivery of our national climate commitments but also deliver the economic benefits of moving away from a carbon economy. The review finds that "<i>The benefits of net zero will outweigh the costs</i>" and believes that "<i>This is too important to get wrong</i>". Mission Zero makes the following recommendations which are relevant to the growing need for large-scale ground mounted solar to be deployed in the UK:</p> <ul style="list-style-type: none"> <li>• Priority Mission no. 2: "Full-scale deployment of solar including a rooftop revolution to harness one of the cheapest forms of energy, increase our energy independence and deliver up to 70GW of British solar generation by 2035";</li> <li>• Priority Mission no. 8: "Working towards gas free homes by 2035 [or earlier]" and Recommendation 1 is to set a legislative target for gas-free homes and appliances;</li> <li>• Recommendation 15 is the swift delivery of Zero Emissions Vehicles and the ZEV mandate to apply from 2024. Powering Up Britain, published by Government in March 2023, remains ambitious and forward-thinking in its targets for the decarbonisation of light road transport, but is less explicit in regard to associated timelines – noting the practical requirement to remain compatible (from a supply chain / industry change perspective)</li> </ul>

ExQ1	Respondent	Question	Response
			<p>with the wider European position: “Between 2030 and 2035, new cars and vans will only be able to be sold if they offer significant zero emission capability”;</p> <ul style="list-style-type: none"> <li>• Priority Mission 8 and Recommendations 1 and 15 of Mission Zero add weight to the argument for rollout of solar and other renewable generation to meet the growing demand which will arise from their delivery;</li> <li>• Priority Mission no. 9 is to “Embed nature and habitat restoration ... maximising co-benefits for climate and nature wherever possible.” Ground mount solar can deliver against this Priority Mission through delivering biodiversity net gain as a result of development; and</li> <li>• Recommendation 11 is to “Set up taskforce and deployment roadmaps in 2023 for solar to reach up to 70GW by 2035.” This Recommendation recognizes that the current pipeline for solar projects in the UK, and the most ambitious projections for solar deployment from National Grid ESO’s Future Energy Scenarios, are not yet of sufficient scale to meet Government’s ambition without undue levels of risk associated with the deployment of other technologies.</li> </ul> <p>Mission Zero recognises the importance of local action and local plans to the achievement of Net Zero. “People and places” must be empowered to deliver net zero through a full alignment on a local level with a net zero future through the introduction of a “net zero test”. All local authorities will be required to play their part in achieving carbon neutrality in the future. Ground-mounted solar (at both NSIP and TCPA scale) is a leading deliverable low-carbon generation technology which will enable local authorities to deliver against plans to decarbonize on a local level.</p> <p>In the context of the Proposed Development, Mission Zero re-emphasises the criticality of solar to the UK’s future energy mix not only to help achieve net zero but also to help achieve energy independence. In this regard Mallard Pass Solar Farm would make a major contribution as well as significant input towards the 70GW solar target to be delivered by 2035. Indeed, the contribution the Proposed Development could make would be realised as early as 2028 (when it is planned to enter commercial operation). The Proposed Development would also actively deliver on the priority to embed nature and habitat restoration throughout our transition to net zero, offering significant Biodiversity Net Gain (72% for habitats). Mission Zero is considered to offer significant support to the principle of delivering</p>

ExQ1	Respondent	Question	Response
			<p>solar as urgently required national infrastructure, the UK's energy independence and habitat restoration and thus lends further weight in support of the Proposed Development.</p>
Q1.2.2	The Applicant	<p>Figure 8.1 of the Statement of Need [APP-202] shows Illustrative Generation Capacity Dependability for a combined portfolio of solar and wind in Great Britain, with some supporting commentary in paragraphs 8.8.4 to 8.8.6.</p> <p>a) Please provide further details of the methodology and evidence used in providing Figure 8.1, including the number, proportion, size and location of solar and wind generating assets used in its formulation.</p> <p>b) What level of certainty can there be that the conclusions derived from this Figure are typical for solar and wind installations as a whole?</p>	<p>a) The data for the graph at Figure 8.1 is sourced from National Grid's Demand Data files. These are large datasets which the Applicant can provide if the ExA confirms that to be its preference.</p> <p>The Demand Data files include National Grid's estimated output, and capacity, for unmetered wind and unmetered solar generation.</p> <p>The Actual Generation file includes metered wind generation (but not installed capacity). National Grid's Future Energy Scenarios includes a workbook which estimates the capacity of installed wind capacity. This data and data available from National Grid's Transmission Entry Capacity (TEC) Register, has been used by the author to derive a series of historical metered wind capacity. This is a large dataset which the Applicant can provide if the ExA confirms that to be its preference. The data series is therefore estimated from the data, and data points are interpolated to derive an estimated actual capacity operational in each month.</p> <p>Two load factor series can therefore be calculated: for solar, and for the combination of metered and unmetered wind.</p> <p>Figure 8.1 of 7.1 Statement of Need [APP-202] shows the load factor series for each of wind and solar respectively as the blue and orange lines. The green dashed line is the weighted average load factor for the combined national portfolio of wind and solar i.e., (wind generation + solar generation) / (wind capacity + solar capacity).</p> <p>The analysis uses national-level data from 1 January 2017 to 31 December 2018, and therefore represents a national-level position covering micro wind, onshore wind and offshore wind as well as rooftop, commercial and larger-scale ground mounted solar to a total combined portfolio of c. 20GW of wind and 13GW of solar (estimated at year end 2018). The solar and wind generation facilities included in this portfolio are located throughout the UK.</p>



ExQ1	Respondent	Question	Response
			<p>b) By virtue of the analytical methods employed, the graph is an illustration of Generation Dependability. Future “actuals” will be dependent on weather conditions at the time, as well as updated estimates of installed generation capacity across the wind and solar sectors over different time periods.</p> <p>Figure 8.1 therefore seeks to show that by combining two generation portfolios which are largely independent of each other (meaning, the level of solar generation in the UK at any time is not mathematically dependent on the level of wind generation in the UK at that time, and vice-versa) the variation of the combined portfolio of (solar + wind), when averaged over a period of time, is lower than the variation of each of the portfolios separately, although the Applicant notes that not all individual days will always conform to this observation.</p> <p>The Applicant regards the level of certainty which may be ascribed to the general conclusions made as high, based on historical information, and expects that insofar as solar and wind capacity both increase in the future in broadly similar proportion each other as has been experienced historically, then the conclusions will remain valid in the future. As an illustration of this, the graph below replicates the analysis using the same data and methodology but using data from 1 January 2019 to 31 December 2020. In this second graph, the observation noted in Paragraph 8.8.6 of the Statement of Need [APP-202], that “Generation Dependability is improved when diverse RES technologies are deployed alongside each other in the same electricity system: the green dashed line is always between the blue and orange lines and is flatter than the other two lines, showing a lower variation from month-to-month through the year” remains valid.</p>

ExQ1	Respondent	Question	Response
			<p>The graph displays three data series: Wind (solid blue line), Solar (solid orange line), and an Illustrative combined portfolio (dashed green line). The Y-axis is labeled 'Monthly Capacity Utilisation (Illustrative)'. The X-axis shows months from Jan to Oct. Wind utilisation peaks in January, while Solar utilisation peaks in April. The combined portfolio shows a similar seasonal pattern to Solar but with higher overall utilisation levels.</p>
Q1.2.3	The Applicant	<p>Figure 8.2 of the Statement of Need [APP-202] shows the results of a model that seeks to illustrate the mutual compatibility of solar and wind generation, with some supporting commentary in paragraphs 8.8.10 to 8.8.14.</p> <p>a) Please provide further details of the methodology and evidence used in this model and the resulting Figure 8.2, including any relevant assumptions and limitations.</p> <p>b) What level of certainty can be attached to the model, taking account of any assumptions and limitations within it?</p>	<p>a) Figure 8.2 of the Statement of Need [APP-202] includes data sets which seek to model 2030 demand and supply. Each data set comprises an annual shape (at monthly granularity) and a future level. The methodology used to derive the shape for each series is as follows.</p> <ul style="list-style-type: none"> <li>• Demand (including heat and transport) assumes an underlying level of demand plus an estimate of future heating and transport demand.</li> <li>• Underlying demand uses 2015 – 2019 National Grid operational data to derive an annual average shape in underlying demand (i.e., month average demand expressed as a ratio of annual average demand).</li> <li>• The heating demand shape has been derived from the author's rule of thumb that in the UK, gas demand in the winter is up to five times higher than in the summer, and therefore electricity demand for heating (when it displaces gas heating) will follow a similar shape.</li> <li>• The transport demand shape has been estimated as flat through the year.</li> </ul>

ExQ1	Respondent	Question	Response
			<ul style="list-style-type: none"> <li>• Demand for electrolysis of water to produce hydrogen has been included in monthly demand estimates for completeness but at only small capacities in the 2030 timeframe, in line with National Grid's projections.</li> </ul> <p>Supply has been modelled as constituting of four technologies only: zero carbon baseload (grey), onshore wind (green), offshore wind (blue) and solar (yellow). The methodology used to derive the shape for each series is as follows.</p> <p>Zero carbon baseload generation represents nuclear energy supplied by Hinkley Point C (assumed to be commissioned before 2030) and Sizewell B (assumed not to be decommissioned before 2030). Nuclear reactors are assumed to have an Unplanned Capability Loss Factor (breakdown rate) of 5% and planned outages are assumed to take place in summers rather than winters, leading to a summer month availability of 83% and a winter month availability rate of 95%.</p> <p>The average monthly load factor for onshore and offshore wind has been derived from National Grid market data for the entire UK operational wind fleet for the period 2016 – 2020. The data sources are the same as are listed in WQ1.2.2. The historical data shows that on a consistent basis, both onshore and offshore wind generation in winter months (October through March) has been just below twice the level seen in the low months of the year (June and July) with shoulder months April, May, August and September in between.</p> <p>The average monthly load factor for solar has been derived from data sourced from PVGIS, an online solar photovoltaic energy calculator, for a central UK location, using 16 years of satellite data observations (2005 – 2020) to model solar output. This is a large dataset which the Applicant can provide if the ExA confirms that to be its preference. The data derives a within-year shape (at monthly granularity) which is consistent with National Grid market data for the entire UK operational solar estate over the period 2016 – 2020.</p> <p>The table below shows the load factors assumed in the analysis alongside those assumed in National Grid's Future Energy Scenarios 2022 report Data worksheet ES1 and other relevant sources, such as Department for Energy Security and Net Zero (DESNZ) Regional Renewable Electricity Report 2021 and DESNZ Electricity Generation Cost Report 2020.</p>

ExQ1	Respondent	Question	Response																								
			<table border="1" data-bbox="1072 220 2083 367"> <thead> <tr> <th></th> <th>Model FES 2022 Assumption</th> <th>DESNZ Regional Average</th> <th>DESNZ Electricity Generation Data 2021</th> <th>DESNZ Electricity Generation Cost Report 2020</th> <th>Footnote</th> </tr> </thead> <tbody> <tr> <td>Offshore Wind</td> <td>47%</td> <td>47%</td> <td>38%</td> <td>57%</td> <td>1</td> </tr> <tr> <td>Onshore Wind</td> <td>31%</td> <td>39%</td> <td>23%</td> <td>34%</td> <td>2</td> </tr> <tr> <td>Solar</td> <td>10%</td> <td>12%</td> <td>10%</td> <td>11%</td> <td></td> </tr> </tbody> </table> <p data-bbox="1072 435 1211 459"><b>Footnotes</b></p> <p data-bbox="1072 483 2083 703">1) New offshore wind farms have significantly higher load factors than early farms, and the technology is projected to see significant growth between now and 2030 (and beyond). This is predominantly due to (a) developments being located in areas with higher average wind resource, and (b) larger more efficient turbines now being available on the market. The model assumption (derived from author analysis) matches the average of the FES 2022 assumption and the other two data sources.</p> <p data-bbox="1072 711 2083 836">2) New onshore wind farms are likely to be more constrained in location and turbine size than new offshore wind farms and growth in load factor is less certain. The model assumption (derived from author analysis) matches the average of the FES 2022 assumption and the other two data sources.</p> <p data-bbox="1072 855 2083 1142">National Grid's Future Energy Scenarios 2022 report (Data worksheet ED1) provides projections for the average levels of demand associated with underlying electricity use, heat, transport and electrolysis capacities of each technology which may be in operation in 2030. Because National Grid's Consumer Transformation scenario lies between the two other FES 2022 scenarios which meet Net Zero (Falling Short is not consistent with achieving Net Zero 2050), it has been used to derive the average level of demand in 2030. The annual average load levels used in the analysis were: Underlying demand: 27.1GW; Heat demand: 4.5GW; Transport demand: 4.1GW; Electrolysis 0.4GW.</p> <p data-bbox="1072 1161 2083 1321">Author assumptions on the future levels of supply capacity have also been included in the model and are listed in the following table, alongside the projections of capacity in Future Energy Scenarios 2022 (average; minimum and maximum installed capacity in 2030 for each technology in the three net-zero compliant scenarios).</p>		Model FES 2022 Assumption	DESNZ Regional Average	DESNZ Electricity Generation Data 2021	DESNZ Electricity Generation Cost Report 2020	Footnote	Offshore Wind	47%	47%	38%	57%	1	Onshore Wind	31%	39%	23%	34%	2	Solar	10%	12%	10%	11%	
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			<p><b>202]</b>), which is that “the deployment of large-scale solar alongside that of offshore wind, onshore wind and low-carbon baseload assets, provides the opportunity for a lower capital, lower curtailment (therefore lower cost) energy system through diversity of asset type than that provided by scenarios which do not include solar generation”.</p> <p>This written response (and the Statement of Need) has been prepared for the Applicant by Si Gillett of Humbeat Ltd. Mr Gillett has European energy sector experience, spanning 20 years of commercial, analytical and consulting roles predominantly within the electricity / utilities sector. Through Humbeat, Mr Gillett provides electricity market consultancy services to generation asset developers and operators. In previous roles he has held responsibility for the commercial operation of electricity generation assets in the UK, EU wholesale energy market trading and for the assessment and evaluation of new developments. Mr Gillett prepared a Statement of Need for Cleve Hill Solar Park (DCO granted May 2020) and provided written and verbal evidence in the Issue Specific Hearings (and similarly for other projects currently going through the DCO process). He also prepared a Statement of Need to support the IROPI (imperative reasons of overriding public interest) for Orsted Hornsea Project Three (DCO granted December 2020) and is also supporting c.10GW (combined) of offshore wind and solar schemes through their applicable planning processes.</p>
Q1.2.4	The Applicant	<p>Paragraph 9.3.11 of the Statement of Need [APP-202] refers to the importance of ancillary service provision such as those available from solar and/or storage assets, as described in Table 9.2 of the Statement of Need, to contribute to the proper functioning of the local National Electricity Transmission System (NETS). Further commentary on the importance of electricity storage is set out in paragraphs 11.5.1 to 11.5.2.</p> <p>a) Provide further details of why electricity storage is not proposed, including a more detailed explanation for why the Proposed Development's</p>	<p>a) Paragraph 8.48 of the Statement of Need <b>[APP-202]</b> explains that Ryhall substation was built as part of the East Coast Main Line (ECML) upgrade program. Ryhall substation is connected to the Cottam Power Station and to Wymondley Substation double-circuit 400kV overhead electricity transmission line (also shown in <b>Figure 9.1</b>). Power flows on the National Electricity Transmission in three phases, and two of the phases at Ryhall are used to feed power to the ECML. The third phase is available for the Proposed Development to use to connect to the NETS. Facilities which require both import and export connections, need to connect to multi-phase supply. An extension of the Ryhall substation would be needed to accommodate an import connection and enable electricity storage to be developed alongside the solar. This means that, without significant extension works at Ryhall substation (which would likely jeopardise the Proposed Development's grid connection date), only a one-way connection can be accommodated. The proposed approach is consistent with meeting the urgent need for low-carbon</p>

ExQ1	Respondent	Question	Response
		<p>grid connection agreement does not provide sufficient import power capacity to justify the inclusion of electrical storage capability without a likely significant cost.</p> <p>b) How does the absence of storage provision, and therefore a lack of any consequent flexibility benefits, effect the weight that should be given to the overall benefits of the Proposed Development in this case? Are there are any disbenefits that arise due to the inability to utilise storage at the site of the Proposed Development?</p>	<p>electricity generation capacity. Delivering a project which maximises the decarbonisation benefit of National Grid's connection offer for 240MW(AC) to be effective in 2028 is therefore for the one-way connection of a generator to export onto the National Electricity Transmission System. While electricity storage could be developed "behind the meter" solely to store electricity generated by the solar farm and to export it to the grid at other times, the Applicant does not consider there to be sufficient benefit associated with that type of operation alone to warrant the installation of energy storage facilities at this location.</p> <p>b) The Applicant's vision for Mallard Pass Solar Farm is to "support the urgent need to decarbonise our electricity system" and the vision is underpinned by four objectives, the first of which is to "decarbonise and increase our electricity supply" (Paragraphs 2.1.2 - 2.1.3 of 7.2 Planning Statement <b>[APP-203]</b>). The Proposed Development, as designed, will meet the objectives and vision for the project because it is the solar element of the scheme which generates low-carbon electricity. As proposed, the benefits which the Proposed Development will deliver to decarbonisation and security of supply should attract significant weight in the planning balance. While the bringing forward of electricity storage as part of the Proposed Development would also be of benefit, the additional time taken to connect a storage facility would weigh against the benefits the Proposed Development would bring to the urgent need to decarbonise our electricity supply.</p> <p>As set out in response to Q1.2.4a), above, there is no import capacity available at Ryhall substation and a facility which stores only surplus from the Proposed Development is not commercially viable. Draft EN-1 provides guidance to this effect at paragraph 4.2.26, where it is advised that alternative proposals which mean the necessary development could not process, for example because the alternative proposals are not commercially viable can be excluded on the grounds that they are not important to and relevant to the Secretary of State's decision. In addition, while draft EN-3 notes government support around co-located facilities (paragraph 3.10.2) and that consideration may be given to co-located facilities to maximise efficiency of land use (3.10.18), it equally does not give any policy reason why the lack of co-located facilities should be considered a disbenefit and weigh materially against the development for which the DCO is sought. Therefore, it is</p>

ExQ1	Respondent	Question	Response
			<p>Applicant's view that the absence of storage does not reduce the weight that the Examining Authority can apply to the Proposed Development.</p> <p>It should also be noted that it is a central component of Government policy on all levels to make the best use of existing infrastructure before developing new infrastructure. The utilisation of the capacity at the existing substation, before extensions are considered, is both good planning and enables expedient delivery of low carbon energy without the delay associated with extensions to the substation.</p>
Q1.2.5	National Grid Electricity Transmission Plc (NGET)	Question not for The Applicant	
Q1.2.6	The Applicant, any Interested Party	<p>a) Provide a summary of the effect upon, and the implications for, the Government's Net Zero and climate change commitments should the Proposed Development not be implemented.</p> <p>b) Taking account of the availability and capacity of other existing points of connection to the NETS or local Distribution Network (both in the region and nationally), what evidence is there of opportunities for other solar projects to come forward in other locations that would be likely to fulfil the Governments Net Zero and climate change commitments in the absence of the Proposed Development?</p>	<p>a) The Net-Zero obligation is the UK's contribution to meeting the 2015 Paris Agreement on Climate Change and there is a duty on government to ensure that these targets are met. Paragraphs 4.7.4 – 4.7.6 of the Statement of Need [APP-202] summarise the Committee on Climate Change (CCC's) 2022 review of Government progress towards its 2050 Net Zero commitments: the UK's emissions targets are compliant with the Paris Agreement and the Net Zero strategy (and supporting strategies) to reach them are credible, however policies are not yet in place to drive the large programme of delivery required in the 2020s and tangible progress is lagging behind the policy ambition.</p> <p>The implication is that more needs to be done in delivery and policy to achieve the required emissions targets on the way to Net Zero.</p> <p>Figure 5.2 of the Statement of Need shows the results of an analysis by National Grid ESO of the carbon emissions associated with each of the four scenarios they modelled in the 2022 Future Energy Scenarios, in relation to carbon budgets CB4, 5 and 6. Carbon emissions are currently higher than they need to be to meet CB4 (2023-2027), and emissions will need to already be on a significantly downward trajectory through CB5 (2028-2032) in order to remain on track to achieve CB6 (2033-2037).</p> <p>Government's position is that solar will be part of the solution to decarbonising the electricity grid (Paragraph 8.1.1 of the Statement of Need) and Figure 5.1 of the Statement of Need shows the trajectories of installed</p>



ExQ1	Respondent	Question	Response
			<p>solar capacity projected in each of National Grid's Future Energy Scenarios. Rising from c.14GW at the time of writing this submission, solar generation capacity in the UK will need to rise to between 25GW and 42GW by 2030 in scenarios which are compliant with a Net Zero future.</p> <p>The Applicant's response to the ExA's Q1.2.1 describes the implications of the 2023 Skidmore Review in respect of the consideration of the Proposed Development, which lists as its Priority Mission no 2 the "Full-scale deployment of solar including a rooftop revolution to harness one of the cheapest forms of energy, increase our energy independence and deliver up to 70GW of British solar generation by 2035".</p> <p>In its Future Energy Scenarios 2022 report, National Grid ESO projected that between 36GW and 60GW of solar capacity would be required in the UK in order to remain compliant with a Net-Zero future, but Government's view is now that even more solar must be delivered by 2035 to ensure that Net-Zero and energy security are both delivered in an affordable, efficient, pro-business and pro-enterprise way.</p> <p>To achieve these targets and secure our Net Zero future, the equivalent of over 150 solar projects (350MW x 150 = 52.5GW, versus c.14GW installed solar capacity as at 2023) of a similar scale to the Proposed Development will be required to come forwards in the next 12 years (i.e., in 2035 or earlier). The Applicant does not expect all of this capacity to be large-scale ground mounted solar but does expect that large-scale ground mounted solar will play a significant role in the delivery of Net Zero, for reasons set out in Section 7.6 of the Statement of Need. Section 7.5 of the Statement of Need describes how suitable locations for large-scale solar generation in the UK may be assessed and selected by developers, concluding in Paragraph 7.5.20 of the Statement of Need that the East Midlands is a highly suitable location for large-scale solar because it possesses an attractive combination of available land, available points of connection to the electricity networks, and sufficiently high solar irradiation.</p> <p>One of the key benefits of the Proposed Development is that it makes use of existing grid connection capacity which facilitates a connection in 2028.</p> <p>The Applicant has provided, at <b>Appendix G</b> and <b>H</b> of its response to the ExA's Written Questions WQ1.3.2 and WQ1.3.3, two tables which list grid connection capacity to the transmission system and also to the East Midlands</p>

ExQ1	Respondent	Question	Response
			<p>distribution system within 80km of the Proposed Development. In particular, the Applicant would like to draw the ExA's attention to the connection dates in <b>Appendix H</b> for large-scale projects which are currently proposed to connect within 80km of the Proposed Development. With the exception of one project at Staythorpe which holds an agreement to connect from 2024 but has not yet secured planning consent for the solar generation element of its proposed scheme, and is therefore likely to connect later than 2024, connection dates for projects are no earlier than 2027.</p> <p>The data therefore shows that opportunities to connect large-scale solar schemes in the East Midlands before 2030 are currently limited.</p> <p>The Proposed Development holds a grid connection offer with connection date in 2028 and therefore will, if consented, contribute to the UK's decarbonisation and security of supply efforts in the important 2020s timeframe.</p> <p>If the Proposed Development is not implemented, then a critical opportunity will have been missed to deliver a significant capacity of low-carbon solar generation capacity onto the National Electricity Transmission System in the important 2020s. Firstly, this would have a multiplying effect on the criticality and scale of projects required to deliver in later timeframes to make up for the carbon emissions (and their associated global warming effect) which would otherwise have been avoided by the Proposed Development. Secondly, this would have an effect on the cost and timings associated with connecting the required capacities of low-carbon generation to meet Net-Zero. Unless a different low-carbon generation scheme came forward and was consented to connect at Ryhall, connection capacity would need to be created elsewhere which would likely take more time (increasing carbon emissions in the ensuing period) and increase consumer costs (when compared to utilising an existing and available point of connection).</p> <p>Draft EN-1 is clear on the point of need, requiring the Secretary of State to <i>assess all applications for development consent for the types on infrastructure covered by this NPS on the basis that the government is demonstrated that there is a need for those types of infrastructure which is urgent</i> (paragraph 3.2.5). Draft EN-1 further states that the Secretary of State is not required to consider the specific contribution of any individual project to satisfying the need established within the NPS (paragraph 3.2.7).</p>

ExQ1	Respondent	Question	Response
			<p>If the Proposed Development is not implemented, the benefit brought forward by the project to Government's Net Zero and climate change commitments, and energy security aims would need to be delivered by as yet undefined, unconsented projects. The Applicant considers that this would significantly increase the risk of non-delivery of Government's legal obligations.</p> <p>b) Paragraph 7.2.12 of the Statement of Need explains that the inclusion of a project in a forward capacity projection is not an indication that the project will go ahead, or if it does, at a particular generation capacity. Indeed, recent analysis by National Grid ESO appended at <b>Appendix E</b> indicates that only 30-40% of projects which are "in the queue" to connect make it through to fruition. Examples of why a project may not come to fruition include where grid connection offers have been made, but then the Applicant is unable to secure the land to deliver the project or has been unsuccessful in securing planning permission or successfully obtain funding.</p> <p>The section analyses the TEC register as of 19<sup>th</sup> May 2023.</p> <p>It is important to recognise that connection to the electricity network, which is an essential element of project development, is currently a constraint to many projects which are coming forwards. This is evidenced by the analysis of current connection dates for large-scale developments which follows in this response to this Written Question.</p> <p>This issue has also been acknowledged by Ofgem who in May 2023 issued an open letter launching a policy review on reforming the electricity connections system (see and appended at <b>Appendix D</b>) and by National Grid ESO who are now working with the industry to undertake a review of the connections queue (see and appended at <b>Appendix E</b>).</p> <p>In relation to these issues, the importance of utilising an existing and already available connection at Rhyall to meet the urgent need for new large-scale solar generation is starkly clear.</p> <p>National Grid's TEC Register shows that projects which include solar PV technology and are currently listed on that register total 59.1GW, however:</p> <ul style="list-style-type: none"> <li>• It is not clear what capacity of PV will be delivered as part of collocated projects. Collocated projects account for 53.6GW of the 59.1GW pipeline.</li> </ul>

ExQ1	Respondent	Question	Response
			<ul style="list-style-type: none"> <li>• 36.6GW of all projects have connection dates in 2030 or earlier; and 55.1GW have connection dates in 2035 or earlier.</li> <li>• 1.2GW of capacity is listed as having a connection date of 2023 or earlier, however only one solar project of up to 50MW has connected to the transmission system at the time of submission of this document.</li> <li>• National Grid's analysis shows that only 30% - 40% of projects in the queue make it to fruition, meaning that 11GW – 14.6GW may connect prior to 2030 and 16.5GW – 22GW may connect prior to 2035.</li> </ul> <p>The Government's Renewable Energy Planning Database (REPD) lists projects which are currently in the planning system. Eight projects totalling 3.8GW of installed capacity are also listed on the TEC Register and therefore have been excluded from this analysis to avoid double counting.</p> <p>The REPD lists 10GW of solar capacity which has progressed to construction or operation. 6GW of solar capacity has not progressed to construction or operation because it has either been refused planning consent, has an expired planning consent, or the project has been withdrawn by its owner. Therefore historically, 38% of &lt;50MW solar capacity has been unsuccessful in progressing to construction stage. The REPD lists 16.9GW of capacity with a "live" planning application and the data suggests that 10.6GW of this might be successful at becoming operational, although timeframes to achieve operational status are unclear.</p> <p>The total "risky" pipeline of possible solar delivery therefore stands at 21.6GW – 25.3GW before 2030 and 27.1GW – 32.6GW before 2035, a shortfall against both National Grid's projections and Government's ambition as described in Mission Zero.</p> <p>This updated analysis confirms the Applicant's position that the pipeline of solar projects listed in the aforementioned registers is not likely to be of a sufficient scale to meet the need for solar generation capacity in the period to 2035. Therefore, opportunities for other solar projects to come forward in other locations should be considered as additional, rather than alternative, developments. Therefore, such projects will be unlikely to fulfil the Government's Net Zero and climate change commitments in the absence of the Proposed Development, and indeed further projects are</p>

ExQ1	Respondent	Question	Response
			<p>likely required to come forwards even if the Proposed Development comes forward, to meet the urgent national need for solar generation.</p> <p>The TEC and REPD data referenced in this answer are from large dataset which the Applicant can provide to the Examination if the ExA confirms that to be its preference.</p>

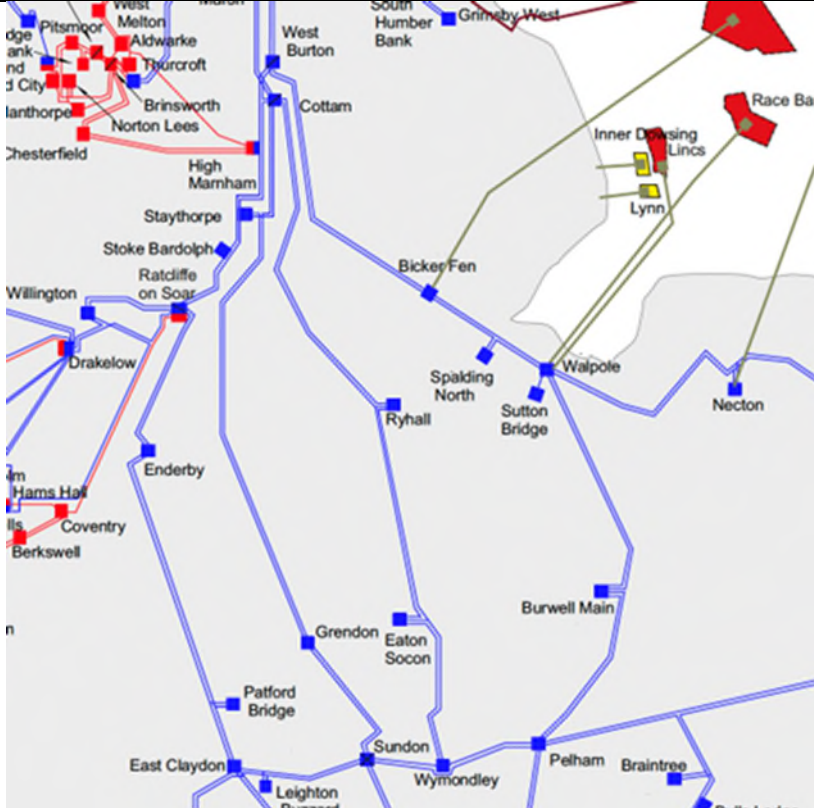
## Topic 1.3 Site Selection and Alternatives

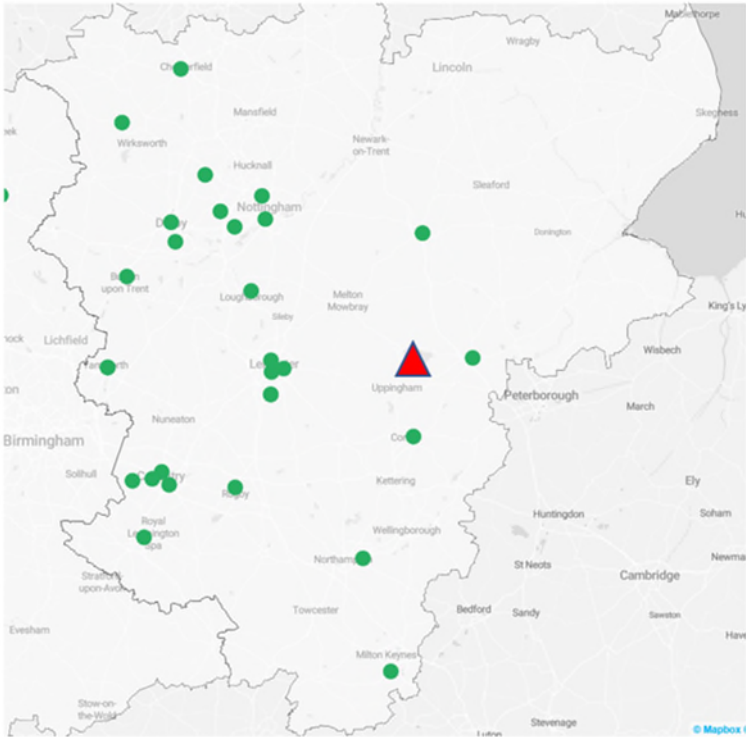
ExQ1	Respondent	Question	Applicant's Response
Q1.3.1	The Applicant	<p>Chapter 4 of the Environmental Statement (ES) [APP-034] and Section 5 of the Design and Access Statement [APP-204] provide commentary on the design evolution of the Proposed Development in general terms. A site appraisal of all "available" land is referenced at Section 5.7 of the Design and Access Statement [APP-204]. Section 5.8 states "This appraisal focused on the suitability of the individual fields for PV Arrays and based on environmental, social, economic factors, site visits and desktop analysis by all of the technical disciplines, areas were identified as not being suitable for accommodating PV Arrays were removed, based on the Project Principles...".</p> <p>a) Can the Applicant submit further details of the appraisal undertaken that clearly identifies the criteria and findings for each individual field within the Order limits?</p> <p>b) Have fields adjoining the Order limits also been assessed with the criteria?</p>	<p>a) The Applicant was offered a grid connection from National Grid due to the available capacity within the Ryhall Substation, which led to the engagement with adjoining landowners interested in developing a large-scale solar project.</p> <p>The Applicant undertook an Environmental Review (<b>Appendix F</b>) submitted for Deadline 2, which was a risk-based approach to assess the land that was available for development from willing landowners within the area. With the support of the four key landowners, the Applicant undertook an initial analysis of the potential option area as part of the initial development stages based on a high-level desk-based appraisal of constraints and site visits from publicly accessible locations, along with the landowner's overall experience of land that may be suitable for solar and those fields that the landowners were agreeable in principle to releasing for solar development.</p> <p>The appraisal focused on the four land parcels identified as potentially suitable areas for solar development, and an analysis was carried out on each individual field parcel. This is detailed in section 2.0 of Environmental Review (<b>Appendix F</b>). The primary purpose of the Environmental review at this stage was to define a credible site area to inform an initial informal consultation and to provide advice to the client team on the land required to deliver a project of circa 350MW. High-level calculations were also carried out at this stage of the solar capacity that each field could potentially accommodate.</p> <p>Following the analysis of the individual topics, a workshop was held with all topic leads along with the planning and community engagement team. Each RAG rating was examined, and an overall RAG rating was allocated to individual field parcels. In addition, the team considered the overall case for each field in the context of the Proposed Development as a whole and, using professional judgement, applied the overall planning balance to conclude whether the land has the potential to accommodate solar panels and would be likely to achieve a consentable scheme.</p> <p>This appraisal identified areas of risk and where additional assessments need to be undertaken to understand the wider impacts on the surrounding area</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>and was used to inform and develop the Proposed Development's design principles.</p> <p>As the development of the scheme, and the understanding of the project team of detailed environmental considerations, progressed, the design developed on an iterative basis.</p> <p>b) The RAG review was only focused on the land available for development, which is in accordance with the National Policy Statement (NPS) EN-1 paragraph 4.4.1, which confirms that from a policy perspective, there is no general requirement to consider alternatives or to establish whether a development represents the best option. This is reinforced by Paragraph 4.2.11 of the Draft Revised NPS EN-1. The Applicant's view is that this is a good site for solar which is suitable in planning and environmental terms.</p> <p>One of the first principles of this was finding willing landowners as close as possible to the substation to minimise the length of grid connection, both to reduce financial cost and environmental effects and limit the number of landowners to negotiate with, providing that the land was suitable from a planning and environmental perspective.</p> <p>The extent that landowners were willing to enter into discussions with the Applicant was also an important factor, balanced alongside planning and environmental considerations, as the Applicant sought to start from a position of seeking to minimise the extent of compulsory acquisition powers that would be required to be utilised on the basis that deals would be able to reach with those willing landowners.</p> <p>As sufficient land was found within close proximity of the substation, which was also suitable from a planning and environmental perspective, with a relatively limited number of landowners willing to negotiate with the Applicant, land further afield was not considered further. Nevertheless, the greater the scale of the solar farm and the longer the grid connection, the more landowners would have been required to be brought in.</p> <p>Therefore, there is no requirement to consider adjoining land that may or may not be available for development.</p>
Q1.3.2	The Applicant	Paragraph 3.1.27 of the Site Selection Assessment as provided in Appendix 1 to the Planning Statement [APP-203] states	For the avoidance of doubt, these other connection points were cited by the Applicant to show the general lack of available connections in the area and to demonstrate why it was important to make best use of those connections. The

ExQ1	Respondent	Question	Applicant's Response
		<p>that there are ten potentially available connection points with the capacity to deliver large scale solar within 80km of the National Grid Ryhall Substation. The closest two (Spalding North and Bicker Fen) are referenced but the remainder are cited as being all over 50km from the Order limits and deemed not to be reasonable alternatives on this basis.</p> <p>Please provide further details of other substations in the region that were considered specifying location, distance from the Order limits, spare capacity and likely viability of connection.</p>	<p>other connection points are not considered to be alternatives to a proposed connection at Ryhall substation and were not actively considered as alternatives. The Applicant identified the capacity at Ryhall, satisfied themselves that the site was physically suitable to accommodate solar in a way which was acceptable from a planning and environmental perspective and then sought to identify willing landowners.</p> <p>The Applicant has prepared a table of potentially available connection points based on updated information available to the Applicant at the time of writing this response. The map below shows the National Grid substations near Ryhall within 80km (National Grid Electricity Ten-Year Statement, 2022, Appendix A).</p> <p><b>Appendix G</b> includes further details on the other 17 substations within an 80km radius as currently shown on the National Grid Electricity Transmission website. The table does not specifically list the spare capacity available at the point of connection but does provide a comment on the viability of the connection at that location. The table indicates that no new applications for connections to any substation within an 80km radius of the site is likely to result in a connection date before 2030, and that solar projects of a similar or larger scale than the Proposed Development hold connection offers at 11 substations (including Ryhall) for connection in late 2027 or later (with just one connection, at Staythorpe, which has a connection date in late 2024).</p>



ExQ1	Respondent	Question	Applicant's Response
			 <p>None of these substations has any more capability to connect any additional connections before 2030. Many connection offers have already been signed, and of these (for projects which include PV), the earliest connection date on the TEC register, except for Staythorpe (an SSE project), is 1/10/2027.</p> <p>The Applicant has reviewed the data against the most recent version of the Transmission Entry Capacity Register (TEC Register) to ensure that the data is accurate and up to date.</p>
Q1.3.3	The Applicant	Paragraph 3.1.30 of the Site Selection Assessment [APP-203] states that there are only 13 grid connection points on the distribution network in the East Midlands	The Applicant has prepared a table based on updated and current available information from National Grid Electricity Distribution of all bulk connection points in East Midlands within 80km of Ryhall which have a "Headroom less offers

ExQ1	Respondent	Question	Applicant's Response
		<p>Region where there is potential for large scale generation to connect. The closest of these is identified as Nottingham South 33kV substation, approximately 55km from National Grid Ryhall Substation which has a headroom of 127MVA (megavolt amperes). The 12 other points are cited as having a headroom of less than 95MVA but they are not referenced individually. Please provide further details of the 12 other connection points considered, including location, distance from the Order limits and spare capacity.</p>	<p>made" for generation connections of greater than 50MVA, which is appended as <b>Appendix H</b>.</p> <p>The map below shows the National Grid Electricity Distribution bulk substations (green circles) to which generation facilities may be connected in the East Midlands Distribution Region. For reference, the Ryhall substation is shown as a red triangle.</p>  <p>The table shows that in order to connect 240MW of generation to the distribution grid in the East Midlands area would require the full currently available "headroom less offers made" capacity at more than one substation. This approach would also leave the currently available National Grid Ryhall substation capacity unused by the Proposed Development.</p>

ExQ1	Respondent	Question	Applicant's Response
Q1.3.4	The Applicant	<p>Paragraph 3.1.5 of the Site Selection Assessment [APP-203] states that the Applicant did not consider delivering a smaller scheme with less generation capacity on a smaller area, as a smaller scheme with less generation capacity would not deliver the same capacity or energy security and climate change benefits nor meet the opportunities presented by the secured connection agreement. Paragraph 4.1.7 of the ES [APP-034] lists "alternative sites, size and scale" amongst the alternatives assessed but the subsequent assessment focuses on alternative sites and does not directly address size and scale. Whilst acknowledging that from a policy perspective there is not a "general requirement to consider alternatives or to establish whether a development represents the best option" (Overarching National Policy Statement for Energy, paragraph 4.4.1), can the Applicant please elaborate on why the consideration of a smaller scheme has not been assessed as a reasonable alternative?</p>	<p>The National Policy Statement EN-1 paragraph 4.4.1 confirms that from a policy perspective, there is no general requirement to consider alternatives or to establish whether a development represents the best option. This is reinforced by Paragraph 4.2.11 of the Draft Revised NPS EN-1.</p> <p>Paragraphs 3.3.17-18 of the Statement of Need [APP-202] explain Government's view that irradiance, site topography and proximity to suitable connection points to the transmission network are likely to be key inputs to site selection. Section 7.5 of the Statement of Need describes the site selection process for large-scale solar more fully, and Section 7.7 of the Statement of Need sets out how the design of the Proposed Development seeks to maximise utilisation of the grid connection capacity available at Ryhall Substation. One of the key benefits of the Proposed Development is that it makes use of existing grid connection capacity which facilitates a connection in 2028. It is with the factors in mind that the site selection and design process has been carried out.</p> <p>The Proposed Development proposes a substantial infrastructure asset, which will deliver large amounts of cheap, low-carbon electricity during and beyond the critical 2020s timeframe if consented. Maximising the capacity of generation in the resource-rich, accessible, and technically deliverable proposed location represents a significant and economically rational step forward in the fight against the global climate emergency.</p> <p>The Vision for Mallard Pass Solar Farm is to deliver a project that supports the urgent need to decarbonise our electricity system, deliver reliable and sustainable low-cost energy, enhance the local environment and be a responsible neighbour (see paragraph 4.2.1 of the Design and Access Statement [APP-203]. This vision is underpinned by objectives which include decarbonising our energy supply and increasing the availability of low-cost energy. In the context of utility scale solar, size remains important, and maximising the generating capacity of schemes improves economic efficiency, bringing power to market at the lowest cost possible. Larger solar schemes deliver more quickly and at a lower unit cost than multiple independent schemes which make up the same total capacity, bringing carbon reduction and economic benefits in line with strategic government policy.</p> <p>This approach is supported at the National Policy Statement level: paragraph 4.2.21 of draft EN-1 states that only alternatives that can meet the same objectives of the Proposed Development need to be considered. Paragraph 4.2.2 states that the Secretary of State should be guided in considering alternative</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>proposals by whether there is a realistic prospect of the alternative delivery the same infrastructure capacity in the same timescale as the proposed development. Smaller scale alternatives would not meet the project vision or objectives in terms of capacity to the extent that the Proposed Development does; they would not consider reasonable alternatives in the meaning of paragraphs 4.2.21 and 4.2.22 of draft EN-1.</p> <p>Therefore, considering the need to assess alternative proposals is not necessary insofar as they would not meet the project objectives and the delivery of larger utility scale solar is more efficient from a cost, environmental impact, and expediency of delivery perspective. It is considered that this is actively supported by paragraphs 4.2.21 and 4.2.22 of draft EN-1.</p>
Q1.3.5	The Applicant	<p>Paragraph 3.1.11 of the Site Selection Assessment [APP-203] states that the general topography of the area immediately surrounding the Ryhall substation is gently undulating and therefore this makes a particularly suitable site for solar. Please explain with appropriate evidence why it is particularly suitable and how the topography has influenced the proposed site layout and choice of fields used for the Proposed Development?</p>	<p>Revised draft NPS EN-3 notes that site topography is a key input to the site selection process under paragraph 3.10.10 Irradiance and Site Topography, which states 'Irradiance of a site will in turn be affected by surrounding topography, with an uncovered or exposed site of good elevation and favourable south-facing aspect more likely to increase year-round irradiance levels. This in turn affects the carbon emission savings and the commercial viability of the site.'</p> <p>Topography, which is generally flat or gently undulating, is most suitable for solar from both a constructability and operational perspective, to ensure that the site can produce a large amount of electricity.</p> <p>Solar panels must be angled towards the sun, so south-facing slopes work best when sites are not flat. Although development can be possible on east or west-facing sites, north-facing slopes are usually subject to significant shading, which can preclude development.</p> <p>The topography within the Order limits ranges between 16m - 67m AOD, with the lowest elevation running along the East Coast Mainline railway route. The highest elevation is present in the north-western extent of the Order limits.</p> <p>The plan at <b>Appendix I</b> demonstrates the topography of the site. On this plan 12% is identified as a distinguishing level, which was the Applicant's initial preference for favourable topography. This shows that a large proportion of the Site fell within that preference. Following further analysis and scheme development, it was considered that the greater than 12% areas could still be considered for solar development and so these areas have been included within Work No. 1 on the Works Plans.</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>The plan at <b>Appendix I</b> does not indicate the slope orientation; however, site visits have confirmed that there is a general predominance of south facing slope within the Site.</p> <p>Noting this general principle and using the context set out in <b>Appendix C</b>, the Application Site's natural topography clearly exhibits a strong suitability for solar development. Indeed, the suitability of the topography is such that the impact of the slopes on design is negligible and at no point have field parcels been included or excluded from accommodating solar arrays as a consequence.</p>
Q1.3.6	The Applicant	<p>Paragraph 3.1.11 on page 22 of the Site Selection Assessment (Appendix 1 of the Planning Statement) [APP-203] states that additional Grade 2 agricultural land was identified following further analysis and removed from areas proposed for PV panels where this was in single fields. Chapter 4 of the ES alludes to practical difficulties of farming crops on land of varying quality [APP-034]. Paragraph 12.4.91 states that "In practical terms there is little between the subgrade 3a or 3b land, and the limited amounts of Grade 2 retained within the area for the Solar PV Site are similarly constrained in practical terms."</p> <p>a) Please elaborate on the practical reasons why only the additional Grade 2 land in single fields was removed from areas for PV panels in relation to the scope for arable farming.</p> <p>b) Please clarify the area (in Hectares) and location of additional Grade 2 land that has been identified that has i) subsequently been removed and ii) remains within the area planned for PV panels. Please provide details of</p>	<p>a) Through the design evolution and field analysis, the Proposed Development sought to avoid the use of best and most versatile (BMV) agricultural land, therefore following the completion of the agricultural land classification survey, fields that were identified as consisting entirely of Grade 2 land were removed from solar development, to ensure that the best quality, most workable fields were still available for agricultural use. There is no Grade 1 land within the Proposed Development. Removing areas of Grade 2 is described with the Design Evolution in Section 5 of the Design and Access Statement [<b>APP-204</b>] in accordance with the Design Guidance V5.2, which seeks to retain fields entirely of ALC Grade 2 land within arable production as part of the Proposed Development. In terms of practical reasons, modern farming is carried out by large machinery and almost always on a whole-field basis. This means that the way the field is farmed, in terms of choice of crop and the timing of cultivation and harvesting, is generally applied on a whole-field basis. Farming patches of a higher grade within a single field in a different crop from other patches is not practical.</p> <p>Similarly, if a field has very variable soil, this creates difficulties. If, for example, the crop in part of a field was to mature three weeks earlier than in another part of the field because of different soil types, then the cropping choice must be for a variety and timing that suits the later maturing areas.</p> <p>If part of a field can grow spring crops sown in March, but part is very wet and cannot be sown until April, then the whole field will be sown in April, and the benefits of the early sowing (usually higher yield) cannot be exploited.</p> <p>In terms of witnessing this in practice, the comparison at Inserts 12.19 and 12.20 of the ES Chapter 12 show variability in the ALC and, from an aerial photograph, in the soils.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>the locations of land referenced under i and ii.</p>	<p>The areas removed involved the fields where the majority of the field was of Grade 2, with only smaller areas of a different grade.</p> <p>The Proposed development approach taken is consistent with the terms of draft NPS EN-3 paragraph 2.48.15, which explains that solar farm developments are not prohibited on 'best and most versatile' agricultural land and that "it is recognised that at this scale, it is likely that applicants' developments may use some agricultural land". The NPS goes on to explain that "applicants should explain their choice of site, noting the preference for development to be on brownfield and non-agricultural land". This is explained further in this document, the Planning Statement [APP-203] and Chapter 12 ES [APP- 042].</p> <p>b) Fields 51 and 54 (as shown on the Figure 3.2 of the ES [APP-112]) were removed as they consisted entirely of Grade 2 Land. The extent of these fields equates to <b>18ha</b>. The western extents of Field 2 were also removed as the preliminary ALC Grades presented within the Preliminary Environmental Information Report, indicated that the western extents, which cropped separately to the rest of the Field 2 was Grade 2. This area equates to <b>3ha</b>.</p>
Q1.3.7	The Applicant	<p>Paragraphs 3.1.16 and 3.1.17 on page 24 of the Site Selection Assessment [APP-203] refers to other areas that have been considered but deemed unsuitable for various reasons, including: likely significant effects on a Grade I listed building, the number of residential properties likely to be affected, impacts on other heritage assets, PRow and Rutland Water. Please provide further details and explanation of the assessments that have informed these conclusions.</p>	<p>The explanation at paragraphs 3.1.16 to 3.1.17 was informed by the professional judgement and opinions of the environmental and planning team, from their knowledge of the site and surroundings and desk-based information.</p> <p>It built on the appraisal set out in <b>Appendix J</b> which considered key environmental constraints.</p> <p>The results of this appraisal were used to inform the design principles and setbacks used as part of the design evaluation.</p> <p>The plan at <b>Appendix H</b> shows that the application site avoids the Environmental Constraints which surround the Ryhall Substation, which provides additional reasons why the Applicant's site is preferable from a planning and environmental perspective to locating the site further north, west, south, or east. This plan does not include PRow's, but these can be seen on the plan at <b>Appendix B</b>.</p> <p>There were no detailed assessments which informed these conclusions as the Applicant did not consider alternative sites within these areas, given the general suitability illustrated by that plan.</p>

ExQ1	Respondent	Question	Applicant's Response
Q1.3.8	The Applicant and Rutland County Council	<p>Paragraph 3.1.22 of the Site Selection Assessment [APP-203] and related table entitled "Consideration of Alternative Site" provides details of three large previously developed (or partially previously developed) sites that have been considered, namely: Woolfox Depot, North Luffenham (St Georges Barracks) and Cottesmore. Land ownership issues, the length of the grid connection and other potential development proposals considered through the Rutland Local Plan process are cited amongst the reasons why the sites are unavailable or unsuitable.</p> <p>a) Could the applicant please confirm the extent to which discussions have been held with the landowners regarding the availability of the sites listed.</p> <p>b) Can Rutland County Council please confirm the current status of the Local Plan review process and any implications for the sites in question?</p> <p>c) Can the Applicant please provide further details of the assumptions made regarding grid connections from the sites assessed including in terms of trench width and depth as well as the operational corridor required for protection and maintenance?</p>	<p>a) To address responses received at the Stage One consultation, the Applicant undertook a desktop assessment of the potential brownfield sites within the surrounding area to consider whether they may be potentially suitable alternatives to the Application site. The Applicant did not contact the landowners regarding the sites, as there was sufficient information available in the public domain on their intended use. Notwithstanding this, even if the sites had been available, the need for large scale solar is such that the sites would be considered as additions to the Proposed Development rather than alternatives (see Statement of Need [APP-201]).</p> <p>It should also be noted that it would be very unlikely that the development of any of these alternative sites could deliver anywhere close to the development capacity of the Application Site. Development economics suggests that landowners will seek to generate the highest reasonable land value, likely based on residential and employment values for scarce brownfield land allocated for a mix of uses. Such sites would, therefore, only ever be able to deliver a relatively small proportion of solar, either on rooftops, or as smaller elements of a wider scheme rather than utility scale solar developments. Woolfox Depot had already obtained planning approval for a smaller solar development (Ref: 2014/1004/MAJ). Development of these sites for large scale solar, rather than for housing and employment uses, is unlikely to be supported in policy terms on the basis that national planning policy supports making the most effective use of brownfield land to reduce the pressure of permanent encroachment on the countryside.</p> <p>b) Rutland County Council to answer.</p> <p>c) In considering whether to commence discussions with landowners further from the National Grid Ryhall Substation, the Applicant also considered the length of grid connection required to connect to the substation. Assuming planning and environmental effects could be mitigated to an acceptable level, as short a connection as possible was preferred on the basis that longer grid connections affect the financial viability of the Proposed Development but also can have additional impacts in terms of land take, landowner agreements and environmental impact of the connection, which for long distances may include overhead lines. To illustrate this point, the distance from the outer boundary of the sites referred to above to the grid connection point at Ryhall is provided below:</p>

ExQ1	Respondent	Question	Applicant's Response									
			<table border="1" data-bbox="1077 212 2087 544"> <thead> <tr> <th data-bbox="1077 212 1585 280">Site</th> <th data-bbox="1585 212 2087 280">Distance from Ryhall substation</th> </tr> </thead> <tbody> <tr> <td data-bbox="1077 280 1585 349">Woolfox Depot (former runway)</td> <td data-bbox="1585 280 2087 349">8.5km</td> </tr> <tr> <td data-bbox="1077 349 1585 448">North Luffenham (St Georges Barracks)</td> <td data-bbox="1585 349 2087 448">13.5km</td> </tr> <tr> <td data-bbox="1077 448 1585 544">Cottesmore (Former RAF airfield Kendrew Barracks)</td> <td data-bbox="1585 448 2087 544">13.8km</td> </tr> </tbody> </table> <p data-bbox="1077 560 2087 687">As the brownfield sites reviewed were not considered suitable alternatives, the technical specification for the cabling was not considered further. However, typically, a working width of between 50m to 100m for cable corridors would be included in a DCO application.</p> <p data-bbox="1077 703 2087 863">It should also be noted that negotiation with the individual landowners along the cable route would be likely to significantly delay the date at which the solar farm could be connected to the grid, reducing the benefits of being able to deliver quickly deployable low-cost energy to the national grid (see Statement of Need [APP-202]).</p>		Site	Distance from Ryhall substation	Woolfox Depot (former runway)	8.5km	North Luffenham (St Georges Barracks)	13.5km	Cottesmore (Former RAF airfield Kendrew Barracks)	13.8km
Site	Distance from Ryhall substation											
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Cottesmore (Former RAF airfield Kendrew Barracks)	13.8km											
Q1.3.9	Lincolnshire County Council, Rutland County Council and South Kesteven District Council	Question not for The Applicant										



## Topic 2.0 Air Quality and Emissions

ExQ1	Respondent	Question	Applicant's Response
Q2.0.1	The Applicant	<p>Paragraph 7.9.7 of the Planning Statement [APP-203] states that the outline Construction Environmental Management Plan (oCEMP) and outline Decommissioning Environmental Management Plan (oDEMP) include requirements for a Dust Management Plan (DMP) to be prepared as part of the detailed CEMP prior to construction. Table 3-6 of the oCEMP [APP207] lists measures that "may" be included in the CEMP, including a DMP. Table 3-6 suggests that the level of detail to be provided in the DMP will depend on the risk and specify minimum recommended measures.</p> <p>a) Please can the Applicant confirm if it is their intention to produce a DMP in support of the CEMP prior to construction?</p> <p>b) How will the level of risk be determined to inform DMP measures and by whom?</p>	<p>The Applicant confirms that a Dust Management Plan will be prepared as part of the preparation of the detailed Construction Environmental Management Plans prior to construction. This is secured through a commitment in the outline CEMP.</p> <p>The mitigation measures that were included within the oCEMP were developed based on a worst-case approach of assessing on the assumption that the whole Order Limits would be built out at once and that therefore a high level of risk should be assumed to arise.</p> <p>Preparation of the DMP will involve further detailed evaluation of the risk of dust generating activities using the detailed construction information that will be available to inform the preparation of the detailed CEMP(s) in line with the Institute of Air Quality Management guidance on the 'Assessment of dust from demolition and construction', and which may mean that some mitigation measures are not necessary. This will involve assessing the risk of dust emissions from earthworks, construction and trackout with respect to the potential loss of amenity and impacts to human health. The risk of dust effects arising is based upon the relationship between the dust emission magnitude and the sensitivity of the area. The risk of impact is then used to determine the mitigation requirements.</p>
Q2.0.2	The Applicant	<p>Section 4.9 of the outline Construction Traffic Management Plan (oCTMP) [APP-212] proposes to incorporate a wheel washing system with rumble grids to dislodge accumulated dust and mud prior to leaving the order limit access points "where reasonably practicable".</p> <p>a) Please identify the proposed access points where it may not be reasonably practicable to provide wheel washing</p>	<p>It is considered that all of the proposed access points will be able to accommodate a wheel washing system which will be located prior to the junction with the adopted highway. However, if due to unforeseen circumstances this is not possible, then other alternative methods will be utilised such as manual cleaning of the wheels and undercarriage to ensure there is no transfer of dust and mud onto the local highway network.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>facilities described and why this is the case?</p> <p>b) What alternative mitigation should be provided where it is not reasonably practicable to implement the measures set out in Section 4.9?</p>	

## Topic 3.0 Biodiversity, Ecology and Natural Environment (including Habitats Regulations Assessment (HRA))

ExQ1	Respondent	Question	Applicant's Response
Q3.0.1	The Applicant	<p>Paragraph 7.2.2 of ES Chapter 7 (Ecology and Biodiversity) [APP-037] states that the inner parts of larger woodland parcels were not surveyed as part of the badger survey as any setts would be located "sufficiently distant" from the proposed construction areas, with a distance of over 25m quoted as "sufficiently distant". Paragraph 7.5.29 refers to a buffer zone of 30m surrounding badger setts and Table 3-2 of the outline Construction Environmental Management Plan (oCEMP) [APP-207] states pre-construction badger surveys will take place and that buffers of 30m around any identified badger setts will be employed as reasonable avoidance measures.</p> <p>Can the Applicant clarify whether these inner parts of larger woodland parcels located within 30m of the Proposed Development will be included in the pre-construction surveys? If these woodland parcels would not be included in the pre-construction surveys, how would harm to the badger population be avoided?</p>	<p>The pre-construction badger surveys will be carried out within 30m of construction activities and will include the woodland parcels referred to in Q3.0.1. Table 3-2 in the outline Construction Environmental Management Plan (oCEMP) [APP-207] has been updated to reflect this.</p>
Q3.0.2	The Applicant	<p>Paragraph 7.4.2 of the ES [APP-037] states that mitigation measures set out in environmental management plans will be monitored by an Ecological Clerk of Works (ECoW) to ensure they have been</p>	<p>a) The Ecological Clerk of Works (ECoW) will be present on site to carry out watching briefs and toolbox talks as necessary. The frequency of these visits would be determined by the need so cannot be prescribed at this stage. The</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>implemented and adhered to. The oCEMP [APP-027] refers to the intent for a "suitably experienced ECoW to be employed/contracted" whilst the outline Decommissioning Environmental Management Plan (oDEMP) [APP-029] refers to the use of a "licensed ECoW".</p> <p>a) How regularly will monitoring be undertaken during each phase by the Ecological Clerk of Works?</p> <p>b) Will monitoring information and actions arising be reported to the local authorities?</p> <p>c) Please provide further details of how it will be determined if the ECoW is suitably experienced and licensed. Update the oCEMP and oDEMP as necessary.</p>	<p>ECoW will be present for activities such as vegetation clearance, audit or sign off of measures set out in the oCEMP.</p> <p>b) The work may involve pre-commencement checks such as the badger surveys, where the results would be fed back in a formal letter report to the LPA. However, for more ad hoc checks for nesting birds in advance of vegetation removal during the nesting season, feedback of the findings would be provided directly to the contractors and recorded but providing these to the LPA would not typically be required.</p> <p>a) The ECoW will be commissioned according to the nature of the work to be undertaken and will potentially include a team of ecologists with appropriate experience in implementing mitigation measures for the species concerned, such as reptiles, badgers or nesting birds. The credentials required for an ecologist to obtain a Natural England mitigation licence will ensure that they are suitably qualified. For activities outside the remit of a Natural England mitigation licence, the definition of a suitably qualified is an ecologist that is a member of a recognised ecological accreditation body such as the Chartered Institute of Ecology and Environmental Management (CIEEM) (at a minimum membership level of associate). No changes have been made to the oCEMP [APP-207] or oDEMP [APP-209] as the final details will be set out within the detailed CEMP and DEMP, prior to construction of the Proposed Development and following updated surveys of the Site.</p>
Q3.0.3	The Applicant	<p>Chapter 7 of the ES [APP-037] identifies a loss of 75m of species rich hedgerow within the Order limits and within the Essendine Hedgerow south side MacMillan Way Local Wildlife Site (LWS) due to the need to increase visibility splays. The creation of temporary passing points on Uffington Lane is also expected to impact grassland verges, including within the Essendine Verge South East of the Freewards (North Side) LWS and the Essendine Verge (North East Side) Near North Lodge Farm LWS with one passing point in each. An adverse effect of significance at District level is identified</p>	<p>As highlighted within Chapter 9: Highways and Access [APP-039] the location of the proposed vehicle access points to the Solar PV Site has been identified through a thorough review of the Local Road Network (LRN) to identify suitable locations in highway safety terms.</p> <p>It is not considered that there are any other reasonable alternative access points or passing place locations that could be utilised to reduce the impacts on the LWSs, as the proposed access strategy already seeks to minimise the impacts and only implement changes which impacts the LWSs where there are no other feasible alternatives. In this instance, almost all access points available within the Order limits require works to accommodate the required visibility splays given the changes in land use and requirement to accommodate the Design Manual for Roads and Bridges (DMRB) requirements.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>for the LWSs in question. Please can the Applicant clarify if alternative access points, visibility splays and passing points been considered in the interests of minimising adverse ecological effects?</p>	<p>The use of existing access points has been prioritised to minimise the environmental impacts associated with the creation of new points of vehicular access, such as the removal of hedgerows and impacts to LWSs.</p> <p>The introduction of passing places along Uffington Lane are temporary and only in place during the construction phase. Once operational, the passing places will be removed and the verge reinstated, as secured through the outline Construction Traffic Management Plan (oCTMP) [APP-207]. As set out in Chapter 7: Ecology and Biodiversity [APP-037], there will be a loss of 15.6% of a hedgerow designated as an LWS, which would be significant at the level of the LWS site, which is the lowest geographical level of those adapted from the EclA Guidelines (CIEEM, 2018) and used in the EIA. The level of impact has been assessed as being sufficiently small that it could not be considered a significant adverse effect at anything other than a District level, based on the relatively small size of the area lost compared to hedgerows in the wider area.</p>
Q3.0.4	The Applicant	<p>Paragraph 7.5.5 of ES Chapter 7 (Ecology and Biodiversity) [APP-037] reports the loss of 15.6% of species-rich hedgerow which is the conservation objective of 'Essendine hedgerow south side MacMillan Way' Local Wildlife Site (LWS). It is noted that this effect is significant at the district level which is not considered significant "in terms of the EIA process". The ES states (in paragraph 7.1.5) that the methodology is based on Chartered Institute of Ecology and Environmental Management (CIEEM) guidance. This guidance states that a significant effect is an effect that undermines the biodiversity conservation objectives of ecological features. Can the Applicant justify why a significant effect on the LWS would not arise</p>	<p>As explained at paragraph 7.1.9 of ES Chapter 7: Ecology and Biodiversity [APP-037], the EclA Guidelines (CIEEM, 2018) state that impacts should be determined as having a significant ecological effect when they have an adverse or beneficial impact on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographical area. This constitutes the guiding principle in determining whether an effect is ecologically significant, and if so at what level.</p> <p>Professional judgement is used to determine whether an effect on the integrity of a defined site or ecosystem(s) and/or the conservation status of habitats or species within a given geographical area is significant, which relates to the level at which it has been valued (i.e., international, national, regional, county, district or site). If an effect is found not to be significant at the highest geographical level at which the resource or feature has been valued, it may be significant at a lower geographical level. Once the potential effects of the Proposed Development have been assessed as per the geographical scale set out above, an effect at District level or below to an ecological feature is considered not significant in terms of the EIA process.</p> <p>The effect of the loss of 15.6% of a hedgerow designated as an LWS would be significant that the level of the LWS site, however which is the lowest geographical level of those adapted from the EclA Guidelines (CIEEM, 2018) and</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>used in the EIA. The level of impact has been assessed as being sufficiently small that it could not be considered a loss at of significance significant adverse effect at anything other than a District level, based on the relatively small size of the area lost compared to hedgerows in the wider area. This means that it is not considered to be a significant effect in EIA terms.</p>
Q3.0.5	The Applicant	<p>Paragraph 7.5.6 of ES Chapter 7 [APP-037] explains that temporary passing points, measuring approximately 20m long and 2m wide, are required to facilitate the passage of HGVs along Uffington Lane during the construction phase leading to an adverse effect of significance at District Level. Paragraph 7.6.3 states that once the construction period is complete, passing points within and outside the LWSs will be removed, their footprint replaced with nutrient poor soil and seeded with species rich grassland. Paragraph 7.5.10 identifies no direct impacts if passing points are required during decommissioning as the passing points created during the construction phase will be present.</p> <p>a) Can the Applicant confirm whether the passing points along Uffington Lane will be replaced or remain following the completion of the construction phase?</p> <p>b) If the passing points are going to be retained, what are the implications for the conclusions on the significance of effects in the ES?</p>	<p>a) The passing points will be removed after the construction stage and vegetation replaced. Please note that paragraph 7.5.10 states that "At the decommissioning phase, the <u>access</u> points created will be still in place" (emphasis added), but the passing places will be removed.</p> <p>b) As noted above in relation to a), the passing points will not be retained following completion of construction. Therefore, the conclusions of Chapter 7: Ecology and Biodiversity [APP-037] are unchanged. If the passing places are needed at the Decommissioning stage, the impacts would be similar to the construction phase. Though their design and location are not yet fixed, it can be assumed they would be of a similar nature, as they would be similarly designed to minimise impacts through suitable measures to be included in the detailed DEMP.</p>
Q3.0.6	The Applicant	<p>As outlined in the question above, new planting is set to be provided as mitigation following the creation of passing points</p>	<p>a) The oLEMP [APP-210] has been updated at paragraph 4.2.10 in Section 4.2 to require that the LEMP(s) that will be prepared in accordance with the oLEMP to</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>along Uffington Lane (Table 7-1 of ES Chapter 7 [APP-037]).</p> <p>a) Can the Applicant explain how these measures have been secured in the draft Development Consent Order (dDCO)?</p> <p>b) Additionally, can the Applicant provide a description of what is considered "medium term" as this term is not defined in ES Appendix 7.2 (Ecology and Biodiversity Assessment Methodology) [APP-060].</p>	<p>detail the locations and extent of planting mitigation for the creation of passing points along Uffington Lane that will be implemented post construction.</p> <p>b) The impact would be a loss running from the pre-construction work start when the relevant vegetation is removed, to the reinstatement of this vegetation through post construction planting and the establishment of the new grassland. It is therefore envisaged that a "medium term" impact would be in the region of six or seven years, after which the grassland will have re-established.</p>
Q3.0.7	The Applicant	<p>Table 7-1 of the ES [APP-037] identifies "adverse, permanent" effect on bats with a residual effect significance of "Site – District". However, the commentary between paragraphs 7.5.21 and 7.5.27 appears to indicate residual adverse effects at a Site level only. Please can the Applicant clarify if the residual effects of the Proposed Development on bats will be at Site or Site-District level?</p>	<p>Table 7-1 characterises the adverse impact as being at a 'Site-District level', but this should say 'Site level' consistent with the conclusions reached in paragraphs 7.5.21 to 7.5.27 with respect of residual adverse effects of significance.</p>
Q3.0.8	The Applicant	<p>Chapter 7 of the ES [APP-037] identifies the loss of approximately 30 territories for Skylark nesting. This results in an adverse effect of significance at up to a District level.</p> <p>Paragraph 4.2.34 of the outline Landscape and Ecology Management Plan (oLEMP) [APP210] includes measures to mitigate this by creating uncropped areas within the retained arable farmland. Plots will be created by either turning off the drill during sowing to leave an unsown plot or by sowing the crop as normal and spraying with a</p>	<p>The option chosen to create a particular Skylark plot will be determined by the preferences of the farm contractor and could be subject to change year on year depending on the technique used to plant the relevant fields. The plots will either be created by stopping the seed drill to create an un-seeded plot or the plots will be seeded but then treated with herbicide to create the bare plots as per RSPB guidance.</p> <p>The LEMP will set out the detail of the location and nature of the Skylark plots themselves but broadly these will follow the RSPB guidance as set out in the oLEMP (RSPB (undated). <i>Farming for wildlife. Skylark Plots</i>). Generally, they will be a minimum of 4x4 m in size, located away from "tram lines" and hedgerows, in accordance with the parameters set out in the RSPB guidance. The plots located in crops will be subject to ongoing monitoring, as set out in the oLEMP and to be required under any relevant detailed LEMP.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>herbicide to create the plot by 31 December.</p> <p>What measures are in place to determine the optimal option for the creation of Skylark plots and to ensure that the chosen measure will be adhered to and effective?</p>	
Q3.0.9	The Applicant	<p>Paragraph 7.5.61 of ES Chapter 7 [APP-037] states that the "majority of breeding birds" would experience a beneficial effect however it is not clear which species this refers to or what the significance of the effect would be to other bird species. Similarly, paragraph 7.5.62 states that "certain wintering species" would experience a beneficial effect. Can the Applicant provide an indication of the specific species of bird which would experience a beneficial effect, and what effects would be experienced by other bird species which would not experience a beneficial effect?</p>	<p>The Green Infrastructure Strategy Plan [APP-173] includes measures to diversify and connect the existing ecologically valuable habitats within the Order limits. This will result in certain habitats being able to support more individuals of the species likely to be present within the Order limits. An example would be the more sympathetic hedgerow management and creation of new diverse grassland margins, which will result in higher quality habitat for breeding bird SPIs such as yellowhammer, bullfinch, linnet, dunnock, and song thrush, which are reliant on scrub or woodland edge habitats with grassland providing foraging opportunities. This would also provide higher value habitat for certain wintering bird species reliant on hedgerow and the fruits these provide, such as fieldfare and redwing.</p> <p>Section 7.5 of the ES [APP-037] sets out the details of the assessment of impacts to breeding birds. Any species where an adverse or beneficial effect has not been identified would likely experience a neutral effect.</p>
Q3.0.10	The Applicant	<p>Paragraph 7.3.81 of ES Chapter 7 [APP-037] notes the difficulties in predicting future baseline due to uncertainties in future farming methods and agri-environmental schemes. As such, the existing baseline information has been used to assess the future baseline scenario (as stated in paragraph 7.3.82). It is unclear whether the reported effects in relation to the decommissioning phase represent a worst-case scenario or whether there is potential for effects to</p>	<p>The impact assessment for the decommissioning phase has been carried out to the same method applied for the construction and operational phase and this is a reasonable worst-case scenario based on the baseline. This is based around assessing the effects which may reasonably arise as a result of the decommissioning works on ecology, biodiversity and protected species, considering the retention of all existing managed and newly created habitats, but assuming the grassland created within the Solar PV array is removed and reinstated to arable land.</p> <p>It is impossible to assess whether these would be worsened or indeed made less significant by changes in the future baseline as it is not possible at this stage to confirm what that future baseline may look like given possible changes in climate and agricultural practice. There is no reason to think that the mitigation measures</p>



ExQ1	Respondent	Question	Applicant's Response
		<p>become worsened by changes in the future baseline.</p> <p>Can the Applicant clarify whether the effects reported in the ES in relation to the decommissioning phase represent a worst-case scenario and if they are not, what the likely significance of effects would be during the decommissioning phase.</p>	<p>set out in the Outline DEMP will not be suitable at the point of decommissioning, and the LPAs will in any event be able to consider this as part of approving any detailed DEMP.</p>
Q3.0.11	The Applicant	<p>Table 16-2 of ES Chapter 16 (Interactions of Effects and Summary of Cumulative Effects) [APP-046] shows that in-combination effects have been assessed in relation to Ecology and Biodiversity and Air Quality, Water Resources, and Ground Conditions. In-combination effects between Ecology and Biodiversity and Landscape and Visual Impact do not appear to have been assessed despite several of the mitigation measures proposed within ES Chapter 6 (Landscape and Visual), such as vegetation screening, being dependent on ecological factors. Can the Applicant comment on in-combination effects between Ecology and Biodiversity and Landscape and Visual (LVIA), including the potential for LVIA mitigation to impact on ecology on and off-site?</p>	<p>Effect interactions between the Ecology and Biodiversity and Landscape and Visual assessments have not been considered because there is no potential for effect interactions that have not already been inherently considered within each assessment.</p> <p>The proposed landscape planting and habitat creation was informed by the Ecology and Biodiversity and Landscape and Visual assessments in an iterative process to develop the Green Infrastructure Strategy <b>[APP-173]</b> that encompasses mitigation for both landscape and ecological effects, is embedded into the design of the Proposed Development. Landscape planting is an integral component of the embedded mitigation that has been taken into account within the Ecology and Biodiversity assessment and the ecological mitigation forms part of the landscape assessment (creation of setbacks, buffers, open spaces etc). The Applicant considers the proposed planting, whether for mitigation or for enhancement, to contribute positively to the Biodiversity Net Gain achieved across the Proposed Development as set out in Appendix 7.6: Ecology and Biodiversity - Biodiversity Net Gain Metric <b>[APP-064]</b>, and which is therefore beneficial in effect.</p> <p>The outline Landscape and Ecological Management Plan (oLEMP) <b>[APP-210]</b> secures the management of the proposed landscape screening and habitat creation taking into account both landscape and ecological considerations.</p>
Q3.0.12	The Applicant	<p>Some of the proposed mitigation measures are not specified within ES Chapter 7 (Ecology and Biodiversity) [APP-037]. For example, an effect on</p>	<p>The measures to reduce the risk of direct accidental damage or habitat degradation are set out in the oCEMP <b>[APP-207]</b>. Table 3-2 includes the following measures:</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>Ryhall Pasture and Little Warren Verges Site of Special Scientific Interest (SSSI) and Tolethorpe Road Verges SSSI and Local Wildlife Sites is excluded on the basis of "measures set out in the oCEMP and oDEMP". However, it is not clear what specific mitigation measures are referred to. Can the Applicant clarify which specific mitigation measures within the oCEMP/oDEMP are relied upon for reducing each potential effect?</p>	<ul style="list-style-type: none"> <li>• adopting the Considerate Constructors Scheme (CCS) to assist in reducing pollution and nuisance during the construction phase;</li> <li>• installing perimeter fencing around the Solar PV Site within the Order limits to secure the Solar PV Site and/or areas of workings. This fence will also prevent accidental damage to retained vegetation, in particular designated sites (Local Wildlife Sites) within and adjacent to the Order limits. Where perimeter fencing is not required, specific protection measures will be implemented, including temporary construction fencing and/or construction exclusion zones.</li> <li>• delivering toolbox talks to all contractors to include the locations of retained features, the ecological risks present, legal requirements and working arrangements necessary to comply with legislation, and the protection measures to be adhered to during construction. This will include sharing the mapping of sensitive ecological receptors, including designated sites, to ensure contractors are aware their location. Toolbox talks will be repeated as necessary over the duration of the construction phase.</li> </ul> <p>Additionally, measures to prevent and minimise dust creation and air pollution will be adopted throughout construction and are set out in Table 3-6 of the oCEMP. Measures to prevent pollution incidents will be adopted throughout construction and are set out in Table 3-7 of the oCEMP. Measures to minimise effects on ecology from noise and vibration will be adopted throughout construction and are set out in Table 3-5 of the oCEMP.</p>
Q3.0.13	The Applicant	<p>Paragraph 7.5.8 of ES Chapter 7 [APP-037] states that during the operational phase hedgerow management will be used to increase the value of habitats as set out within the oLEMP [APP210]. Within Appendix 1 (Management Programme Schedule) of the oLEMP it is indicated that existing hedgerows will be managed throughout the operational phase but boundary hedgerow enhancements are only proposed to be managed for Year 0. Can the Applicant</p>	<p>Appendix 1 of oLEMP [APP-210] indicates that any new planting for hedgerow enhancements will be undertaken in Year 0. Once planting is complete, management of these hedgerows would then revert to the 'Existing hedgerows' category and be managed continuously (essentially allowed to grow out with minor pruning as appropriate) for the duration of the Proposed Development. The oLEMP has been amended to clarify this intent.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>explain why the hedgerow enhancements are not proposed to be managed throughout the operational phase as is indicated within paragraph 7.5.8 of ES Chapter 7?</p>	
Q3.0.14	The Applicant	<p>With reference to Appendix 1 (Management Programme Schedule) of the oLEMP [APP-210], the description provided for "New Hedgerows" does not appear to be relevant as it references tree stock. Can the Applicant explain whether this is a typographical error and, if necessary, provide an amendment to the oLEMP to ensure the descriptions of the management activities proposed are accurate.</p>	<p>In this context, 'tree stock' is intended to mean 'woody/scrub' vegetation species characteristic of native hedgerows such as hawthorn, blackthorn, hazel, holly etc (which are trees in their own right) as well as individual hedgerow trees such as field maple, oak and birch. The oLEMP has been amended to provide clarification.</p>
Q3.0.15	The Applicant and Natural England	<p>Chapter 7 of the ES [APP-037] notes the requirement for works relating to badgers and Great Crested Newts. It is understood from the Relevant Representation submitted by Natural England that they are yet to receive draft protected species licence applications for review. Please can the Applicant and Natural England consider the scope to agree an appropriate timeframe for the submission of Protected Species Licences applications and look to record any outcome in a Statement of Common Ground?</p>	<p>In terms of badger licenses, the exact details of the licences applied for would be dependent on the baseline closer to the start of construction, and therefore this cannot be started at this stage.</p> <p>For great crested newts, it is likely that the Applicant will pursue the District Level Licensing route for works within the Order limits. Therefore, this will be progressed with Natural England over the course of the Examination, but the outcome of this will not be known by the submission of the first Statement of Common Ground.</p> <p>In both cases, all relevant mitigation guidance and indeed the mitigation hierarchy will be applied to the mitigation proposals therefore it is highly unlikely that any unforeseen issues with the mitigation proposals will arise.</p> <p>The Applicant will update the Examining Authority as discussions with Natural England progress in subsequent iterations of the Statement of Common Ground over the course of the examination.</p>
Q3.0.16	The Applicant and Anglian Water	<p>Paragraph 3.1.13 d. of the oLEMP [APP-210] states that the "Applicant is in dialogue with Anglian Water who have identified the West Glen River for</p>	<p>The Applicant has provided an update on this matter in the Statement of Common Ground (SoCG) with Anglian Water.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>potential works to improve biodiversity and riparian habitats as part of their Catchment Based Approach (CaBA) partnerships programme. These works are mutually compatible and beneficial with the aspiration GI Strategy and would bring biodiversity benefits to the West Glen River" Please can the Applicant and Anglian Water provide an update on these discussions and any implications for the Proposed Development and related management plans?</p>	<p>The West Glen River runs north to south through the central part of the Order limits. Within the Order limits, the extent of the West Glen River is subject to Work Number 4, as shown on the Work Plans <b>[APP-006]</b>, which allows for electrical cables and communication cables, connecting the PV Arrays and the Onsite Substation.</p> <p>The electrical cables and communications cables will be Horizontally Direction Drilled (HDD) beneath the West Glen River. The method for these works is set out within outline Construction Environmental Management Plan (oCEMP) <b>[PDA-005]</b> A minimum offset from the West Glen River of 10m to HDD works is set out in the Design Guidance within the Design and Access Statement <b>[APP-204]</b>. These measures will ensure the retention of the West Glen River and associated habitats and will not result in hydrological changes.</p> <p>During the pre-application stage, the Applicant has engaged with Anglian Water who have identified the West Glen River for potential works to improve biodiversity and riparian habitats as part of their Catchment Based Approach (CaBA) partnerships programme.</p> <p>No formal scheme has been confirmed for the potential improvement works. However, should the works proceed, these would be mutually compatible and beneficial with the aspiration of Green Infrastructure Strategy and would bring biodiversity benefits to the West Glen River.</p> <p>The PV Arrays have been removed from both the west and east banks of the West Glen River to ensure that the Proposed Development does not prejudice any forthcoming design and the Applicant is willing to continue to work with Anglian Water to deliver a design that meets the objectives of the Green Infrastructure Strategy, as described in the outline Landscape Environmental Management Plan (oLEMP) <b>[APP-036]</b>.</p> <p>The detailed LEMP would reflect changes in baseline and specific management prescriptions to ensure these are appropriate for the receiving environment, but no update is required to the oLEMP, which accounts for discussions with Anglian Water.</p>

ExQ1	Respondent	Question	Applicant's Response
			The Applicant is happy to continue with dialogue with Anglian Water's consultants Fiver Rivers.
Q3.0.17	The Applicant	A Green Infrastructure Strategy Plan is provided at Figure 6.11 [APP-173] and within the Design and Access Statement [APP-204]. Section 6 of the Design and Access Statement summarises the key principles of the Green Infrastructure Strategy. They include the following: "reconnection of existing habitats and designated ecological sites through new woodland, grassland and hedgerows planting that is reflective of local soil conditions and existing species and as part of landscape scale GI enhancements and facilitating a network of permeable 'wildlife corridors' throughout the Order limits." However, the plan provided is not particularly clear in terms of the identification of the wildlife corridors and ecological networks to be connected within the Order limits or how these corridors connect beyond the Order limits. Please can an updated plan be provided that provides clarification on the above?	<p>The Applicant has updated the Design and Access Statement <b>[APP-204]</b> and in particular the diagram on page 49 to address this comment. The figure on page 49 identifies selected SSSI and LWS within the vicinity of the Order Limits and illustrates conceptually the principles of the Green Infrastructure Strategy.</p> <p>The Green Infrastructure Strategy Plan provides, at Figure 6.11 <b>[APP-173]</b> and also with outline Landscape and Ecology Management Plan <b>[APP-210]</b>, further detailed information on the types of planting, which relate to the principles identified on Page 49 of the DAS.</p>
Q3.0.18	Lincolnshire County Council, Rutland County Council, South Kesteven District Council, and any other Interested Party	Question not for The Applicant	

## Topic 3.1 Habitats Regulations Assessment

ExQ1	Respondent	Question	Applicant's Response
Q3.1.1	The Applicant	With reference to the shadow Habitat Regulations Assessment Report (sHRA) [APP-063] it is unclear whether mitigation is replied upon for the conclusion of no likely significant effects to Baston Fen Special Area of Conservation (SAC). The sHRA states that given the distance between the Proposed Development site and the SAC any pollutants entering the watercourse would be diluted. However, the sHRA also refers to "significant planting". Can the Applicant confirm whether the conclusion of no likely significant effects to Baston Fen SAC relies upon mitigation planting?	No, the planting is not a mitigation measure to reduce the risk of pollution or similar effects. The conclusion has been reached on the basis that the amount of pollutant required to have any form of adverse effect on this SAC feature at this distance would not be released as a result of the Proposed Development.
Q3.1.2	The Applicant and Natural England	Table 3 of the sHRA [APP-063] states that there is a potential impact pathway on Baston Fen SAC from siltation or pollution from the Proposed Development entering the waterway due to the hydrological connectivity between the Order limits and the SAC. It is stated in Table 3 that this impact pathway has been assessed within the ES. However, Table 11-5 (Statutorily Designated Sites within 5km of the Order limits) of ES Chapter 11 (Water Resources and Ground Conditions) [APP-041] states that the Order limits are not hydrologically connected to the (incorrectly named) Baston and Thurlby Fens SAC and therefore effects of the Proposed Development on	<p>The Order limits would only be linked to Baston Fen SAC hydrologically should the sluice gates at Greatford and west of Market Deeping be open at the same time. On this basis, Chapter 7: Ecology and Biodiversity [APP-037] identified a hydrological link which was then assessed. The conclusion was that given the distance to the SAC and the likely intervening dilution arising from the wider catchment, effects as a result of pollution from the Order limits are highly unlikely. Baston Fen SAC is outside the 5 km buffer and therefore was not assessed in Chapter 11: Water Resources and Ground Conditions [APP-041].</p> <p>Table 11.5 Statutory Designated Sites within 5 km of the Order limits of Chapter 11: Water Resources and Ground Conditions, identifies Baston and Thurlby Fens SSSI, Special Protection Area (SAC) as a receptor within 5 km of the Order Limits. The table should read Baston and Thurlby Fens SSSI. For clarity, Baston Fen SAC is located approximately 6.1 km from the Order Limits and outside the 5 km Study Area and therefore was scoped out of the assessment.</p> <p>The conclusions of the assessment remain unchanged.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>designations are 'scoped out', as stated in paragraph 11.2.68 of [APP-041]. As such there are discrepancies between the two documents.</p> <p>a) Can the Applicant clarify whether the Order limits are hydrologically connected to this SAC and therefore whether there is a potential impact pathway which should be assessed within ES Chapter 11?</p> <p>b) Do Natural England have any comments on the above?</p>	
Q3.1.3	The Applicant and Natural England	<p>Paragraph 7.1 of the sHRA [APP-063] rules out in-combination effects on European sites on the basis that no effects would occur on European sites alone and so the Proposed Development cannot add to any effects resulting from any other development. No methodology has been provided to support this statement and it is unclear what other plans and projects have been considered within the assessment of in-combination effects. Furthermore, although significant effects are screened out, potential effect pathways are noted in Table 3 of the sHRA. The Habitats Regulations require assessment of the potential for effects, which alone may be insignificant, to combine with any other plan or project that affects the same European site(s) and qualifying feature(s).</p> <p>a) Can the Applicant provide the methodology and evidence used</p>	<p>The standard HRA method was applied through the process, The Proposed Development will not affect European sites in any way as it does not provide supporting habitat for any species for which the European sites are designated. No effects at even a Site level have been identified to any of these features, therefore no in-combination effects can arise. Therefore, the conclusion was reached based on this assessment that the Proposed development will have no detrimental effect on European designated sites in combination with any other project.</p>

ExQ1	Respondent	Question	Applicant's Response
		for reaching the conclusion of no likely significant in-combination effects, including the list of other plans and projects considered? b) Do Natural England have any comments on the above?	



## Topic 4.0 Compulsory Acquisition, Temporary Possession and Other Land or Rights Considerations

ExQ1	Respondent	Question	Applicant's Response
Q4.0.1	The Applicant	<p>The Applicant's letter [PDA-001] submitted at Procedural Deadline A sets out the proposed use of a Schedule of Negotiations and Powers Sought [APP-024].</p> <p>As the Examination progresses and at each successive deadline the Applicant is requested update the Schedule as necessary, including taking account of the positions expressed in Written Representations and any Compulsory Acquisition Hearing and giving reasons for any additions.</p>	<p>The Applicant can confirm the Schedule of Negotiations and Powers Sought <b>[APP-024]</b> has been updated to reflect the ongoing negotiations with interested parties. This document now also indicates which parties submitted Relevant Representations.</p> <p>The Applicant will provide an update to this Schedule as necessary at successive deadlines.</p>
Q4.0.2	The Applicant	<p>The Book of Reference (BoR) [APP-023] includes a number of Statutory Undertakers with interest in land.</p> <p>a) Provide a progress report on negotiations with each of the Statutory Undertakers listed in the BoR, with an estimate of the timescale for securing agreement with them.</p> <p>b) State whether there are any envisaged impediments to the securing of such agreements.</p> <p>c) Provide a list of any additional Statutory Undertakers identified since submission of the BoR, and answer the above two questions, for such additional Statutory Undertakers.</p>	<p>a) The Statutory Undertakers Tracker (Rev 1) sets out the progress of negotiations with each Statutory Undertaker listed in the BoR. The Applicant has reached agreement with Anglian Water, National Grid Electricity Transmission, National Gas Transmission, Cadent Gas and National Grid Electricity Distribution. The Applicant anticipates that agreement will be reached with all Statutory Undertakers before the end of the Examination.</p> <p>b) The Applicant does not envisage any impediments to the securing of such agreement.</p> <p>c) There are no additional Statutory Undertakers identified since the submission of the BoR.</p>

ExQ1	Respondent	Question	Applicant's Response
Q4.0.3	The Applicant	<p>The Key to the Land Plans [APP-005] refers to the pink land as “Order land – freehold and leasehold to be compulsorily acquired and in relation to which it is proposed to extinguish easements, servitudes and other private rights” and also “land to be possessed temporarily and, during any period of temporary possession, the exercise of easements, servitudes and other private rights, are to be suspended”. The later wording is also included in the key to the blue land. This appears to result in overlap with the yellow land described as “temporary use of land.....”.</p> <p>a) The Applicant is requested to explain the rationale behind the inclusion of temporary possession in relation to the pink and blue land and the overlap between those plots and the yellow land.</p> <p>b) The descriptions in key of the Land Plans also differs from those used on page 3 of the BoR. Please update these for consistency.</p>	<p>a) The Applicant can confirm the Key to the Land Plans has now been updated to remove the erroneous text indicating an overlap between the blue and pink land, and the yellow land.</p> <p>b) The Applicant has updated the descriptions shown on page 3 of the BoR.</p>
Q4.0.4	The Applicant	<p>Any person entitled to enjoy easements or other private rights over land which the Applicant proposes to extinguish, suspend or interfere with identified in Part 3 of the BoR should also be recorded in Part 1 as a person within categories 1 or 2 as set out in section 57 of the Planning Act 2008. Please confirm the BoR has been drafted accordingly?</p>	<p>The Applicant can confirm the BoR has been drafted accordingly.</p>

ExQ1	Respondent	Question	Applicant's Response
Q4.0.5	The Applicant	<p>In the light of the relevant guidance "Planning Act 2008: procedures for the compulsory acquisition of land" (September 2013) and in particular paragraph 8:</p> <p>a) How can the Examining Authority (ExA) be assured that all reasonable alternatives to CA (including modifications to the scheme) have been explored?</p> <p>b) Please set out in summary form, with document references where appropriate, what assessment/comparison has been made of the alternatives to the proposed acquisition of land or interest in each case.</p>	<p>a) The Applicant has considered all reasonable alternatives to compulsory acquisition, including negotiating agreements, considering alternative sites and making modifications to the Proposed Development, as set out in the Site Selection Report prepared and appended to the Planning Statement <b>[APP-203]</b>, the Alternatives chapter of the ES <b>[APP-034]</b>, and the Design and Access Statement <b>[APP-204]</b>. The ExA can be assured by the progress of the voluntary negotiations, as the Applicant has successfully entered into voluntary option agreements with the freehold owners of the majority of the Solar PV Site and expects to enter into similar agreements with the remaining freehold owners before the end of the Examination. Further information on this is set out in the updated Schedule of Negotiations submitted at Deadline 2.</p> <p>b) Chapter 4 of the ES <b>[APP-034]</b> sets out the process undertaken for considering alternative sites, with a Site Selection Report prepared and appended to the Planning Statement <b>[APP-203]</b>. The availability of significant capacity at the National Grid Ryhall Substation without the need for upgrading was the primary driver in identifying a site in this part of Lincolnshire.</p> <p>To identify which of the land in proximity to the substation is appropriate for solar, the Applicant commenced discussions with landowners to identify whether there was a willingness to enter into lease agreements. Alternative areas were considered but deemed less preferable due to lack of availability of previously developed land, the relative distance from protected ecological and heritage assets, higher graded ALC and the need for more land for a cable connection route. This is discussed further in the DAS <b>[APP-204]</b> and in the responses to the ExA's questions on site selection and alternatives above.</p> <p>Alternative solar technologies and layouts were also considered and discounted, as set out in section 4.3 of Chapter 4 of the ES <b>[APP-034]</b>.</p> <p>Where the Applicant is seeking powers of compulsory acquisition, the Applicant's preference is to negotiate the acquisition of land and / or interests in land and enter into voluntary agreement with the landowner. Negotiations for the purchase of land, rights and interests is ongoing in respect of land and new rights required for the Proposed Development. The progress of the</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>negotiations is detailed in the Schedule of Negotiations and Powers Sought (Rev 2) submitted at Deadline 2.</p> <p>The Applicant remains committed to acquiring all land and rights by voluntary agreement in the first instance, however it requires the powers of compulsory acquisition sought in order to provide certainty that the Applicant will have all the land required to construct and operate the Proposed Development, including accounting for if there are any breaches of those options. The use and application of compulsory acquisition powers is considered the last resort to secure the land and rights needed for the Proposed Development.</p>
Q4.0.6	The Applicant	<p>Paragraph 17 of the guidance "Planning Act 2008: procedures for the compulsory acquisition of land" (September 2013) states the Funding Statement should provide as much information as possible about the resource implications of both acquiring the land and implementing the project for which the land is required.</p> <p>a) The Funding Statement [APP-022] does not identify the CA costs separately from the project costs or explain in detail how a figure for CA costs was arrived at. Please clarify the anticipated cost of CA and how this figure has been estimated.</p> <p>b) Notwithstanding the details within the Funding Statement, what further information/evidence can be provided to demonstrate that adequate funding is likely to be available?</p> <p>c) What financial arrangements would be put in place to secure the decommissioning of the Proposed Development at the end of its (albeit unspecified) operational lifetime?</p>	<p>a) The Funding Statement [<b>APP-022</b>] confirms that the current cost estimate for the Proposed Development is approximately £245 million. This covers all aspects of the Scheme and has been arrived at by including land acquisition costs. Of the £245 million, approximately £38 million is estimated to cover the costs anticipated for using compulsory acquisition powers across the Site. This estimate includes the costs for acquisition of rights, covenants and equipment, the value of the freehold interest, leasehold interest and crop loss, statutory loss payments and an allowance for inflation and project contingencies.</p> <p>b) The Applicant is 100% owned by CS UK Holdings III limited, whose ultimate parent company is Canadian Solar Inc. The Applicant has appended at <b>Appendix K</b> Canadian Solar Inc's latest financial report, being Q1 2023, to demonstrate that Canadian Solar Inc has the adequate funding required for the Proposed Development. In addition, this demonstrates that Canadian Solar Inc has been able to successfully finance a large number of solar and battery projects, with a market cap of approximately \$3 billion, being one of the largest companies in the solar industry.</p> <p>c) The Applicant intends to follow good commercial practice to set aside funds during the operational life of the Proposed Development.</p> <p>Requirement 18 of the dDCO (Rev 2) provides a clear mechanism for ensuring decommissioning takes place. It is not necessary to provide financial arrangements to secure the decommissioning of the Proposed Development as the enforcement mechanisms in the Planning Act 2008 are rigorous, where criminal liability is a possible consequence for a breach of a requirement. In addition, the Proceeds of Crime Act 2002 also allows local</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>authorities to seek to recover the profits accruing to businesses and individuals who breach planning control.</p> <p>It is not routine practice for DCOs to incorporate financial arrangements for decommissioning. Without clear precedent or government guidance, there is no basis to justify putting financial arrangements in place</p>
Q4.0.7	The Applicant	<p>Paragraph 5.1.4 of the Statement of Reasons (APP-021) confirms that there are a number of interests identified in the Book of Reference [APP-023] where it has not been possible to identify ownership. Details are also provided of further measures being carried out to seek to identify unknown landowners or persons with an interest in the land. Please provide an update on the identification of such owners/interests along with an update of what further steps will be undertaken in this regard.</p>	<p>The Applicant's land referencing company employed a number of methods to identify owners of unregistered land, taking account of best practice and relevant guidance, including PINS Advice Note 4 'Section 52' (March 2017).</p> <p>Methods included searches at the Land Registry; the issue of Land Interest Questionnaire letters to landowners adjacent to parcels of unregistered land; follow up discussions with known landowners; desktop research; the use of the Applicant's local knowledge and connections with landowners, and their land agents, to identify any unregistered landowners, amongst others.</p> <p>It should be noted that owners for all pieces of land within the solar development areas have been identified. Accordingly, the Applicant does not intend to carry out further investigations.</p>
Q4.0.8	The Applicant	<p>Paragraph 6.2.13 of the Statement of Reasons [APP-021] states that the residual significant adverse effects will only occur while the Proposed Development is under construction, operational or being decommissioned and will disappear when the Proposed Development is decommissioned.</p> <p>a) Given that the draft Development Consent Order (dDCO) does not include any time limit for the operational period of the Proposed Development and assuming that the Environment Statement is based on a worse case assessment with no time limit restriction, what weight is given to the possibility that the adverse effects</p>	<p>a) The weight attributed is a matter of the overall planning balance judgement. Although no timescale has been given for the decommissioning stage and the effects during operation are accordingly considered to be permanent in nature, as recognised at paragraph 3.10.59 of the draft revised NPS EN-3, the solar PV installation could be dismantled relatively easily and economically at the end of its operational lifespan. Its impacts are therefore reversible at the decommissioning stage.</p> <p>It is the case that technology has an operational lifespan, and it is noted that the definition of maintain in the draft DCO <b>[PDA-003]</b> means that the Applicant cannot replace the Proposed Development wholesale. As such, it will come to an end, but, given the possibilities of technological enhancement, a time limit has not been imposed. Therefore, while a time limited consent is not sought, it is anticipated that the Proposed Development will be decommissioned at some point in the future. Whilst the ES has assessed the operational impacts of the development as permanent effects, it is the case that any impacts arising from the development related to the use of the land are considered to be reversible, pursuant to the management plans secured</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>will disappear as stated in Paragraph 6.2.13?</p> <p>b) How is this factored into the condition imposed under Section 122(3) of the Planning Act 2008 that the Secretary of State needs to be satisfied that there is a compelling case in the public interest for the land to be acquired compulsorily?</p>	<p>by the DCO Application. It is also noted that the conclusion of the operational phase of the Proposed Development will hold for the lifetime of the development, whatever that may be, given the requirements to implement the mitigation measures set out in the detailed management plans in the draft DCO. If they were not continued to be implemented, then that would be a breach of the draft DCO.</p> <p>b) The Applicant requires the powers of compulsory acquisition sought in order to provide certainty that it will have all the land required to construct and operate the Proposed Development. Not limiting the operational period of the Proposed Development does not affect the need case for the acquisition of the land and does not change the balance of the public benefits that would be derived from the compulsory acquisition outweighing the private loss suffered by those whose land is acquired. The case for the land powers is not made on the basis of a time period, but on the compelling case for the delivery of renewable energy to deliver Net Zero.</p>
Q4.0.9	The Applicant	<p>Q1.0.12 above refers to the proposed cable routes, including the use of the A6121 through Essendine.</p> <p>a) Clarification is sought on whether the proposed cable route along the A6121 through Essendine would still be required in the event that an alternative crossing route of the East Coast Main Line is pursued?</p> <p>b) Assuming that the potential crossing of the East Coast Main Line is a reasonable and realistic option, how should such an alternative be considered in determining whether the acquisition of rights, as currently proposed, should be authorised by the Secretary of State?</p>	<p>a) The Applicant considers that it is highly likely that a cable route would not be required along the A6121 if the alternative route crossing the East Coast Mainline railway was utilised. However, it is not able to fully confirm this until Network Rail has confirmed that it is content with its technical proposals for that alternative crossing. The Applicant is in extensive engagement with Network Rail and fully anticipates that this will be able to be resolved in good time before the end of Examination.</p> <p>b) As the Examination progresses, the Applicant will amend the DCO to account for the progress made with Network Rail. In particular, if Network Rail confirm that all cabling requirements can be dealt with via the non A6121 route, then article 20 will be able to be amended to provide that the Applicant must choose, and be restricted to only using, powers over either the A6121 or through the non A6121 route (noting that either of the other two options would require the same land to be used) (by reference to plots in the Land Plans). The Applicant will, however, still need the ability to be able to make a choice, as even if design approval is given, a range of Agreements will need to be entered into, and the Applicant would need the 'backstop' of being able to use its powers.</p> <p>However, until that design approval is given, the Applicant needs to allow all variety of options open to it for the cabling route in an unrestricted</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>fashion from a DCO powers perspective (whilst acknowledging the need for protective provisions for Network Rail generally).</p>
Q4.0.10	The Applicant	<p>Compulsory acquisition powers are proposed for extensive areas of land for Works No.7 (works to create, enhance and maintain green infrastructure). Please explain in further detail, providing examples of particular land parcels as illustration, how the acquisition of land for Works No.7 is no more than reasonably necessary for that purpose, and that it is proportionate?</p>	<p>The scope of the powers of compulsory acquisition proposed in respect of the land within the Order limits goes no further than is needed. All the land included within the Order limits is needed to achieve the identified purpose of delivering the Proposed Development, as described in the Statement of Reasons <b>[AS-009]</b>.</p> <p>As set out within section 5 of the Design and Access Statement <b>[APP-204]</b>, areas identified as not being suitable for accommodating PV Arrays were removed. However, the removed areas were retained in the Order limits as Mitigation and Enhancement Areas to provide opportunities to create multifunctional spaces and achieve, for example, biodiversity enhancements and amenity corridors; and help secure the extensive BNG outcome for the Proposed Development (although it should be noted that no field is proposed for compulsory acquisition powers solely to achieve BNG).</p> <p>The Mitigation and Enhancement Areas will provide areas for green infrastructure, amounting to approximately 165ha. What each area is required for is illustrated in the Green Infrastructure Strategy Plans (Appendix 2 of the oLEMP <b>[APP-210]</b>). For example, fields retained within the Mitigation and Enhancement Areas will be retained in agricultural use and managed to provide skylark plots to mitigate the impact of skylarks recorded within the Solar PV Site. The fields where skylark plots are to be created are indicated by a purple diamond symbol and are no more than reasonably necessary as they are required to offset the losses from the Solar PV Site.</p> <p>Other areas within the Mitigation and Enhancement Area are proposed as types of grassland as they are impractical to continue to be commercially farmed as part of the existing farming estate, given their size and shape.</p>
Q4.0.11	The Applicant	<p>Paragraph 7.5.13 of the Statement of Reasons <b>[APP-021]</b> states that other areas around, and further from the substation, were discounted due to reasons such as multiple land ownerships, unwilling landowners or smaller, irregular field boundaries. For areas around and within proximity of the site substation,</p>	<p>As explained in the Site Selection Report (Appendix 1 of the Planning Statement <b>[APP-203]</b>), the Applicant started with the intention of finding suitable land within close proximity to the Ryhall substation that was large enough to accommodate a utility-scale solar project, whilst also taking account of the site selection factors discussed in that report. One of the first principles of this was finding willing landowners as close as possible to the substation, to minimise the length of grid connection, both to reduce financial cost and environmental effects and limit the</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>please provide further details of the land parcels which may have been potentially suitable on environmental/land-use issues but were discounted due to multiple land ownerships or unwilling landowners.</p>	<p>number of landowners to negotiate with, providing that the land was suitable from a planning and environmental perspective.</p> <p>The extent that landowners were willing to enter into discussions with the Applicant was also an important factor, balanced alongside planning and environmental considerations, as the Applicant sought to begin from a starting position of seeking to minimise the extent of compulsory acquisition powers that would be required to be utilised on the basis that deals would be able to be reached with those willing landowners.</p> <p>As sufficient land was found within close proximity of the substation, which was also suitable from a planning and environmental perspective, with a relatively limited number of landowners willing to negotiate with the Applicant, land further afield was not considered further. Nevertheless, the greater the scale of the solar farm and the longer the grid connection, the more landowners would have been required to be brought in.</p> <p>The process undertaken by the Applicant was an iterative one, opening up discussions with landowners and then stopping when sufficient land had been identified and accounting for planning and environmental factors. The Applicant used their own judgement and knowledge of the local area to target particular landowners, which focussed on those with larger land holdings. This development work also took into account landscape design considerations, the feedback from the on-going consultation and engagement process in the pre-application period and the development of the EIA and understanding of the baseline. This led to the Scheme changing from Stage 1 consultation to Stage 2 consultation and onto the application, as explained in the DAS <b>[APP-204]</b>.</p> <p>The Applicant notes that there is no requirement to demonstrate that the Application site is the 'best' option (see NPS EN-1 paragraph 4.4.1 and revised draft NPS EN-1 paragraph 4.2.11) and there is no requirement to consider and discount other land within the wider area surrounding the substation. However, in any event, it is noted that those alternatives would be constrained by agricultural land and other environmental considerations as set out in the Site Selection Report and have involved additional land take for solar development and cabling, with landowners who may not have been willing to negotiate with the Applicant, thus necessitating more compulsory acquisition.</p>



ExQ1	Respondent	Question	Applicant's Response
Q4.0.12	The Applicant	The Applicant's attention is also drawn to the compulsory acquisition elements of Written Questions 1.0.17 (part d) and 1.0.18 (part c).	Please refer to the responses to Written Questions 4.0.1 to 4.0.11 above, and to the responses to Written Questions 1.0.17 (part d) and 1.0.18 (part c).

## Topic 5.0 Draft Development Consent Order (dDCO) Articles

ExQ1	Respondent	Question	Applicant's Response
Q5.0.1	The Applicant	<b>Part 1, Article 2 (Interpretation)</b> <b>“apparatus”</b> – This definition has been expanded to include specifically named apparatus such as pipeline, aerial markers etc. Whilst the Explanatory Memorandum (EM) [APP-108] notes this has precedent in the Riverside Energy Park Order 2020, further explanation is requested for why it is particularly necessary for the Proposed Development?	This is to ensure that the definition of apparatus is broad enough to encompass the type of apparatus that the undertaker may encounter during the construction of the Proposed Development and the nature of the works the Applicant may need to carry out. This wording is also reflected in the Immingham Open Cycle Gas Turbine Order 2020 and Keadby 3 Carbon Capture Power Station Order 2022.
Q5.0.2	The Applicant	<b>“authorised development”</b> – This definition includes ‘any other development within the meaning of Section 32 (meaning of “development”) of the 2008 Act authorised by this Order’. a) Provide justification for why this wording is required in addition to the development described in Schedule 1 (authorised development)? b) Can the above wording be reviewed to include just the development described in Schedule 1?	a) This wording is provided to authorise works set out in section 32 of the Planning Act 2008 that may be required as part of the construction of the Proposed Development. These works have not been listed in Schedule 1 of the dDCO (Rev 2) and therefore this does not give rise to any duplication. This wording ensures that the Applicant is not required to obtain additional consents should any works that are classified as ‘development’ under section 32 of the Planning Act 2008 be required. b) The Applicant does not consider it necessary for the definition to be amended to only include reference to Schedule 1. This is a widely precedented approach and has been approved by the Secretary of State in a range of DCOs, including the Immingham Open Cycle Gas Turbine Order 2020, Lake Lothing (Lowestoft) Third Crossing Order 2020, the M25 Junction 28 Development Consent Order 2022 and Keadby 3 Carbon Capture Power Station Order 2022.
Q5.0.3	The Applicant	<b>“maintain”</b> – This definition includes the potential for works of a significant nature. For example, to adjust, remove, reconstruct, replace and improve any part of the authorised development. Whilst the definition prevents the removal, reconstruction or replacement of ‘the	a) The works expected to be proposed due to technological and practical advancements are not known at this stage, as these will depend on the technological advancement during the operational phase of the authorised development. It is important to note that the definition of ‘maintain’ is made operational through Article 5 of the draft DCO (Rev 2).  As a standard position the maintenance of the site would be split into planned and unplanned maintenance. Unplanned maintenance would involve

ExQ1	Respondent	Question	Applicant's Response
		<p>whole of' authorised development, this would still allow for potentially significant works, including at different times during operation. The EM [APP-108] explains that the drafting will enable technological and practice advancement and that flexibility must be built in to keep up with changing standards, controls and advances in technology.</p> <p>a) In this context, please explain what works are expected to be proposed to the authorised development during operation due to such technological and practical advancement?</p> <p>b) Why has a restriction been applied to 'the whole of' the authorised development when lesser interventions might still amount to significant elements of work?</p>	<p>elements such as replacing broken fencing, faulty solar panels or dealing with planting that has not established. Planned maintenance could involve aspects such as standard equipment checks, the measures in the LEMP, or the replacement of inverters which will be replaced on a planned schedule as unlike transformers and modules the inverters will not last the full life of the scheme - such activities would be minor in nature. Whilst technological advances may mean that these activities are carried out in a more efficient or different manner, at this stage the Applicant does not envisage that the focus of activities would change from those listed above.</p> <p>Paragraph 3 of Article 5 of the draft DCO (Rev 2) provides that the power to maintain the authorised development is limited so only works which would not give rise to new or materially different effects that have not been assessed in the Environmental Statement could take place. There should therefore be no concern that the definition of maintain could allow activities during operation that have not been assessed in the Environmental Statement.</p> <p>b) The restriction to 'the whole of' the authorised development has been inserted for clarity that the definition is not intended to enable the decommissioning and construction of a new generating station (for example if the repowering of the whole solar farm was proposed then a new Development Consent Order would be required). The definition would however allow replacement of solar panels at the end of their lifetime.</p> <p>It could be argued that this qualification is unnecessary as a repowering of the Authorised Development during operation would not be possible given the provisions of Article 5(3) but it is provided as the Applicant considers such clarification as helpful.</p> <p>This is a precedented definition and has been approved by the Secretary of State in Riverside Energy Park Order 2020 and Keadby 3 Carbon Capture Power Station Order 2022.</p>
Q5.0.4	The Applicant	<p><b>Article 4 (Operation of generating station)</b> The Explanatory Memorandum explains that this Article is included so that the undertaker has powers to operate the generating station.</p>	<p>a) A definition of 'generating station' is not required as this is described in Schedule 1 of the dDCO (Rev 2) as a ground mounted solar photovoltaic generating station with a gross electrical output capacity of over 50 megawatts. Article 4 specifically refers to "the generating station <i>comprised</i> in the authorised development" and therefore it is as described in Schedule 1.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>a) Does a definition of 'generating station' need to be provided in Article 2?</p> <p>b) Is it intended that this Article only applies to Work No.1? If so, explain why is it needed specifically for this and not other parts of the authorised development?</p>	<p>This is consistent with the approach in similar DCOs, including the Cleve Hill Solar Park Order 2020 and the Little Crow Solar Park Order 2022.</p> <p>b) Article 4 is included in the dDCO pursuant to the provisions of section 140 of the Planning Act 2008 (which provides an order granting development consent may include provision authorising the operation of a generating station only if the development to which the order relates is or includes the construction or extension of the generating station). Section 140 specifically requires the operation of a generating station to be authorised by the Order. Schedule 1 defines the generating station as including all or any of the work numbers in the schedule and therefore it is intended to apply as such.</p>
Q5.0.5	The Applicant	<p><b>Article 5 (Power to maintain authorised development)</b> This article does not authorise any works which are likely to give rise to any materially new or materially different effects that have not been assessed in the Environmental Statement (ES).</p> <p>a) Please explain the process and criteria for fairly and transparently determining whether any proposed maintenance works would give rise to any such materially new or materially different effects?</p> <p>b) Who would be responsible for making such a judgement and what role could the relevant local planning authority or any other Interested Party have in this process?</p> <p>c) What risks might arise that proposed maintenance works might be carried out under this Article that, notwithstanding the restrictions in current drafting, could potentially lead to adverse effects?</p>	<p>a) The Applicant has prepared an Outline Operational Environmental Management Plan (oOEMP) [APP-208] which provides a clear and consistent approach to the control of operational and maintenance activities, which must be approved by the relevant planning authorities. Likely significant effects have been identified through the Environmental Impact Assessment (EIA) process and are reported in the Environmental Statement (ES); within which the Project Parameters at Appendix 5.1 [APP-053] have been used to ensure a "worst case" assessment of likely effects of the Proposed Development during the operation and maintenance period.</p> <p>A range of best practice mitigation and operational management measures are accounted for in the assessments, which will be implemented during operation of the Proposed Development. The oOEMP details how these operational best practice and mitigation measures will be implemented. It also sets out the monitoring activities designed to demonstrate that such mitigation measures are carried out, and that they are effective.</p> <p>The oOEMP is prepared with the objective of ensuring compliance with the relevant environmental legislation and mitigation measures set out within the ES. Any additional licences, permits or approvals that are required for the operation phase of the Proposed Development and that are not disapplied by the DCO, will be set out in the subsequently prepared OEMP(s), including any environmental information submitted in respect of them.</p> <p>The relevant planning authorities have the power to withhold consent should there be any concerns on the detail contained within the OEMP.</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>b) The Proposed Development is likely to become operational (or be commissioned) in phases or parts, and it is envisaged that the OEMP(s) may be prepared, approved and implemented for individual parts or phases of the Proposed Development. As a result, there could be multiple OEMP(s) prepared in accordance with the oOEMP. Each OEMP will be produced in line with the oOEMP following grant of the DCO and approved by the local planning authorities in consultation with the Environment Agency in advance of the date of final commissioning for the relevant phase of the Proposed Development.</p> <p>c) The Applicant has fully assessed the likely significant impacts from the maintenance of the Proposed Development and does not reasonably anticipate any adverse effects arising from the proposed maintenance works. This is detailed in the Environmental Statement [APP-030 – APP-047].</p>
Q5.0.6	Lincolnshire County and Rutland County Councils	Question not for The Applicant	
Q5.0.7	The Applicant	<p><b>Article 7 (Statutory Nuisance)</b> Please expand the explanation in paragraph 4.2.19 of the Explanatory Memorandum [APP-108] to explain why the broad defence in s.158 of the Planning Act 2008 is not sufficient and why this additional provision is required for the Proposed Development?</p>	<p>Section 158 of the Planning Act 2008 confers statutory authority for carrying out development consented by, or doing anything else authorised by, a development consent order and provides a defence against any civil or criminal proceedings for nuisance. This would include a defence for proceedings for nuisance under Part III of the Environmental Protection Act 1990 (statutory nuisance) but only to the extent that the nuisance is the inevitable consequence of what has been authorised.</p> <p>Article 7 of the dDCO (Rev 2) provides a defence for the undertaker against proceedings by an aggrieved person (i.e., not the local authority) in respect of statutory nuisance, including where it cannot reasonably be avoided when it arises (i) as a consequence of the construction or maintenance of the Proposed Development or (ii) as a consequence of the use of the Proposed Development.</p> <p>The defence against proceedings in respect of statutory nuisance is based on both the effect of section 158 of the Planning Act 2008 and Article 7 of the dDCO.</p>
Q5.0.8	The Applicant	<p><b>Article 8 (Street Works)</b> This allows the undertaker to carry out certain works to a</p>	<p>a) Reference to sections 54 to 106 of the New Roads and Street Works Act 1991 (the "1991 Act") is inserted to provide protection for the street authority</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>street for the purposes of the Proposed Development.</p> <p>a) Please expand the explanation in paragraph 4.3.1 of the Explanatory Memorandum [APP108] to explain the relevance of sections 54 to 106 of the 1991 Act.</p> <p>b) Also explain in further detail the relevance of Article 9 of The Immingham Open Cycle Gas Turbine Order 2020 to the draft Development Consent Order (dDCO) [APP-017] and why the wording in Article 8 (1) (e) is appropriate for the Proposed Development?</p>	<p>for the streets in question, as set out in Schedule 4 of the dDCO (Rev 2) as it clarifies that the requirements in the 1991 Act would continue to apply to the undertaker.</p> <p>b) Reference to the Immingham Open Cycle Gas Turbine Order 2020 is an example of a granted DCO in which this drafting was accepted, whereby the model provisions were modified to bring in sections 54 to 106 of the 1991 Act. Schedule 4 sets out the cable works that are required beneath the width of the highway. The wording in Article 8(1)(e) is appropriate to enable the undertaker to carry out the works required for the purposes of the Proposed Development, including an repairs or replacement to the surface or structure of the street or any culvert under the street arising from the cable works.</p>
Q5.0.9	The Applicant, Lincolnshire County and Rutland County Councils	<p><b>Article 9 (Power to alter layout, etc. of streets)</b> Article 9 allows the undertaker to alter the layout of or carry out works in a street. For the works set out in Article 9 (a) and (b) which are listed in Schedule 5 of the dDCO [APP017], is it necessary to include provision for the consenting of the detail of such works by the relevant street authority?</p>	<p>Article 9 must be read together with Article 10 of the dDCO (Rev 2) as it provides that the alterations set out in Schedule 5 must be completed to the reasonable satisfaction of the street authority. It is not considered necessary for the street authority to consent to the detail of the works given this requirement. However, the general powers for altering the layout of any street, conferred by Article 9(2), requires the consent of the street authority before they can be exercised. This is considered reasonable given the general application to streets which is differentiated from the power in Article 9(1) where the specific location of the works has already been identified and provides sufficient protection for the street authority. This aligns with the approach in other DCOs, including Drax Power (Generating Stations) Order 2019 and the Great Yarmouth Third River Crossing Development Consent Order 2020.</p>
Q5.0.10	The Applicant	<p><b>Article 9 (Power to alter layout, etc. of streets)</b> The EM [APP-108] explains that this Article has been extended to include streets outside of the Order limits to allow for unforeseen circumstances during the construction stage.</p> <p>a) Given that the dDCO [APP-017] is limited to works within the Order limits</p>	<p>a) Schedule 5 of the dDCO (Rev 2) sets out the streets that the Applicant is already aware require alteration of the layout and for works to be carried out in the streets. The powers sought in Article 9 are sought in case any other minor highway works and highway works that may not necessarily be understood to be required at this stage, other than those specified in Schedule 5 of the dDCO (Rev 2) and are identified in the future by the highway authority or the undertaker and are necessary or convenient for the undertaker to carry out within the regime imposed by the Order. In addition, the nature of the existing streets could change prior to the commencement of</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>please provide further justification for this power for works relating to areas outside of the Order limits?</p> <p>b) What type of works might be required due to such unforeseen circumstances and why are they not able to be envisaged at this stage? How have the effects of such works been included within the environmental statement?</p> <p>c) What might the implications be of not including this provision to include streets outside the Order limits?</p> <p>d) Why is it necessary to authorise the alteration etc of any street within the Order limits?</p>	<p>the DCO, which could necessitate the need for alterations to the streets. Such alterations are limited to the purposes of, or in connection with, the authorised development. While such a power might appear wide, the consent of the street authority is required in order for this power to be exercised, which we consider provides the requisite level of control.</p> <p>b) With a development of this size, it is possible for an unforeseen change in circumstances to necessitate alterations to streets outside of the Order limits. An example of such circumstances is where an existing access cannot be used because of a change of circumstances and therefore alternative access to the Proposed Development is required to avoid any delays in implementation. The environmental effects of the Proposed Development, including highways works, have been assessed in the Environmental Statement, and it is considered that the conclusions of the ES would not change as a result of any additional minor highway works. The assessment included in the Environmental Statement is not limited solely to the Order limits.</p> <p>c) The implications of not including such a provision may lead to the undertaker not having the power to alter the layout of streets which are deemed necessary as part of the Proposed Development. This would then require a separate Section 278 agreement to be entered in to with the relevant highway authority outside of the Order, which could lead to a delay in implementing the Proposed Development.</p> <p>d) This approach has precedent in the Sizewell C (Nuclear Generating Station) Order 2022, South Humber Bank Energy Centre Order 2021 and the Hornsea Three Offshore Wind Farm Order 2020.</p>
Q5.0.11	Lincolnshire County Council	Question not for The Applicant	
Q5.0.12	The Applicant	<p><b>Article 13 (Access to works)</b> The EM [APP-018] explains that Schedule 7 is split into Part 1 (permanent means of access to works) and Part 2 (temporary means of access). However, Schedule 7 of the dDCO [APP-017] only includes permanent means of access.</p>	<p>a) This is a typographical error contained in the Explanatory Memorandum. Schedule 7 of the dDCO (Rev 2) only details the permanent means of access to works as temporary means of access are not required for the Proposed Development. This is shown on the Access and Rights of Way Plans <b>[AS-004]</b>. Article 13 of the dDCO (Rev 2) has been updated accordingly and the Explanatory Memorandum <b>[APP-018]</b> will be updated at Deadline 8.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>a) Please confirm whether Schedule 7 requires amending in this respect to include temporary means of access?</p> <p>b) Is it the intention that all permanent means of access listed in Schedule 7 will be the subject of detailed design approval under Requirement 6 of the dDCO [APP-017]?</p>	<p>b) The Applicant can confirm that the intention is that all permanent means of access listed in Schedule 7 will be the subject of detailed design approval under Requirement 6 of the dDCO (Rev 2). Whilst the Applicant is not anticipating submitting detailed engineering drawings, additional detail, such as visibility splays, will be provided at the detailed design stage.</p>
Q5.0.13	The Applicant	<p><b>Article 15 (Traffic regulation measures)</b> Does part 15(5)(b) of this Article need re-drafting to make it clearer?</p>	<p>Article 15(5)(b) of the dDCO (Rev 2) has been re-drafted to provide further clarity.</p>
Q5.0.14	The Applicant	<p><b>Article 17 (Removal of human remains)</b> This Article extends the model provision to include that (11) no notice of intended removal of human remains from the Order Land needs to be published where the undertaker is satisfied that the remains were interred more than 100 years ago and no relative or personal representative of the deceased is likely to object to their removal. This is described in paragraph 4.4.3 of the EM [APP-108], though not justification is provided.</p> <p>a) Please provide a clear justification and reasoning for this exclusion.</p> <p>b) Set out the criteria and process that would be used for determining the matters referred to in 11 (a) and (b) of Article 17.</p>	<p>a) The effect of this Article is to replace the existing regime for regulating the removal of human remains. There is no requirement to publish a notice if the human remains were interred more than 100 years ago. This is because it is assumed that no personal representatives of the deceased are alive any longer and therefore the Secretary of State is engaged on their behalf as per the provisions of Article 17(12) and (14) provide. The process is set out in APABE Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England (Second Edition – 2017). Therefore, this is required to ensure that archaeological remains are recovered appropriately without causing unacceptable delay to the implementation of the Proposed Development.</p> <p>b) The professional judgment of qualified and competent archaeologists will be relied upon to discharge all of the relevant duties and requirements associated with the Order. This particular matter will be handled in the same way. Archaeologists have a suite of different techniques that allow them to provide a robust and informed position to determine that the discovered human remains are (in all likelihood) over 100 years old. Further to this, should unexpected human remains be uncovered during the works associated with the Order, it is most likely that these would be over 1,000 years old (in unmarked graves) and thus reasonable judgments can be made that “no relative or personal representative of the deceased is likely to object to the remains being removed in accordance with this article.”</p>



ExQ1	Respondent	Question	Applicant's Response
Q5.0.15	The Applicant	<p><b>Article 18 (Protective work to buildings)</b> This Article seeks to provide powers to the undertaker to enter any building any land within its curtilage to determine whether protective works need to be carried out in respect of buildings with the Order Land. Please set out a justification of why this Article is required for the Proposed Development, including an indication of the types and likelihood of the protective works that might be required to any buildings within the Order Land.</p>	<p>Whilst protective works are not currently anticipated, including this power is considered reasonable and proportionate to ensure that the undertaker can swiftly carry out any required protective works where there are any unforeseen effects as a result of the authorised development. This Article reflects the model provisions in the Infrastructure Planning (Model Provisions) (England and Wales) Order 2009 and follows precedents in most DCOs made to date. The inclusion of this power accords with PINS Advice Note 13: Preparation of a draft order granting development consent and explanatory memorandum.</p>
Q5.0.16	The Applicant	<p><b>Article 19 (Authority to survey and investigate land)</b> Article 19 includes an enforcement mechanism where entry onto land under the Article is refused.</p> <p>a) Please set out in further details why this is necessary in the context of the Proposed Development including how it is a proportionate response to any refusal to give permission.</p> <p>b) What alternative measures would be available in cases where there has been refusal to give permission?</p>	<p>a) Article 19(1) of the dDCO (Rev 2) enables the Applicant to enter on to land which might be affected by the Proposed Development to undertake surveys, bring equipment onto the land and make trial holes. This power is required to ensure that there is no delay in the implementation of the Proposed Development. It is considered proportionate because without this mechanism landowners could refuse consent and the undertaker would have no power under the DCO to compel access. Given this power is required for the purposes of implementation of the authorised development it is considered reasonable.</p> <p>b) Article 19(6) of the dDCO (Rev 2) applies section 13 of the Compulsory Purchase Act 1965 which provides the enforcement mechanism, by way of a warrant, to enter onto the land where entry is refused. This provision could be used to obtain entry in the event that consent was unreasonably withheld or delayed. Alternatively, the Applicant could refer the matter to arbitration in accordance with Article 40 of the dDCO (Rev 2).</p>
Q5.0.17	The Applicant	<p><b>Article 22 (Compulsory acquisition of rights)</b> Article 22(1) appears to be broadly drafted to enable compulsory acquisition (CA) of new rights over all of the Order land. Schedule 9 limits the CA power in defined plots to the defined</p>	<p>a) Paragraph 5.5. 2 of the Statement of Reasons <b>[AS-009]</b> provides that the power to compulsorily acquire rights also applies in relation to land in which compulsory acquisition is proposed. There is no requirement to limit the extent of rights that can be compulsorily acquired where the land can also be compulsorily acquired outright as the compulsory acquisition of rights is a</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>rights in that schedule, but the CA of rights is not limited to the plots listed in Schedule 9.</p> <p>a) If this is intended, the Explanatory Memorandum [APP-108] and Statement of Reasons [AS-009] is requested to be updated to clearly explain and justify this approach.</p> <p>a) Please demonstrate how the persons with an interest in the Order Land (and not only those plots listed in Schedule 9) have been made aware that undefined new rights are potentially being sought over all the order land and were consulted on that basis?</p> <p>b) If this is not the intended approach (and that CA of rights is only proposed to be limited to the plots listed in Schedule 9) then please provide amended drafting.</p>	<p>'lesser property interest' than freehold acquisition which would already be authorised by the Order. In addition, Article 22(1) states that the powers for compulsory acquisition of rights is subject to Article 29 and therefore does not apply to land temporarily used for constructing the authorised development. On this basis the Applicant does not agree that further changes are required to or explain this approach.</p> <p>b) For rights being acquired where the land is also subject to compulsory acquisition, the Applicant is not required to draw attention to the lesser compulsory acquisition power. However, the Applicant has taken pro-active steps to engage with persons impacted by the compulsory acquisition of land or rights through formal consultation and informal engagement. This is detailed further in the Statement of Negotiation and Powers Sought (Rev 1).</p> <p>c) CA of right is not intended to be limited to the plots in Schedule 9 and therefore no alternative drafting has been provided.</p>
Q5.0.18	The Applicant	<p><b>Article 23 (Private rights) and Article 26 (Statutory authority to override easements etc)</b></p> <p>a) Please demonstrate how the Applicant has made diligent enquiries to establish what such private rights exist (Article 23) over the Order Land and that affected parties have been consulted.</p> <p>b) Set out the distinction between Articles 23 and 26, explaining why both are necessary rather than a single Article.</p>	<p>a) Part 3 of the Book of Reference [APP-023] contains the private rights which are proposed to be extinguished, suspended or interfered with in connection with the Proposed Development.</p> <p>The Applicants' land referencing company employed a number of methods to identify Part 3 interests in the Book of Reference, taking account of best practice and relevant guidance, including PINS Advice Note 4 'Section 52' (March 2017). Methods included searches at the Land Registry; review of legal title reports; the issue of Land Interest Questionnaire letters to potentially affected parties with private rights; the issue of Land Interest Questionnaire letters to potentially affected landowners to ascertain further private rights on their land; follow up discussions with known Part 3 interests; desktop research of statutory undertaker and utility company's assets, amongst others.</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>The Applicant also used its local knowledge and connections with the landowners, and their agents, to identify any unregistered landowners and holders of private rights.</p> <p>The other consultation methods employed (including local and national newspaper adverts / notices, press releases and posters) also had the potential to notify those interested in the relevant land of the Proposed Development.</p> <p>It is important to note that the Applicant's land referencing company continued with their methods seeking to identify Section 44 interests throughout the pre-application stage, in order to ensure the greatest possible chance of identifying people who may be relevant, and where additional Section 44 interests were identified they were consulted in accordance with Section 42.</p> <p>b) Article 23 (Private rights) of the dDCO (Rev 2) is a model provision that (i) extinguishes private rights and restrictions over land subject to the compulsory acquisition powers contained in Article 20 (Compulsory acquisition of land); (ii) provides that private rights and restrictions over land cease to have effect in so far as their continuance would be inconsistent with the exercise of compulsory acquisition of rights or the imposition of restrictive covenants under Article 22 (Compulsory acquisition of rights); and (iii) suspends private rights and restrictions over land so far as their continuance would be inconsistent with the exercise of temporary possession powers under the Order. This is required because it enables the undertaker to implement the authorised development without impediment.</p> <p>Article 26 (Power to override easements and other rights) provides that in carrying out or using the development authorised by the Order and doing anything else authorised by the Order, the undertaker may interfere with any easement, liberty, privilege, right or advantage annexed to land and affecting other land, including any natural right to support, or breach any restriction as to use of land arising by virtue of contract. It also provides that compensation may be payable under section 7 or 10 of the Compulsory Purchase Act 1965 for any such interference or breach. This is not a model provision but is added to clarify the position with regard to rights and restrictions that continue to bind the Order land (i.e., that have not been extinguished or suspended by Article 23). It has precedent, for example, in Article 19 of the Immingham Open Cycle Gas Turbine Order 2020 and Riverside Energy Park Order 2020.</p>

ExQ1	Respondent	Question	Applicant's Response
Q5.0.19	The Applicant	<p><b>Articles 29 and 30 (Temporary use of land for constructing/maintaining the authorised development)</b></p> <p>Whilst Schedule 11 sets out land of which temporary possession may be taken, Article 29(1)(a)(ii) extends this power more broadly. The temporary possession powers sought in Article 30(1) also relate to 'any land with the Order Land'.</p> <p>a) Please demonstrate how persons with an Interest in the Order Land have been made aware of and have been consulted on this possibility.</p> <p>b) Provide justification for the 14 days prior notice of temporary possession set out in Article 29(3).</p>	<p>a) Statutory consultation carried out in May 2022 made clear that the Proposed Development includes, amongst other things, temporary possession powers. Section 42 consultation letters were sent to each affected party with an interest in the Order land, including land in which temporary possession may be taken. The Schedule of Negotiations and Powers Sought (Rev 1) provides details of the negotiations entered into before and during the consultation process.</p> <p>b) The Applicant considers a minimum of 14 days' notice of entry to be reasonable and would provide landowners with sufficient time to make any necessary arrangements. The 14-day timeframe reflects the model provisions and was also included in Article 24 of the Cleve Hill Solar Park Order 2020.</p>
Q5.0.20	The Applicant	<p><b>Article 38 (Felling or lopping of trees and removal of hedgerows)</b></p> <p>This Article includes reference to Schedule 12 (Hedgerows to be removed) whilst also including a generic power for any hedgerows within the Order land to be removed where required.</p> <p>a) Please update Schedule 12 to identify those hedgerows that are 'important' hedgerows (see Regulation 4 and Schedule 1 of the Hedgerows Regulations 1997 and section 97 of the Environment Act 1995) along with the identification of any further hedgerows that would be affected by the Proposed Development.</p> <p>b) Where it is not possible for hedgerows to be specifically identified in Schedule 12, what provision would</p>	<p>a) All hedgerows detailed in Schedule 12 of the dDCO (Rev 2) have been identified as Important Hedgerows to ensure that the assessment is based on a worst case scenario. There are no further hedgerows that can be identified at this stage that may be affected by the Proposed Development.</p> <p>b) Requirement 7(2)(b) of Schedule 2 of the dDCO (Rev 2) states that any hedgerows proposed for removal that are not shown on the hedgerow plans must be detailed within the Landscape and Ecology Management Plan. The Landscape and Ecology Management Plan must be approved by the relevant planning authority and is secured by Requirement 7 of the dDCO.</p> <p>c) The dDCO (Rev 2) has been updated to reflect that this relates to trees and shrubs that are within or encroaching upon the Order limits</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>be in place to ensure that the removal of such previously unspecified hedgerows would be subject to the prior consent of the relevant local planning authority?</p> <p>c) The Article allows the undertaker to fell or lop any tree or shrub near any part of the authorised development or cut back its roots. Is revised drafting required to ensure that this relates to trees and shrubs that are within or encroaching upon the Order limits?</p>	
Q5.0.21	The Applicant	<p><b>Article 39 (Trees subject to tree preservation orders (TPO))</b></p> <p>This Article would apply generally to any tree subject to a TPO. The EM [APP-108] states that this Article does not include a paragraph identifying specific TPO trees affected as such information is not yet known. Please provide an update on this position including, as applicable, a Schedule and plan to specifically identify any affected trees and revised drafting of this Article, noting the advice in the Planning Inspectorate's Advice Note Fifteen: Drafting Development Consent Orders that it is not appropriate for this power to be included on a precautionary basis.</p>	Rutland County Council and South Kesteven District Council have confirmed that there are no TPOs within the Order limits. Therefore, this Article has been removed from the dDCO (Rev 2).
Q5.0.22	The Applicant, any Interested Party	<p><b>Article 44 (Procedure in relation to certain approvals etc)</b></p> <p>Under this Article, applications for consent submitted by the undertaker will be deemed to be granted if notice is not given of their refusal by the consenting authority within six weeks of the</p>	Article 44 of the dDCO (Rev 2) has been inserted to ensure that the Proposed Development can proceed in a reasonable timescale and so that there is a consistent approach to consents and approvals that are sought pursuant to the Order. An example of this is approval to form and lay out means of access other than those specified in Schedule 7 of the dDCO.

ExQ1	Respondent	Question	Applicant's Response
		<p>submission of the application (unless a longer period has been agreed).</p> <p>a) Whilst a precedent for this Article has been cited, please provide justification for and circumstances why this is specifically required for the Proposed Development?</p> <p>b) Comments are sought from interested parties on the merits of this clause along with the proposed time period of six weeks for determination (unless a longer period has been agreed).</p>	<p>Article 44 and Schedule 16 of the dDCO (Rev 2) have been inserted in accordance with PINS Advice Note 15: Drafting development consent orders. It provides flexibility where later stage approval by a relevant discharging authority is required.</p>

## Topic 5.1 Schedule 1 – Authorised Development

ExQ1	Respondent	Question	Applicant's Response
Q5.1.1	The Applicant	<p>This Schedule includes further associated development (a) to (q).</p> <p>a) Please explain the differences between items (c), (d) and (m) which include, amongst other things, works to existing irrigation systems, surface water drainage systems, works to existing drainage networks and improvements or extensions to existing drainage and irrigation systems?</p> <p>b) Could these elements be more nearly categorised within the list of further associated development?</p> <p>c) There is some overlap between the listed 'further associated development' and the 'permitted preliminary works' in Article 2. Please explain this overlap and any implications that may result, making any drafting refinements as necessary.</p>	<p>a. Paragraph (c) relates to carrying out works on existing agricultural irrigation systems that are already in place within the Site. However, paragraph (d) relates to the drainage system being put in place to deal with the Proposed Development, as proposed in the drainage strategy. The Applicant has amended Schedule 1 of the dDCO (Rev 2), merging paragraph (m) with paragraphs (c) and (d) to further clarify the differences between these items.</p> <p>b. The Applicant has updated these elements in Schedule 1 of the dDCO (Rev 2) to more neatly categorise the list of further associated development.</p> <p>c) Permitted preliminary works are still works that are authorised by the dDCO under Schedule 1 – they allow certain types of activities to be carried out without the Applicant having to discharge the requirements set out in Schedule 2. The overlap between further associated works and permitted preliminary works does not cause any implications but is required, as permitted preliminary works must also be authorised through the DCO.</p>

## Topic 5.2 Schedule 2 – Requirements

ExQ1	Respondent	Question	Applicant's Response
Q5.2.1	The Applicant	<p><b>Requirement 3 (Phasing of the authorised development)</b></p> <p>No details of potential phasing are included in Chapter 6.1 (Project Description) [APP-035] of the ES. It is also noted that 'the date of final commissioning' is defined as meaning 'in respect of each phase of development as approved under requirement 3 the date on which each phase of the authorised development commences operation by generating electricity.....'.</p> <p>a) Please explain why a phasing requirement is necessary for the Proposed Development?</p> <p>b) Set out indicative phasing details for the construction of the Proposed Development.</p> <p>c) How has the phasing of construction been assessed in the ES, taking account of the possibility that phasing may result in different construction phases at different times?</p>	<p>a) The phasing requirement is necessary to retain the flexibility to construct the Proposed Development. Importantly, without the ability to phase development, the undertaker would be required to discharge each of the requirements in full for the whole site. This could delay the commencement of development as without the phasing requirement the undertaker would need to compile all the information required to discharge a requirement for the whole site.</p> <p>b) The indicative construction activities that are likely to be required are set out in the Outline Construction Environmental Management Plan [PDA-005]. However, it is not known at this stage what the phasing details are for the construction of the Proposed Development.</p> <p>Final programme will be dependent on the detailed layout design and potential environmental constraints on the timing of construction activities. As secured by Requirement 3 of the dDCO (Rev 2), the authorised development cannot commence until a written scheme detailing the phase or phases of construction has been submitted to and approved by the relevant planning authority, which will include a timetable for the construction phase(s).</p> <p>The Environmental Statement has considered a worst-case scenario for the construction of the Proposed Development and therefore the phasing of the construction activities will not result in any materially new or materially different environmental effects from those assessed in the Environmental Statement.</p> <p>c) The Environmental Statement identifies and assesses the likely significant environmental effects arising from construction under the worst case scenarios in relation to phasing for each environmental topic. For example, the Highways and Access assessment assumes that the Proposed Development will require the peak in Light Goods Vehicles activity and peak in Heavy Goods Vehicles activity at all times throughout the two-year programme when in reality the total number of vehicles will be below this due to construction phasing. Different construction phases occurring at different times will generally represent lower magnitude of effects.</p>



ExQ1	Respondent	Question	Applicant's Response
Q5.2.2	The Applicant	<p><b>Requirement 4 (Approved details and amendments to them)</b></p> <p>a) Please justify why this requirement has been drafted to include provision for amendments to the documents certified under Article 40 (certification of plans and documents etc) as well as plans, details and schemes that have been approved pursuant to any requirement?</p> <p>b) The response above should take into account (i) Schedule 6 of the Planning Act 2008, (ii) the Planning Act 2008: Guidance on Changes to Development Consent Orders, (iii) the Infrastructure Planning (Changes to, and Revocation of, Development Consent Orders) Regulations 2011 (as amended in 2015) and (iv) paragraphs 17.2 to 17.6 of Advice Note Fifteen: Drafting Development Consent Orders.</p>	<p>The exact design details of the Proposed Development cannot be confirmed until the detailed design has been completed and approved by the relevant planning authorities prior to commencement. This allows flexibility to accommodate changes in technological advancements. In order to maintain the flexibility at this stage of the process, the ability to amend approved documents is necessary.</p> <p>As detailed in Advice Note 15: Drafting development consent orders, where the discharging authority is given power to approve detailed aspects of the development in advance (such as the documents secured by the Requirements) it is acceptable to allow that body to approve a change to details they had already approved. These changes would be within the parameters authorised by the Order.</p> <p>Any amendments to documents certified under Article 40 are subject to Requirement 4(2), that such approval is unlikely to give rise to any materially new or materially different environmental effects from those assessed in the Environmental Statement. Therefore, such amendments would be consistent with Advice Note 15.</p> <p>The amendments to the approved details under Requirement 5 would not be classified as material or non-material changes under the Planning Act 2008 and the Infrastructure Planning (Changes to, and Revocation of, Development Consent Orders) Regulations 2011.</p> <p>This aligns with the approach taken in The Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order 2022.</p>
Q5.2.3	The Applicant	<p><b>Requirement 6 (Detailed design approval)</b></p> <p>a. For the avoidance of doubt, please set out each specific elements of the Proposed Development that would be included within each of the details to be submitted for items (a) to (g).</p> <p>b. Should the list of details required include i) drainage, water, electrical and communication cables (including those part of Work Nos. 3 and 4) and pipelines, and ii) any noise mitigation</p>	<p>a) Requirement 6 items (a) to (g) of Schedule 2 of the dDCO (Rev 2) cover Works 1 to 4 and any associated ancillary works as listed at the end of Schedule 1. Work No. 6 also includes items (a) to (g) where it relates to accesses to the site. The remaining elements of Work No. 6 will be considered by the relevant planning authorities further to management plans secured under Schedule 2, such as the Construction Traffic Management Plan.</p> <p>Work No. 5 is not covered by any items in Requirement 6 as it is not permanent in nature and therefore does not need detailed design approval.</p> <p>Work No. 7 is covered by Requirement 7 and Requirement 6(2).</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>measures? If not, how will these elements be controlled?</p>	<p>b) The Applicant has updated Requirement 6 of Schedule 2 of the dDCO (Rev 2) to include drainage, water, power and communication cables and pipelines. However, operational noise mitigation is controlled by the operational noise strategy, which is secured by Requirement 16 of Schedule 2 of the dDCO (Rev 2). Construction noise mitigation is provided in the Outline CEMP (Rev 2), as secured by Requirement 11 of Schedule 2 of the dDCO (Rev 2). Therefore, the Applicant does not consider it necessary for noise mitigation measures to be detailed within the detail design approval. This approach has precedent in the Cleve Hill Solar Park Order 2020 and the Little Crow Solar Park Order 2022.</p>
<p>Q5.2.4</p>	<p>The Applicant, Lincolnshire County Council, Rutland County Council and South Kesteven District Council</p>	<p><b>Requirement 7 (Landscape and ecology management plan)</b></p> <p>a) Should the list of individual requirements include details of trees to be retained and any necessary measures for their protection?</p> <p>b) Should existing hedgerow protection measures be included?</p> <p>c) Should details of existing trees to be removed be included?</p> <p>d) What would 'hard landscaping works' include?</p> <p>e) Is there any conflict between the provision for landscaping management and maintenance measures 'during the operational life of the authorised development' in 2(f) and the five year replacement period for any shrub or tree planted under part 3 of this requirement.</p> <p>f) Does part 3 also need to include new hedgerows planted?</p>	<p>a) Requirement 7(2) of Schedule 2 of the dDCO (Rev 2) has been updated to include details of trees to be retained. However, the necessary measures for their protection are provided within the Outline Construction Environmental Management Plan (Rev 2), secured by Requirement 11 of the dDCO (Rev 2), and therefore are not required to also be contained within the Outline Landscape and Ecology Management Plan.</p> <p>b) The Outline LEMP (Rev 1) states that existing hedgerows will largely be retained and managed via a rotational cutting regime. The existing hedgerow protection measures will be set out further in the detailed Landscape and Ecology Management Plan.</p> <p>c) Details of existing trees to be removed will be set out in the detailed Landscape and Ecology Management Plan.</p> <p>d) Hard landscaping works are expected to include specifications relating to items such as signage, benches, interpretation boards, ecology hibernacular and any other 'hard' materials that are proposed as part of the overall landscaping scheme.</p> <p>e) Requirement 7(2)(f) (now Requirement 7(2)(g) in Rev 2) is subject to Requirement 7(3). The Applicant will maintain landscaping and ecological measures throughout the operational phase but will not be required to replace a planted tree or shrub during the entirety of the operational phase. The Applicant is only required to replace a tree or shrub that, within 5 years from its planting, dies or becomes seriously damaged or diseased as this allows for fixes to take place if growth rates are not being met – this is precedent in the Cleve Hill Solar Park Order 2020.</p>

ExQ1	Respondent	Question	Applicant's Response
			f) The Applicant has updated Requirement 7(3) of Schedule 2 of the dDCO (Rev 2) to include new hedgerows planted.
Q5.2.5	The Applicant	<b>Requirement 8 (Fencing and other means of enclosure)</b> Should the drafting of this requirement include an implementation and retention clause for the permanent fencing, walls or other means of enclosure?	A new Requirement 8(7) has been inserted into Schedule 2 of the dDCO (Rev 2) to include the implementation and retention for permanent fencing, walls or other means of enclosure.
Q5.2.6	The Applicant	Requirement 10 (Archaeology) a) Should this requirement be amended to include reference to an Outline Written Scheme of Investigation (see question 6.0.1 below)? b) Is an implementation clause required to ensure that any archaeological works or watching brief are carried out in accordance with the approved scheme?	a) Requirement 10 of the dDCO will be amended to include reference to the Outline Written Scheme of Investigation once it has been agreed with the relevant planning authorities (see the response to Q6.0.1). b) Requirement 10 of the dDCO (Rev 2) submitted at Deadline 2 has been amended to require any archaeological works or watching brief to be carried out in accordance with the approved scheme.
Q5.2.7	The Applicant	<b>Requirement 16 (Operational Noise)</b> a) Is 'operational noise strategy' the most suitable term for a document that would be expected to include detailed design details to ensure that appropriate noise mitigation is properly implemented? b) The current drafting refers to 'the operational noise rating levels as set out in the environmental statement'. For clarity and precision, can such 'noise rating levels' be specified in the requirement? c) Please explain the links and any overlap between this requirement and requirements 6 (Detailed design	a) The operational noise strategy contains details of how the design has incorporated mitigation to ensure operational noise rating levels set out within the ES are complied with. It relates to noise generated at the operational phase of the Proposed Development. However, the Applicant has amended Requirement 16 of the dDCO (Rev 2) submitted at Deadline 2 to refer to the "operational noise assessment". This aligns with the approach taken in the Cleve Hill Solar Park Order 2020 and the Little Crow Solar Park Order 2022. b) The Applicant does not consider this necessary on the face of the Order. This aligns with the approach taken in multiple DCOs, including the Cleve Hill Solar Park Order 2020 and the Little Crow Solar Park Order 2022. c) The purpose of the OEMP is to provide a clear and consistent approach to the control of operational and maintenance activities – in relation to operational noise, it sets out the complaints procedure for noise disturbances. The operational noise strategy details how the design of the authorised development incorporates mitigation to ensure the operational noise rating levels set out in the ES are complied with. The detailed design approval will

ExQ1	Respondent	Question	Applicant's Response
		approval) and 12 (Operational environmental management plan).	set out layout and other detail that may affect the noise levels, which will be mitigated through the operational noise strategy.
Q5.2.8	The Applicant	<p><b>Requirement 17 (Skills, supply chain and employment)</b></p> <p>a) Please set out the full reasons including policy justification for all aspects of the skills, supply chain and employment plan?</p> <p>b) Paragraph 3.1.2 of the outline Employment, Skills and Supply Chain Plan [APP-211] states that in order for the Plan to be successful, it will need to be implemented as early as practicable prior to the commencement of construction. Consequently, does the time frame for the submission and approval of the Plan (currently prior to commencement) need to be earlier in the scheme development process, or should the final Plan be part of the DCO application process?</p> <p>c) Should parts (2) and (3) of the requirement refer to the 'skills, supply chain and employment plan' to be consistent with part (1) and the actual title of the plan?</p>	<p>a) The Outline Skills, Supply Chain and Employment Plan (oSSCEP) has been produced to help secure economic benefits of the Proposed Development to the local area. This includes opportunities for involvement of local companies, the ability for local residents to access employment opportunities and enabling research and innovation by facilitating access to the Proposed Development for appropriate research organisations.</p> <p>The policy justification for this obligation is to ensure that the Proposed Development supports a strong, inclusive and sustainable economy for current and future residents. This is supported by the Strategic Objectives of the South Kesteven Local Plan (January 2020) which include:</p> <p><b>“Objective 1:</b> To welcome and encourage development that supports the sustainable growth and diversification of the local economy.”</p> <p>and;</p> <p><b>“Objective 2:</b> To develop a strong, successful and sustainable economy that provides a sufficient number and wide range of employment opportunities for local people.”</p> <p>It is also consistent with the Rutland Core Strategy (July 2011) Strategy Objective 7 which states:</p> <p><b>“Strategic Objective 7:</b> Strong and diverse economy: To strengthen and diversify the local economy in order to provide a greater range and quality of employment opportunities locally and reduce commuting out of the county, including new high-tech knowledge-based, leisure and tourism industries.”</p> <p>In addition, Policy CS13 states that the strategy is to, amongst other things:</p> <p>“Support the provision of a greater range of employment opportunities focused on high skilled, knowledge based, leisure and tourism industries in the county.”</p> <p>b) Requirement 17(1) of the dDCO (Rev 2) provides that the skills, supply chain and employment plan must be substantially in accordance with the oSSCEP, which has been produced as part of the DCO application process. The oSSCEP provides that the proposed activities listed in Section 2 and the</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>Appendix will be undertaken in advance of the procurement and appointment of the construction contracts. Therefore, the Applicant does not agree that the final plan is required as part of the DCO application process as this is secured by way of the oSSCEP.</p> <p>c) Requirement 17 of the dDCO (Rev 2) submitted at Deadline 2 has been amended to refer to 'skills, supply chain and employment plan' in parts (2) and (3).</p>

## Topic 5.3 Schedule 3 – Legislation to be disapplied

ExQ1	Respondent	Question	Applicants Response
Q5.3.1	The Applicant (a) and (b) Anglian Water (c) Network Rail (c) Rutland County Council (c) South Kesteven Council (c) Lincolnshire County Council (c)	<p>The EM [APP-018] explains that Schedule 3 sets out a list of the historic legislation that Article 6 would disapply in so far as the provisions still in force are incompatible with the powers contained within the dDCO [APP-017].</p> <p>a) For each, provide details and a summary of the relevant provisions for which disapplication is sought.</p> <p>b) Provide justification for why each is proposed to be disapplied, including any relevant provisions of the dDCO [APP-017].</p> <p>c) Please comment, as applicable, on the proposed disapplication of the listed legislation.</p>	<p>The legislation in Schedule 3 is only disapplied insofar as the provisions still in force are inconsistent with how the powers in the Order can be exercised.</p> <p>As outlined in the Explanatory Memorandum [APP-018], the Applicant conducted a review of any local legislation that might conflict with the powers and rights sought in the Order. The list found in Schedule 3 of the dDCO [PDA-003] has been prepared taking a precautionary approach, because in some cases it was difficult to conclusively determine whether or not the provisions of the legislation were relevant to the dDCO, given that plans were not available in respect of the majority of the Acts considered to make clear their precise geographic scope. As this causes uncertainty for the Applicant, the provisions have been disapplied insofar as they are inconsistent with how the powers in the Order can be exercised.</p>

## Topic 5.4 Schedule 16 – Procedure for discharge of requirements

ExQ1	Respondent	Question	Applicant's Response
Q5.4.1	The Applicant Rutland County Council South Kesteven District Council Lincolnshire County Council Any other Interested Party	The procedure for the discharge of requirements is set out in Schedule 16. a) Has the Applicant consulted with the relevant discharging authorities on the approach and procedure to discharging requirements? b) Please set out which matters are agreed and/or disagreed, including any suggested alternative drafting as appropriate.	a) The Applicant has throughout pre-application consulted regularly with the relevant discharging authorities on various parts of the DCO process, referring to Advice Note Two: The role of local authorities in the development consent process, including their role in discharging requirements. Advice on the process of discharging requirements was specifically requested by South Kesteven District Council to inform member briefings prior to receiving their formal Stage 2 (S42) consultation response. b) The Applicant has shared an initial draft of the Statement of Common Ground with each discharging authority which includes a section on the draft DCO Articles and Requirements and is scheduling regular meetings to discuss progress on matters. The Applicant is yet to receive any comment on Schedule 16.
Q5.4.2	The Applicant Rutland County Council South Kesteven District Council Lincolnshire County Council Any other Interested Party	Part 2(1) of Schedule 16 requires that the relevant planning authority must give notice of its decision within a period of six weeks (subject to the criteria set out in 2(1) (a), (b) and (c). a) Is a determination period of six weeks generally appropriate, including when taking account of the likely content of the submissions to be considered, the relevant procedures of each relevant planning authority and the possible need for publicity and consultation? b) Where new or different environmental effects are reported in any application under part 2(3) of Schedule 16, would a longer determination period be appropriate, including when taking into account circumstances where the relevant planning authority might	a) The Applicant has updated the dDCO (Rev 2) submitted at Deadline 2 to provide a notice period of eight weeks. This reflects the notice period in similar DCOs, including the Cleve Hill Solar Park Order 2020 and the Little Crow Solar Park Order 2022. b) Part 2 of Schedule 16 of the dDCO (Rev 2) has been updated to provide further clarity. However, additional time for notification and consultation is provided in Part 3, with the period extended under Part 2(1)(b) to start the day immediately following on from which the further information has been supplied under Part 3. This takes into account a further period where consultation is required. This approach has been preceded in the Eggborough Gas Fired Generating Station Order 2018.

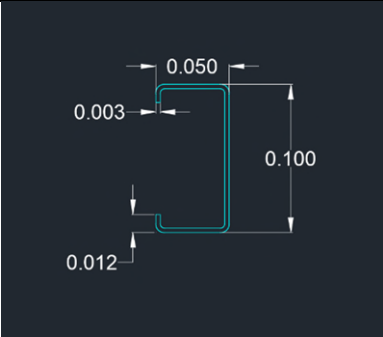
ExQ1	Respondent	Question	Applicant's Response
		need to carry out further publicity and consultation?	
Q5.4.3	The Applicant Rutland County Council South Kesteven District Council Lincolnshire County Council	a) Would it be appropriate to include provision for the payment of fees to the discharging authority for applications made under Schedule 16? b) Provide additional drafting as appropriate.	The Applicant does not consider it necessary to include a provision for the payment of fees to the discharging authority. The need and/or detail of any fees will be discussed and agreed with the relevant planning authorities outside of the Order. This aligns with the approach taken in a large number of DCOs, including the Cleve Hill Solar Park Order 2020 and the Little Crow Solar Park Order 2022.




## Topic 6.0 Historic Environment

ExQ1	Respondent	Question	Applicant's Response
Q6.0.1	The Applicant	<p>Requirement 10 of Schedule 2 of the draft Development Consent Order (dCO) [APP-017] requires the submission and approval of a Written Scheme of Investigation (WSI) prior to commencement of any phase. Table 3-3 of the outline Construction Environmental Management Plan (oCEMP) [APP-207] states that a WSI is appended to the Trial Trenching Summary Report [APP-070]. However, whilst the 'interim' Trial Trenching Report refers to a WSI for an archaeological evaluation prepared in 2022, this has not been submitted with the Application.</p> <p>The applicant is requested to submit:</p> <p>a) A copy of the WSI referenced in the Interim Trial Trenching Summary Report; and</p> <p>b) An outline WSI which would form the basis and guiding principles for the final WSI to be submitted under Requirement 10 of the dCO. If this document is not able to be provided by Deadline 2 then please provide details of the timetable for its submission including the opportunity for consultation with relevant Interested Parties.</p>	<p>a) The WSI for the Trial Trenching work, as referenced in the Interim Trial Trenching Summary Report [APP-070], has been submitted at <b>Appendix L</b> for Deadline 2.</p> <p>b) The Outline WSI is being developed and will be shared with the Local Planning Authorities at the end of June, with a view to seeking their engagement and agreement on the document. We will keep the Examining Authority updated as to the progress of that engagement throughout the Examination and submit a finalised version of the Outline WSI at such time as this has been agreed with the Local Planning Authorities.</p>
Q6.0.2	Historic England, Lincolnshire County Council	Question not for The Applicant	

ExQ1	Respondent	Question	Applicant's Response
	and Rutland County Council		
Q6.0.3	Historic England, Lincolnshire County Council, Rutland County Council, South Kesteven District Council (as appropriate)	Question not for the Applicant	
Q6.0.4	The Applicant	<p>Paragraphs 4.37 of the Cultural Heritage Impact Assessment [APP-068] notes that the construction methodology will entail the installation of minimally intrusive piles in order to mount the panel frames. Paragraph 4.38 states that the Proposed Development presents an opportunity to restrict further damage to the archaeological resource by removing the site from arable use and therefore the effects of modern ploughing.</p> <p>a) Noting the proposed maximum pile depth for the proposed mounting structures of 2.5m and the proposed extent of works proposed, how would this compare to the possible extent and depth of any subsequent archaeological intrusion that might result from the effects of modern ploughing?</p> <p>b) Provide further explanation of what would constitute 'minimally intrusive piles'?</p>	<p>a) As noted in the results of the Supplementary Trial Trenching Report <b>[PDA-014]</b> (see paragraph 5.4, 5.5, 8.2), recent ploughing is having a continued impact on buried remains within the Solar PV Site. The ploughsoil across much of the site is between 0.2m and 0.4m. When the plough cuts deeper than the ploughsoil the uppermost horizons of buried remains are being disturbed, in localised but extensive areas.</p> <p>No archaeological remains were encountered at depths greater than 1.2m. Thus, while the depth of the piles, if they were to encounter buried remains (see below), would be greater than that of the remains, their limited footprint and singular occurrence (at construction and decommissioning) would create negligible disturbance when compared to the on-going effects of the plough. This matter is acknowledged in the draft EN-3 (paragraph 3.10.101), where it states, "archaeological assets may be protected by a solar PV farm as the site is removed from regular ploughing".</p> <p>b) The typical cross-section of the piles for solar arrays is 50mm x 100mm, with two 12mm 'returns' to create the 'c-shape' (see image below). The thickness of each pile is only 3mm. Thus, the total area would equate to circa. 0.000672m<sup>2</sup> per pile. But if one is to assume that each pile, during insertion and then removal, was to displace all material within its extent the total area for each pile would be 0.005m<sup>2</sup> (50m x 100m). One could expect c. 1,200 piles per hectare (or per 100m x 100m). This would equate to 6m<sup>2</sup> of displaced (horizontal) material per 10,000m<sup>2</sup> or 0.06% of the area. As a comparison, the effects of construction for residential or commercial developments, road schemes, water infrastructure projects and new high-speed railways, is typically determined to be 100% of the developed area.</p>

ExQ1	Respondent	Question	Applicant's Response
			 <p>Typically, even the most densely packed archaeological site (in a rural context) would very rarely extend buried remains to cover more than 1/3 of any given development area. In the examples identified within the Solar PV Site (from the geophysical survey and trial trenching) the extent of buried remains within each land parcel would be expected to be at the most 5% to 10% of the total area. Thus, it is reasonable to assume that the likelihood of the piles encountering buried archaeological remains is very low (i.e., most would simply miss / avoid buried remains). For instance, remains of pits, post holes or stake holes, similar to those that might be encountered within the late prehistoric or Roman period settlement sites, occur very infrequently. It is exceptionally unlikely that any given pile would be located at exactly the same position as one of these 'discrete' (small) features. Were such impacts to occur, for instance at the location of larger archaeological features, such as infilled boundary ditches, the displaced material would be insignificant (fractions of a percentage) compared with that which would remain unaffected / still in situ. The key consideration is that the archaeological interest of the buried remains would be retained within the Solar PV Site i.e., (as per the definition within EN-1 and the NPPF) the "evidence of past human activity worthy of expert investigation at some point" would in no way be affected. Further to this point, they would be protected and safeguarded from on-going damage from ploughing.</p>
Q6.0.5	The Applicant	Paragraph 4.39 of the Cultural Heritage Impact Assessment [APP-068] explains that the detailed design will allow for the implementation of a specific and targeted mitigation strategy to minimise	a) The areas where the installation of solar PV arrays would be avoided will be determined based on the presence of the types of buried archaeological remains that are more susceptible to disturbance and adverse effects via piling and other construction operations. These include:

ExQ1	Respondent	Question	Applicant's Response
		<p>or avoid any construction effects on important buried archaeological remains.</p> <p>a) Explain the criteria that would be used to determine those localised areas of the Order limits where the installation of Photovoltaic (PV) arrays (and any other construction work) would be avoided.</p> <p>b) Based on the currently available evaluation information, are there any areas of the Order limits where it can be determined at this stage that works should be avoided?</p>	<ul style="list-style-type: none"> <li>- waterlogged remains, whereby the soil chemistry and conditions could be affected;</li> <li>- human remains, whereby even minimal disturbance could result in a potentially disproportionate loss of archaeological evidence, alongside the ethical considerations; and</li> <li>- complex structured deposits, such as those associated with burials but also structural remains such as floor surfaces.</li> </ul> <p>The application of these criteria, and the extent of the areas where the installation of solar PV arrays would be avoided, will be explored in further detail in the Outline WSI.</p> <p>b) There are three specific and very localised areas where more complex and dense remains were encountered during the trial trenching work. While no human remains were encountered, there is still a possible 'funerary' interpretation of the discovered remains at two sites (in proximity to trenches T40 and T42 as depicted on Figure 8 and T142 and T145 on Figure 18 of the Supplementary Trial Trenching Report [PDA-014]). At one location (in proximity to trenches T112 to T121, Figure 17 of the Supplementary Trial Trenching Report [PDA-014]), the nature of the settlement remains could suggest the possibility of as yet undiscovered funerary / human remains.</p> <p>This matter will be explored in further detail in the Outline WSI.</p>
Q6.0.6	The Applicant	<p>Paragraph 4.40 of the Cultural Heritage Impact Assessment [APP-068] explains that 'no dig' solutions are likely to include where ground disturbance is proposed for the construction of the substation and other infrastructure. The information provided (including Figures 2a, 3 and 4 of the Assessment) indicates potential for archaeological interest in the area of the proposed substation location and the adjacent construction compound. Please set out in further detail the effects upon potential archaeological remains in this area, including further details of the likely</p>	<p>Paragraph 4.40 sets out that 'no dig' solutions are not likely at the location of the proposed substation. However, further to this point, at the location of the proposed Onsite Substation the geophysical survey did not identify anomalies that could be positively attributed as buried archaeological remains. Trial trenching carried out within the land parcel to the immediate north-west, targeted to explore anomalies with greater potential to be buried archaeological remains, revealed some very limited remains of possible archaeological interest. The construction work at this location is likely to involve the removal of ploughsoil across the whole footprint of the works. This would expose any surviving buried remains. The Outline WSI will set out the proposed scope of further archaeological work to take place at the location of the proposed Onsite Substation. The execution of an industry standard programme of archaeological work (in advance of and during construction), as will be described in the Outline WSI, would mitigate any potential disturbance such that no residual adverse effects would remain.</p>

ExQ1	Respondent	Question	Applicant's Response
		ground disturbance required for these works.	
Q6.0.7	The Applicant	<p>Paragraph 5.4.15 of the Project Description [APP-035] states that the option to install concrete blocks known as "shoes" may also be considered, avoiding the need for driven and screw anchored installation, therefore minimising ground disturbance.</p> <p>a) Please provide further details, including indicative drawing(s), of the design of these "shoes" in association with the PV Modules.</p> <p>b) Summarise the circumstances and process for determining whether these would be used in the final design?</p> <p>c) Should the possible use of this design/construction approach be specifically included in Table 3-3 of the oCEMP [APP-207]?</p>	<p>a) The Applicant is unable to provide drawings of the concrete shoes at this stage, as a geotechnical investigation, wind studies and the results of the further investigations and surveys committed to through the DCO Requirements will need to be undertaken prior to construction to inform the final decision on types of Solar PV technology and systems (whether fixed tilt or trackers), to optimise the type of mounting structure required whilst taking account of the parameters secured through the DCO. However, the image below is representative of the type of 'shoe' that has been used on other solar farm developments.</p>  <p>b) Concrete 'shoes' would potentially be used in areas with buried archaeological remains that are more susceptible to disturbance and adverse effects via piling and other construction operations. These types of remains include:</p> <ul style="list-style-type: none"> <li>- waterlogged remains, whereby the soil chemistry and conditions could be affected;</li> <li>- human remains, whereby even minimal disturbance could result in a potentially disproportionate loss of archaeological evidence, alongside the ethical considerations; and</li> </ul>

ExQ1	Respondent	Question	Applicant's Response
			<p>- complex structured deposits, such as those associated with burials but also structural remains such as floor surfaces.</p> <p>Of the three areas where the trial trenching identified specifically sensitive buried archaeological remains, concrete shoes or complete avoidance would be available to be employed in the detailed design and upon the selection of Solar PV panel and mounting types. Either option would ensure potential adverse impacts on these remains are appropriately avoided. This will be explored in further detail in the Outline WSI.</p> <p>c) The oCEMP <b>[APP-207]</b> has been updated at Table 3-3 to read: "Ongoing archaeological evaluation and assessment under the WSI will allow for identification of any areas where concrete shoes / blocks may be required, and also where preservation in situ is the preferred strategy." These areas will be set out in the detailed CEMP.</p>
Q6.0.8	The Applicant	<p>Paragraphs 5.6 to 5.8 and paragraph 5.15 of the Cultural Heritage Impact Assessment [APP-068] consider the effects upon nearby Scheduled Monuments, concluding that there would be no impact on any resulting from the Proposed Development.</p> <p>a) Please identify and describe in further detail the significance of each Scheduled Monument as a designated heritage asset, including those elements of the setting that make a positive contribution to the significance.</p> <p>b) Update as appropriate the consideration of the effects of the Proposed Development on the significance of each Scheduled Monument by any development within its setting.</p>	<p>a) The significance of known and potential heritage assets within the Site, and any beyond the Site which may be affected by the Proposed Development, has been assessed and described, in accordance with:</p> <ul style="list-style-type: none"> <li>- paragraph 5.8.8 of EN-1 and paragraph 194 of the NPPF (2021)</li> <li>- the guidance issued by ClfA (2020)</li> <li>- Historic Environment Good Practice Advice in Planning Note 2 (Historic England 2015) and</li> <li>- Advice Note 12: Statements of Heritage Significance: Analysing Significance in Heritage Assets (Historic England 2019).</li> </ul> <p>Determination of the significance of Scheduled Monuments relevant to the Proposed Development has been undertaken in accordance with the industry standard guidance on assessing heritage value provided within Conservation Principles (English Heritage 2008). This approach considers heritage significance to derive from a combination of discrete heritage values, principal amongst which are (amongst others):</p> <ul style="list-style-type: none"> <li>i) evidential (archaeological) value,</li> <li>ii) historic (illustrative and associative) value,</li> <li>iii) aesthetic value, and</li> </ul>

ExQ1	Respondent	Question	Applicant's Response
			<p>iv) communal value.</p> <p>Further detail of this approach, including the detailed definition of those values, as set out, and advocated, by Historic England, is provided in Annex 1 of Appendix 8.4: Cultural Heritage Impact Assessment <b>[APP-068]</b>. As set out in paragraph 8.2.29 of Chapter 8: Cultural Heritage <b>[APP-038]</b> twelve Scheduled Monuments lay within or just beyond 1km of the Order limits. The closest, Essendine Castle, is discussed below, however, the preliminary analysis also identified the following Scheduled Monuments, before these were scoped out of further detailed assessment:</p> <ul style="list-style-type: none"> <li>• the Roman Town and section of Roman Road near Great Casterton;</li> <li>• the two Causewayed Camps west of Uffington village and south of Barholm;</li> <li>• the deserted medieval settlement remains in Shillingthorpe Park;</li> <li>• the prehistoric and Romano-British settlement remains east of Greatford (comprising four distinct scheduled areas);</li> <li>• Castle Dyke moated site, northeast of Pickworth; and</li> <li>• Carby Wood Camp, south-east of the village”.</li> </ul> <p>The proximity of the Scheduled Monuments to the Order limits and nearest area of Solar PV is as follows:</p> <ul style="list-style-type: none"> <li>• Roman town of Casterton (CA ref E) - 90m from the Order limits (the area of the junction improvement works, see answer to Q6.0.10 below), 4.2km from the nearest area of Solar PV.</li> <li>• Uffington Neolithic Causewayed Camp (CA ref F) - 220m from the Order limits, 1.2km from the nearest area of Solar PV.</li> <li>• Medieval settlement, Shillingthorpe (CA ref C) - 300m from the Order limits, 760m from the nearest area of Solar PV</li> <li>• Barholm Causewayed Camp - 2.3km from the Order limits and the nearest area of Solar PV</li> <li>• Settlement site at Greatford - 1.2km from the Order limits, 2km from the nearest area of Solar PV.</li> </ul>

ExQ1	Respondent	Question	Applicant's Response
			<ul style="list-style-type: none"> <li>• Castle Dyke moated site (CA ref D) - 310m from the Order limits, 340m from nearest PV</li> <li>• Woodhead Castle ringwork bailey 2.1km from the Order limits and the nearest area of Solar PV.</li> <li>• Careby Wood Camp - 1.7km from the Order limits and 1.9km from the nearest area of Solar PV.</li> <li>• Essendine Castle moated site (CA ref A)- 50m from Order limits, 310m from nearest PV</li> <li>• Settlement east of Uffington - 2.3km from the Order limits, 3km from the nearest area of Solar PV</li> <li>• Ruins and site of St Leonards Priory - 1.6km from the Order limits, 2.2km from the nearest area of Solar PV</li> </ul> <p>The Scheduled Monuments that lie in closer proximity to (i.e., less than 1km from) the Order limits are depicted on Figure 24 of the Cultural Heritage Impact Assessment [APP-068] and are listed in the table within Annex 2 (page 128) of the same document (which correlates with the unique CA reference identifier given in brackets () above).</p> <p>The Proposed Development does not lie within the setting of any of these Scheduled Monuments. The Cultural Heritage Impact Assessment [APP-068] provides additional narrative on the rationale for not taking forward detailed assessment for those Scheduled Monuments that lie closest to the Proposed Development. Castle Dyke (CA ref. D, at paragraph 5.6) is a medieval moated site, comprising a series of earthworks demarcating the former moat ditches and island. The moated remains lie wholly within the densely wooded area and are hard to discern. There is no location where an experience of the monument and the Proposed Development can be had together. There is no material historic association between the monument and the land within the Order limits. The medieval settlement at Shillingthorpe (CA ref C, at paragraph 5.7) comprises a series of shallow earthworks and buried archaeological remains. The site shares no historical association with the land within the Order limits. The distance, landform and intervening screening (including Banthorpe Wood) means that no experience can be had of the Proposed Development from the monument (and vice-versa). Uffington Neolithic Causewayed Camp (CA ref F, at paragraph 5.8) is a site of potential buried archaeological interest with no surface expression, lying across two</p>



ExQ1	Respondent	Question	Applicant's Response
			<p>ploughed fields. There is no known historical association with the land within the Order limits and the monument. No meaningful experience can be had of the monument and there is no intervisibility of the areas of Solar PV from the monument. The scheduled remains of the Roman Town at Great Casterton (CA ref E, at paragraph 5.15) comprising buried archaeological remains and possible earthworks lies to the east of the village. The proposed junction improvement works within the village will have no effect on the physical remains lying nearly 100m away, and the changes are insignificant, there is no intervisibility and they will no way affect the historic interest of the place.</p> <p>Paragraph 8.2.31 in Chapter 8: Cultural Heritage <b>[APP-068]</b> sets out the importance of Essendine Castle Scheduled Monument and the values associated with the asset, as well as the importance of the setting. In summary, the Scheduled Monument of Essendine Castle and the Grade II* Listed Church of St. Mary (Appendix 8.4: Fig. 24: A), located c. 50m to the west of the Order limits, are of high importance, with their values deriving from the evidential, historical, aesthetic and communal components embodied within their physical form. The assets are situated within an area of known medieval remains, including earthworks and cropmarks associated with the medieval village of Essendine, which represent a crucial aspect of their setting. The land within the Order limits makes a limited contribution to the assets' importance, as part of the surrounding landscape that would once have formed their agricultural hinterland.</p> <p>Table 8.2 Assessed Heritage Assets, in Chapter 8: Cultural Heritage <b>[APP-068]</b>, further sets out the heritage assets, their designation, their values, and their importance.</p> <p>b) The Proposed Development does not lie within the setting of any Scheduled Monuments, and therefore the level of assessment is proportionate to the requirements of best practice and the policy requirements of EN-1 and the NPPF, and it is considered that no further updates are required.</p>
Q6.0.9	The Applicant	Paragraphs 5.10 to 5.14 of the Cultural Heritage Impact Assessment [APP-068] consider the effects upon nearby Conservation Areas and concludes that none will be affected by the Proposed Development.	Refer to the Applicant's response to Q6.0.8 for a detailed summary of the methodological approach followed in the assessment of significance of known and potential heritage assets within the Site, as well as any beyond the Site which may be affected by the Proposed Development. This overview provides the rationale for not needing to carry out a detailed assessment of the identified Conservation Areas.

ExQ1	Respondent	Question	Applicant's Response
		<p>a) Please identify and describe in further detail the significance of each Conservation Area as a designated heritage asset, including those elements of the setting that make a positive contribution to the significance.</p> <p>b) Update as appropriate the consideration of the effects of the Proposed Development on the significance of each Conservation Area by any development within its setting.</p>	<p>The proximity of the Conservation Areas to the Order limits and nearest area of Solar PV is as follows:</p> <ul style="list-style-type: none"> <li>• Ryhall (CA ref L) - 260m from the Order limits (an area of junction improvement works, see answer to Q6.0.10 below), 870m from the nearest area of Solar PV</li> <li>• Little Casterton and Tolethorpe - 2.3km from the Order limits, 2.4km from the nearest area of Solar PV</li> <li>• Great Casterton – adjacent to the Order limits in Great Casterton (an area of junction improvement works, see answer to Q6.0.10 below), 4.7km from the nearest area of Solar PV</li> <li>• Braceborough (CA ref K) - 240m from the Order limits, 1.1km from the nearest area of Solar PV</li> <li>• Greatford (CA ref I) - 800m from the Order limits, 1.5km from the nearest area of Solar PV</li> <li>• Uffington (CA ref J) - 440m from the Order limits, 1.5km from the nearest area of Solar PV</li> </ul> <p>All of the Conservation Areas (with the exception of Little Casterton and Tolethorpe) are depicted on Figure 24 of the Cultural Heritage Impact Assessment <b>[APP-068]</b> and are listed in the table within Annex 2 (page 128) of the same document (which correlates with the unique CA reference identifier given in brackets () above).</p> <p>The Proposed Development does not lie within the setting of any of these Conservation Areas. The distances involved ensure that there is no location where the significance of the designated assets can be experienced, while also being able to experience the Proposed Development. The Proposed Development would not alter any of the physical surrounds that contribute to heritage significance of these assets.</p> <p>The Cultural Heritage Impact Assessment <b>[APP-068]</b> provides additional narrative on the rationale for not taking forward detailed assessment for these assets (paragraphs 5.10 to 5.14). This initial appraisal drew on either original assessment work or from the existing Conservation Area Appraisal documents, that set out the significances of the places and details such as key views. The Conservation Area at Braceborough has very few outward looking perspectives and its significance is</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>derived from intimate 'inward' views of the historic buildings within the village. Mature screening and vegetation, and over 1km of separation between the Conservation Area and any Solar PV ensures that the change would have no adverse effect on heritage significance. Although neither Greatford nor Ryhall have published Conservation Area Appraisals, the same conclusions on significance, change and effects, as reported for Braceborough, apply for these two assets. Uffington Conservation Area includes the village and parkland (lying to the south) and this relationship and views to and from are critical to its significance. The key views are described in the Conservation Area Appraisal. The Proposed Development lies well beyond and in opposing directions from these locations. The minor junction improvement works located in proximity to Ryhall and Great Casterton Conservation Areas would result in no perceptible change to areas that do not contribute to their heritage significance.</p> <p>b) It is considered that the level of assessment is proportionate to the requirements of best practice and the policy requirements of EN-1 and the NPPF, and that no further updates are required.</p>
Q6.0.10	The Applicant	<p>Paragraphs 5.14 and 5.15 of the Cultural Heritage Impact Assessment [APP-068] describe works to reinforce kerbs and relocate some of the street furniture and lighting adjacent to the Great Casterton Conservation Area (which also includes fourteen listed buildings). A temporary change is reported to the setting of the Scheduled Monument of the Roman town of Great Casterton.</p> <p>Please provide further detail and justification for the assessment of these works upon the significance of the designated heritage assets (including any listed buildings).</p>	<p>a) The potential works to reinforce the kerbs and relocate a street sign and lighting column outside of the Great Casterton Conservation Area are deemed to be minor and insignificant. Further discussion on this is provided in the answer to Q6.0.9; however, in summary the areas where the Order limits are located do not contribute to the significance of the assets, and the changes would be imperceptible. Thus, no adverse effects are predicted.</p> <p>b) The temporary change in traffic flows in proximity to the Scheduled Monument of the Roman town of Great Casterton would have no effect on the significance on the monument (in terms of its archaeological and historic interest). The physical remains (mostly buried, with some potential earthworks) would in no way be altered / affected by the change in traffic flows. The existing presence of traffic along Ryhall Road is not a negative element within the setting of this monument, and subsequently, minor and barely perceptible changes to these traffic flows, as set out within the Transport Assessment [APP-074], would have no effect on the historical interest of the monument.</p>
Q6.0.11	The Applicant	Paragraph 8.2.30 of the ES [APP-038] notes that six Registered Parks and Gardens lie within 5km of the Order limits (including the Grade II* Burghley	Refer to the Applicant's response to Q6.0.8 for a detailed summary of the methodological approach followed in the assessment of significance of known and potential heritage assets within the Site, as well as any beyond the Site which may

ExQ1	Respondent	Question	Applicant's Response
		<p>House Registered Park and Garden). It states that there are no meaningful historic associations or intervisibility between the Proposed Development and each one of the Registered Parks and Gardens and that the distances involved, and their heritage values, mean that they did not need to be assessed in any further detail.</p> <p>Please provide a more detailed and reasoned justification for why these Registered Parks and Gardens do not need to be assessed in any further detail?</p>	<p>be affected by the Proposed Development. This overview provides the rationale for not needing to carry out a detailed assessment of the identified Registered Park and Gardens.</p> <p>The proximity of the Registered Parks and Gardens to the Order limits and nearest area of Solar PV is as follows:</p> <ul style="list-style-type: none"> <li>• Burghley House - 1.5km from the Order limits, 2.4km from the nearest area of solar PV.</li> <li>• Greatford Hall (CA ref I) – 620m from the Order limits, 1.2km from the nearest area of Solar PV.</li> <li>• Uffington (CA ref J) – 680m from the Order limits, 1.6km from the nearest area of Solar PV,</li> <li>• Holywell Hall Park - 2km from the Order limits and the nearest area of Solar PV</li> <li>• Exton Park - 5.4km from the Order limits and the nearest area of Solar PV.</li> <li>• Grimsthorpe Castle - 4km from the Order limits, 4.2km from the nearest area PV</li> </ul> <p>The Registered Parks and Gardens that lie in closer proximity to (i.e., within 1km of) the Order limits are depicted on Figure 24 of the Cultural Heritage Impact Assessment <b>[APP-068]</b> and are listed in the table within Annex 2 (page 128) of the same document (which correlates with the unique CA reference identifier given in brackets () above).</p> <p>The Proposed Development does not lie within the setting of any of these Registered Parks and Gardens. The distances involved ensure that there is no location where the significance of the designated assets can be experienced, while also being able to experience the Proposed Development. The Proposed Development will not alter any of the physical surrounds that contribute to their heritage significance of these assets. Therefore, the Proposed Development will not bring about a change that would adversely affect their significance.</p> <p>The Cultural Heritage Impact Assessment <b>[APP-068]</b> provides additional narrative on the rationale for not taking forward detailed assessment for the two Registered Parks and Gardens that lie closest to the Proposed Development. These comprise Greatford Hall (CA ref. I, at paragraph 5.11) and Uffington (CA ref J, at paragraph</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>5.13). Greatford Hall is a parkland best experienced from within its bounds. The official Listing description for the assets comprises a very detailed narrative of the key significances, views within and out of the park, towards landscape features and buildings of interest, and a broader narrative on the historic development of the estate, parkland, gardens and buildings. The Solar PV Site lies at distance of 1.2km beyond the setting of the parkland, such that the change will have no effect. Further details on Uffington are presented within the Applicant's response to Q6.0.9.</p> <p>It is therefore considered that the level of assessment is proportionate to the requirements of best practice and the policy requirements of EN-1 and the NPPF, and that no further updates are required.</p>
Q6.0.12	The Applicant	<p>Paragraph 5.9.9 of the draft Overarching Policy Statement for Energy March 2023 (EN-1) states that consideration will need to be given to the possible impacts, including cumulative, on the wider historic environment and that assessment should include reference to any historic landscape character assessment and associated studies as a means of assessing impacts.</p> <p>a) Notwithstanding the information provided, including paragraphs 8.2.33 to 8.2.34 of the ES (APP-038] and Chapter 6 (Landscape and Visual) [APP-036] please explain in further detail how the Proposed Development has been assessed in the context of its overall impact on historic landscape character, taking</p>	<p>a) Further to details presented within 8.2.33 and 8.2.34 of the ES <b>[APP-038]</b> additional narrative on the historic landscape character and any heritage significance / value that it may have is presented within paragraphs 4.30 to 4.34 within the Cultural Heritage Impact Assessment <b>[APP-068]</b>. In summary, the Very Large Post War Fields and fragmentary remnants of probable parliamentary enclosures that dominate the land within the Order limits are of no heritage significance. The Historic Hedgerows (as noted on Figure 23 [APP-068]) are of some limited evidential and historic value. The Proposed Development would have a negligible effect on these hedgerows and no effect on historic landscape character of any heritage value / significance.</p> <p>c) A copy of the Leicestershire County Council 2019: The Leicestershire, Leicester and Rutland Historic Landscape Characterisation Project has been provided as part of the Applicant's Deadline 2 submission.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>account of Historic England's Historic Landscape Characterisation guidance?</p> <p>b) Please provide a copy of the Leicestershire County Council 2019: The Leicestershire, Leicester and Rutland Historic Landscape Characterisation Project referred to in paragraph 8.2.33 of the ES.</p>	
Q6.0.13	The Applicant	<p>Section 4.0 oCEMP [APP-207] states that the detailed CEMP(s) will set out all roles, responsibilities and actions required in respect of the implementation of the measures contained in the oCEMP.</p> <p>In respect of archaeology, explain the supervisory, decision-making processes and responsibilities that would be required in connection with the proposed archaeological protection and mitigation measures, including the need for the appointment of any suitably qualified person(s). Update the oCEMP as necessary.</p>	<p>The proposed archaeological protection and mitigation measures will be set out in the WSI. Provision for these measures is included in the Outline WSI.</p> <p>In summary, the WSI will:</p> <ul style="list-style-type: none"> <li>Identify those locations where measures will be put in place to safeguard buried archaeological remains from temporary or permanent works that could adversely affect them. Areas will be demarcated on the ground (with suitable fencing and signposting), identified on mapping within welfare and site offices, and the means to ensure their protection will be highlighted in briefings to the construction workforce.</li> <li>Set out the means by which decisions will be made in the event of important archaeological remains being discovered during construction work. This will take the form of close liaison between the attending Archaeologist, the Environmental Clerks of Works, and the nominated construction site manager; all being fully briefed on the mitigation options available to ensure adverse effects are avoided or minimised.</li> <li>Define the archaeological works planned in advance of or during construction and that they will be undertaken under the direction of suitable qualified and experienced professional archaeologists. The planning and phasing of these works will be designed alongside the general construction programme, to minimise or avoid the potential impact of discovering unexpected remains.</li> </ul> <p>The oCEMP has been updated to include this additional detail on the WSI.</p>
Q6.0.14	The Applicant, Lincolnshire	The Applicant, Lincolnshire County Council and Rutland County Council are	The Applicant has shared an initial draft of the Statement of Common Ground (SoCG) with both Lincolnshire County Council (LCC) and Rutland County Council

ExQ1	Respondent	Question	Applicant's Response
	County Council, Rutland County Council	<p>requested to provide an update on the discussions between the parties on archaeology, including but not limited to archaeological evaluation work.</p> <p>This can be incorporated into the relevant Statements of Common Ground and should provide a specific summary of any matters of disagreement remaining on archaeology, the reasons for this disagreement and the steps being taken to seek to address outstanding concerns.</p>	<p>(RCC) which includes a section on matters related to Archaeology. The SoCG LCC sets out the most recent position regarding the status of discussions regarding the Written Scheme of Investigation (WSI) method statement, trial trenching, evaluation and proposed mitigation.</p> <p>During pre-application RCC confirmed that the authority has a service level agreement with Leicestershire County Council to provide advice to RCC on archaeological matters. However, their service level agreement extends only to Town and Country Planning Act applications and not Nationally Significant Infrastructure Projects. As such, no formal advice was provided from RCC on the scope of the WSI or archaeological evaluation work. Notwithstanding this the Applicant provided regular briefings and updates on progress to RCC with regards to archaeological assessment of the Proposed Development on RCC's administrative area.</p> <p>The Applicant is committed to working with both LCC and RCC to resolve any outstanding matters relating to archaeology.</p>

## Topic 7.0 Land Use and Soils

ExQ1	Respondent	Question	Applicant's Response
Q7.0.1	Rutland County Council and Lincolnshire County Council	Question not for The Applicant	
Q7.0.2	The Applicant	<p>Paragraphs 12.4.10 to 12.4.14 of the ES [APP-042] explains that the temporary construction compounds will have no adverse long-term effect on soils or agricultural land quality.</p> <p>a) In the case of the primary construction compound, how does its relationship with the onsite substation proposed in the same location (and with no limit on its operational life), have a bearing on this assessment?</p> <p>b) For the secondary construction compounds, will the areas of these be subsequently used as solar PV site areas? If so, how will the soil restoration process and solar photovoltaic (PV) construction, be managed and phased for these areas?</p>	<p>a) The primary construction compound area (Work No 5) as shown on the Work Plans [APP-006] is also shown as the onsite substation (Work No 2). In the ES Chapter 12 [APP-042] the entirety of Field 19 (6.4ha) has been included in the assessment of land areas measured as though it will be irreversibly developed. The assessment and measurement are set out in paragraphs 12.4.45 – 12.4.47 of Chapter 12. The assessment is considered to be a worst case as it includes all the land within Field 19 even though the onsite substation will only involve 2ha and the temporary primary construction compound will temporarily involve up to 4ha.</p> <p>b) For the other temporary construction compounds that are proposed on farmland, the surface of the temporary compound will be removed, the topsoil replaced, and the land restored prior to the installation of the solar PV arrays. These areas will therefore be the last areas to have solar PV arrays installed. These areas are shown as having the flexibility for the installation of PV Arrays, as shown on the Work Plans [APP-006]. The layout of the PV Arrays and extent of temporary secondary construction compounds will be determined at the detailed design stage, but each will be built out pursuant to a detailed soil management plan for that phase which will be in accordance with the measures set out in the outline soil management plan.</p>
Q7.0.3	The Applicant	<p>Paragraphs 12.4.33 and 12.4.34 of the ES [APP-042] refer to two previous solar farm planning decisions at Little Crow (EN010101) and St Asaph (Welsh DNS 3247619).</p> <p>a) What weight was given in those cases to any maximum operational time period and how might that</p>	<p>The references to the two decisions were included as they set out conclusions that acknowledge that the land resource, notably the soils and subsoils that are assessed to determine the ALC grade, are not affected. The period the panels will remain in place will not affect the ALC resource, so a longer-term or permanent change would not change the ALC grade and therefore the resource. Nor would a longer-term use affect the potential for the PV Arrays to be removed and the land put to a future agricultural use unhindered by PV Arrays, when the solar farm use ceases. The installation and decommissioning can be carried out without altering the ALC grade irrespective of the term. The answers below are set in that context.</p>



ExQ1	Respondent	Question	Applicant's Response
		<p>influence the conclusions reached in this case?</p> <p>b) Assuming that the time period for operation was limited in both those cases, what bearing should those decisions have on the consideration of the Proposed Development, which does not include a time limit for the operational period?</p>	<p>a) The two Inspectors have referenced the uses being temporary and have noted the benefits for soils from the changed plant cover. It is not possible to determine whether they would have reached the same conclusion had the applications been without time limit, as that was not the proposal that the Inspectors were considering.</p> <p>b) The decisions are still relevant because the Inspectors were addressing the effect of the construction and decommissioning on the soils and land quality. That is a relevant assessment for the current proposals. As highlighted within these decisions, the land resource will not be lost, and the development and land-use change is capable of being reversible. There is no policy requiring agricultural land to be used for farming, food production or at any particular intensity of use, and as the ALC resource will be unharmed, policy requirements to prevent the loss of agricultural land will be satisfied.</p>
Q7.0.4	The Applicant	<p>Paragraph 12.4.48 of the ES [APP-042] states that the effects of farm businesses during construction would not be significant.</p> <p>a) Please provide further details of the likely effects during construction with reference to each farm affected.</p> <p>b) Summarise the proposed measures that would be secured by the dDCO to minimise any disruption to farm businesses during construction.</p>	<p>a) <b>Grange Farm.</b> This holding extends to 1000 ha, with 400 ha operated at Grange Farm as set out in Appendix 12.6: Farm Interviews [APP-093]. The principal buildings are to the north of the Proposed Development. There will be no severance of access to any other land during construction. A temporary construction compound is proposed at an existing farmyard where there are two relatively modest general farm stores (adjacent to field 34 as shown on Figure 3.2: Field Numbering System [APP-112], but with the reduced arable area these will not be required, so there will be no adverse effect.</p> <div data-bbox="1131 997 2101 1316" data-label="Image"> </div> <p><b>Manor Farm.</b> This holding extends to 900 ha [APP-093], with all land not within the Proposed Development accessible by the local road network. There will be</p>


ExQ1	Respondent	Question	Applicant's Response																				
			<p>no adverse effect on the agricultural activities of the rest of the holding during construction as a consequence. The farmyard is just north of the village.</p> <p><b>Walk Farm Barn.</b> This holding extends to 880 ha [APP-093] with the farmyard located to the is northwest of Ryhall and west of the Proposed Development. The fields involved form the northern-most fields of this block. There will be severance of access to land during construction.</p> <p><b>Wood Farm</b> extends to about 800 ha [APP-093] with the farm buildings to the south of the Proposed Development. None of the fields involved in the Proposed Development will sever access to other land, so construction impacts will be minimal.</p> <p>b) Advance notice will be provided to the farm businesses of the likely start dates, and cropping will have been chosen accordingly. The Proposed Development will take whole fields at a time, in consultation with landowners who will remain informed throughout. All fields not involved will be able to access the highway network or will be provided with access temporarily if construction affects existing gateways, so that farming operations will not be hindered.</p>																				
Q7.0.5	The Applicant	<p>Paragraph 12.4.62 of the ES [APP-042] states that none of the occupying farm business will cease and that all have considerable areas of land that extend beyond the solar PV Array areas.</p> <p>a) What percentage area of land for each farm business would be utilised by i) land within the Order limits and ii) the proposed PV array areas?</p> <p>b) Please provide a plan showing the full extent of the land of each farm business.</p> <p>c) For each farm business and with reference to any affected fields, provide further details of how access and severance (both inside and outside the Order limits) could be</p>	<p>a) Please refer to the table provided below:</p> <table border="1" data-bbox="1084 890 2024 1123"> <thead> <tr> <th>Farm</th> <th>Area Farmed (ha)</th> <th>% within Order Limits</th> <th>% within Solar PV Area</th> </tr> </thead> <tbody> <tr> <td>Grange Farm</td> <td>1,000</td> <td>32%</td> <td>15%</td> </tr> <tr> <td>Manor Farm</td> <td>900</td> <td>26%</td> <td>18%</td> </tr> <tr> <td>Walk Farm Barn</td> <td>880</td> <td>12%</td> <td>8%</td> </tr> <tr> <td>Wood Farm</td> <td>800</td> <td>22%</td> <td>13%</td> </tr> </tbody> </table> <p>b) We do not have, or do not have permission to release, complete holding plans for all the farms involved. The land within the Order limits forms part of wider farms. There are no severance or land-locking issues arising from the Proposed Development, and consequently there will be no significant impact on any agricultural land farmed as part of the wider holding. Therefore, plans showing the wider holding will not provide any additional information that will inform or alter the necessary assessment carried out in the ES process. Furthermore, the proposals have been developed in conjunction with those</p>	Farm	Area Farmed (ha)	% within Order Limits	% within Solar PV Area	Grange Farm	1,000	32%	15%	Manor Farm	900	26%	18%	Walk Farm Barn	880	12%	8%	Wood Farm	800	22%	13%
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ExQ1	Respondent	Question	Applicant's Response
		<p>affected by the Proposed Development?</p> <p>d) Identify any difficulties or constraints that might arise for the use of any of the fields retained in the Order limits for agricultural use?</p>	<p>landowners and they have only given up the fields they are happy to give up whilst maintaining their farming enterprise elsewhere.</p> <p>c) The Proposed Development during construction will involve installing Solar PV Arrays on a field-by-field basis and with multiple fields being installed simultaneously. This will be programmed and coordinated with the farmers and there will be no sudden or unexpected removal of fields or severance. If during the phasing of installation, it appears that there might be temporary disruption to any field access then a temporary access will be provided. It is only during harvest time that the need for frequent access is necessary in any event. The location of the fields are all away from the farm yards, which are all located around the periphery of the Solar PV Array area, and severance of access should not present problems.</p> <p>d) There are no evident difficulties in accessing or utilising land within the Order limits retained for agricultural use. Access to all areas is available via existing farm tracks or public roads. Field 20, (Field Numbering System <b>[APP-112]</b>) will continued to be accessed via the existing agricultural crossing over the West Glen River, which is located within the Order limits. An existing field track provides direct access to this crossing from an existing field gateway on Essendine Road.</p>
Q7.0.6	The Applicant	<p>Paragraphs 12.4.57 and 12.4.58 of the ES [APP-042] states that the land under and around the PV Arrays could be used for the grazing of sheep or fodder production.</p> <p>a) For each farm business affected by the Proposed Development please explain how likely the proposed use for sheep grazing would be, given that the existing farms are either wholly or primarily arable. This explanation should take account of how the practices of the farm would need to change to accommodate sheep grazing and the incentive for doing so.</p>	<p>a) Currently only Manor Farm has sheep as part of the land management. The fields are mostly in arable use and consequently are mostly not stock-fenced or provided with water. Where sheep are grazed, temporary fencing is used. Walk Farm Barn has a cattle enterprise <b>[APP-093]</b>. For the areas of the Solar PV Site, they will all be fenced with stockproof fencing. Consequently, sheep grazing within these areas are secure. There is no necessity for the current farmers to manage the sheep themselves.</p> <p>The management of sheep requires some expertise and experience, and for managing sheep under and around panels the shepherd needs to be able to work with sheepdogs. The management of sheep therefore provides an opportunity for existing sheep farmers in the area, or new entrants/young farmers, to develop sheep enterprises.</p> <p>There will be a need for a handling area in each panel area, but this can be made from hurdles. It does not need to be a fixed feature.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>b) Provide evidence of any examples of existing solar farms where sheep grazing is successfully operated by an arable farm business.</p> <p>c) How would fodder production be carried out taking account of the obstructions of the solar arrays and solar stations etc</p>	<p>There will be no necessity for other parts of the farm to be modified for the sheep. The sheep can lamb outside and will not need supplementary feeding except some purchased-in compound feed in the run-up to lambing.</p> <p>Accordingly, for each farm it is considered likely that the land will be able to be grazed by sheep.</p> <p>b) There are many farms that run a sheep enterprise, whether under panels or on grassland. There is a general recognition that grassland within a rotation is beneficial for soils, and grazed grassland is the best. There is no requirement or necessity for the sheep to be managed by arable staff, and it will be a decision for each farmer as to whether to manage the enterprise themselves or let it out. Evidence of solar farms where sheep grazing is successful are numerous, however the Guide to Agricultural Good Practice (BRE) provides some examples and is appended at <b>Appendix M</b> for Deadline 2.</p> <p>c) For most sheep no supplementary fodder is needed. They can graze outside all year round, with some bought-in compound feeds provided for some key periods. Fodder production in and around the panels will not generally be possible using conventional machinery unless there are wider areas within the fence line where there are no panels. Otherwise, fodder will be made from some of the environmental areas (where this is not needed to achieve the requirements of the LEMPs), or can be brought in if required, but in most years, there will be no need for supplementary feed by hay or silage.</p>
Q7.0.7	The Applicant	<p>The Land Use and Soils Assessment Methodology within Appendix 12.2 of the ES [APP-089] explains that under the Institute of Environmental Management and Assessment (IEMA) Guide the methodology considers the permanent sealing of land or Agricultural Land Classification (ALC) downgrading of more than 20ha to be a major adverse magnitude of impact. Given that (in the absence of any time limit) the operational effects of the Proposed Development need to be considered on a permanent basis, in circumstances</p>	<p>The IEMA Guide (2022) Table 3 refers to the "<i>irreversible loss of one or more soil functions or soil volumes (including permanent sealing or land quality downgrading) ... including effects from 'temporary developments'.</i>"</p> <p>The Guide states "<i>temporary developments can result in a permanent impact if resulting disturbance or land use change causes permanent damage to soils</i>".</p> <p>The soil properties potentially affected, paragraph 9.1 identifies, include physical properties (e.g., soil, depth, texture), chemical properties and biological properties. None of these refer to land use.</p> <p>Accordingly, the longevity of the use will not alter the ALC grade and will not result in sealing or land quality downgrading.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>where the land to be used for PV arrays was not to be used for either sheep grazing or fodder production, how would this change the conclusions reached on the effect on agricultural land?</p>	<p>In the event that the land is managed grassland but is not grazed, it would not result in any downgrading of land quality or sealing over of agricultural land.</p>
Q7.0.8	The Applicant	<p>Paragraph 12.4.61 of the ES [APP-042] states that the retained agricultural land within the Mitigation and Enhancement Areas as set out in the outline Landscape and Ecology Management Plan [APP-210] will continued to be farmed. Does this include the areas of proposed wildflower grassland with calcareous species within Fields 1 and 3 [APP-112] in the northwest section of the Order limits?</p>	<p>Yes. The management measures set out within paragraph 4.2.24 of the outline Landscape and Ecology Management Plan [APP-210], which references Fields 1 and 3, refer to the arisings from these fields being used for fodder production.</p>
Q7.0.9	The Applicant	<p>An assessment of potential impacts of the Mitigation and Enhancement areas on agricultural land and soils has not been provided. Paragraphs 12.2.8, 12.3.6 and 12.4.81 of ES Chapter 12 [APP-042] state that 239 ha of the Mitigation and Enhancement Areas will remain in agricultural use and are not affected by any works.</p> <p>Please provide an additional table in ES Chapter 12 or an expanded version of Table 12-1 to clearly show the amounts and proportions of agricultural land, including BMV, impacted by each element of the proposed Mitigation and Enhancement areas.</p>	<p>A table showing the ALC for the Solar PV Areas and within the Order limits was submitted at Procedural Deadline A and provided in Annex A of the Applicant's Response to Relevant Representations [PDA-012]. A copy of that table is set out below.</p> <p>The Applicant confirms that the penultimate column titled 'Area for Biodiversity and arable' is the Mitigation and Enhancement Areas.</p> <p><b>ALC Results for the Order Limits and Solar PV Site Area</b></p>

ExQ1	Respondent	Question	Applicant's Response						
			ALC#	Order Limits		Solar PV Site and field margins		Area for biodiversity and arable	Area affected by substation and fixed equipment
				Area (ha)	Area (% of total Site)	Area (ha)	Area (% of Solar PV Site)	Ha	Ha
			Grade 1	0	0%	0	0%	0	0
			Grade 2	100	11.7%	35	6.6%	65	0.5
			Grade 3a	260	30.5%	181	34.1%	79	3.7
			Grade 3b	439	51.5%	297	55.9%	142	9.9
			Grade 4	18	2.1%	18	3.4%	0	0.3
			Grade 5	0	0%	0	0%	0	0
			Non-agricultural	0	0%	0	0%	0	0
			Urban	3	0.4%	0	0%	-	3
			Not surveyed (roads, railways, verges etc)	32	3.8%	0	0%	-	0
			<b>Total</b>	<b>852</b>	<b>100%</b>	<b>531</b>	<b>100%</b>	<b>286</b>	<b>17.4</b>
			<p># The ALC identifies the areas in hectares and the proportions of land in each grade. All figures are rounded to the nearest hectare.</p>						
Q7.0.10	The Applicant	Paragraph 12.2.28 states that the existing farmyard area and buildings could be used as a temporary construction compound area as shown on the Works Plans. What would the implications of this be for the operation of the farm during the construction period?	<p>Part of Grange Farm includes a farmyard with a large hardstanding area and two old, modest-sized general/crop stores. These are shown in the images below:</p>						

ExQ1	Respondent	Question	Applicant's Response
			 <p>The yard is within the area for the Solar PV arrays, between parcels 30, 31 and 34 as shown on Figure 3.2: Field Numbering System [APP-112]. The farm will have a reduced need for crop storage as a result of the Proposed Development, and the temporary use of this land as a temporary construction compound will not affect the ongoing management of the rest of the farm.</p>
Q7.0.11	The Applicant	<p>Paragraph 12.8.3 of the ES [APP-042] states that the Proposed Development would not result in any irreversible or permanent loss of agricultural land, and therefore there are no cumulative effects associated with other projects. Nonetheless, several Relevant Representations (RR) have raised the issue of the cumulative effects on agricultural land (including Best and Most Versatile (BMV) resulting from other solar farm developments.</p> <p>a) Please explain this statement in the context that the effects of the Proposed Development need to be considered on a permanent basis given that there is no time limit for its operational phase.</p> <p>b) Provide an estimate of the total area of BMV agricultural land within the regional area, and express the area</p>	<p>The Proposed Development will not, as noted, result in any irreversible loss of any soil functions or soil volumes, except for the small areas assessed (e.g., tracks). There will be no sealing or permanent damage to soils except for those small areas.</p> <p>a) The Proposed Development should not be considered as a permanent loss of agricultural land. The land resource will not be adversely affected by the Proposed Development and decommissioning can take place following which the agricultural land will be the same quality as it is now. There will, therefore, be no loss of agricultural land and agricultural use will continue for the duration of the operational phase.</p> <p>Whilst there is no specific date for decommissioning, there will be a requirement that once electricity generation ceases the site will be cleared. Therefore, there will be a decommissioning phase should the need for renewable energy change, or at the end of the life of the panels, and the underlying agricultural land resource will not have been affected.</p> <p>Therefore, whilst no specified time limit is sought, the Proposed Development is nevertheless not a permanent development.</p> <p>In the event that the Proposed Development is considered on a permanent basis, the soil resource will still not be sealed over or downgraded and could</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>of 'temporary loss' from (i) the Proposed Development and (ii) other known solar farm developments as a percentage of that total area? The response should also explain how these figures support the ES conclusion of no likely significant effect from any loss of BMV agricultural land.</p>	<p>be used for grazing (agriculture). There is no policy requiring agricultural land to be used for farming or food production or at any level of intensity. As the ALC resource will be unharmed, policy requirements to prevent the loss of agricultural land will be satisfied.</p> <p>b) An estimate of the area of BMV in Lincolnshire and Rutland is provided in Table 12.3 in the ES Chapter 12 Land Use and Soils <b>[APP-042]</b> at 419,649 ha. Based on the "provisional" ALC maps, BMV is estimated to account for about 71.2% of agricultural land in Lincolnshire (c. 402,900 ha) and 45.2% in Rutland (16,700 ha) (see paragraphs 12.2.16 to 12.2.18).</p> <p>(i) The BMV land within the Order limits would amount to 360 ha (see Table 12-1 in Chapter 12 <b>[APP-042]</b>, which equates to 0.086% of the approximated 419,600 ha of BMV in Lincolnshire and Rutland. That is 1/1165th of the BMV land within the two counties. At less than 1% of the BMV land, this is considered to be not significant, and the conclusions of the ES remain unchanged.</p> <p>(ii) The Applicant will provide a response to part b(ii) at Deadline 3, as it is still gathering the required publicly available data (from Scoping Reports, PEIRs, and Environmental Statements) from other Solar DCO proposals in the region.</p>
Q7.0.12	The Applicant	<p>Table 6 (South Kesteven Local Plan Policy – Table of Compliance) of Annex 3 of the Planning Statement <b>[APP203]</b> sets out the Applicant's response to 'Renewable Energy Appendix 3 Criteria). However, it omits any assessment in response to Solar Energy Criterion 9 which is referred to in the RR from South Kesteven District Council. Please therefore update the Table of Compliance to include a full response for how the Proposed Development has been assessed against this Criterion 9.</p>	<p>An update to Table 6 (South Kesteven Local Plan Policy – Table of Compliance) of Appendix 3 of the Planning Statement <b>[APP-203]</b> has been submitted to include a response to Solar Energy Criterion 9 of South Kesteven's 'Renewable Energy Appendix 3 to the Local Plan. The Applicant's response was omitted in error in the original submission of the Planning Statement.</p>



## Topic 8.0 Landscape and Visual

ExQ1	Respondent	Question	Applicant's Response
Q8.0.1	The Applicant	<p>Paragraph 1.1.29 of the Applicant's Landscape and Visual Assessment Methodology [APP-055] states that effects that are Major-Moderate or Major are considered to be significant, whilst effects of Moderate significance or less are "of lesser concern" and not significant. This differs from the standard approach set out in Chapter 2 (Overview of EIA Process) of the Environmental Statement (ES) [APP-032].</p> <p>Please explain why, for landscape and visual matters, effects of Moderate significance are not considered as being significant within the ES?</p>	<p>Within the EIA Regulations, judgements regarding the likelihood of significant or not significant effects must be clearly set out by a suitably qualified consultant. However, no particular threshold is given for the determination of significant or not significant effects, and it is for the assessor or suitably qualified consultant of the relevant topic to determine this threshold. The threshold for a significant or not significant effect may vary between EIA topics.</p> <p>Paragraph 2.4.7 of Chapter 2 [APP-032] states that "Moderate or Major effects are considered to be significant, whilst minor and negligible effects are considered to be not significant. However, professional judgement will be applied for each topic, including taking account of whether the effect is permanent or temporary, its duration / frequency, whether it is reversible, and / or its likelihood of occurrence." The threshold for significance will therefore vary from topic-to-topic depending on different criteria of relevance to the particular chapter within the ES.</p> <p>Paragraph 2.24 of the Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3) notes that "Professional judgement is a very important part of LVIA. While there is some scope for quantitative measurement of some relatively objective matters, for example the number of trees lost to construction of a new mine, much of the assessment must rely on qualitative judgements, for example what effect the introduction of a new development or land use change may have on visual amenity, or about the significance of change in the character of the landscape and whether it is positive or negative."</p> <p>Professional judgement has been applied to the LVIA methodology [APP-055] to consider the threshold of significant and not significant effects in the context of the Proposed Development and the mitigation measures to be applied. The significance ratings within the LVIA methodology [APP-055] indicates a 'sliding scale' of the relative importance of effects with Major being the most important and Minimal being the least important and this sliding scale has been applied accordingly. The Applicant's methodology [APP-055] and threshold for the determination of significant or not significant effects has been considered appropriate for other DCO / NSIP applications and has been tested and</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>considered acceptable at numerous other examinations and planning appeals including the approved EDF Sizewell Nuclear Power Station DCO.</p>
Q8.0.2	The Applicant	<p>Paragraph 3.34 of the Guidelines for Landscape and Visual Impact Assessment (GLVIA) (3rd Edition) states that it should be made clear that effects not considered to be significant will not be completely disregarded. Explain how this has been taken into consideration, including in relation to the assessment of combined effects, the effects on the well-being of residents and the wider 'planning balance' within the Planning Statement [APP-203].</p>	<p>Paragraph 3.34 of GLVIA3 notes that <i>"it should also be made clear that the effects not considered to be significant will not be completely disregarded."</i> The submitted LVIA [APP-036] identifies both the significant and not significant effects arising from the Proposed Development in accordance with the EIA Regulations. Effects assessed as not significant are of <i>"lesser concern"</i> in line with paragraph 3.35 of GLVIA3 although they are not disregarded and remain material in the weighing up of judgments within the overall planning balance. Equally, effects considered to be significant are not necessarily unacceptable when assessed within the overall planning balance. The assessment of the planning balance considers all the impacts identified within the LVIA and other topics, both significant and non-significant, and balances these impacts in the context of the green infrastructure strategy and the wider benefits of the DCO in terms of renewable energy generation and tackling climate change.</p> <p>The cumulative landscape and visual effects have been assessed within paragraphs 6.5.103 to 6.5.109 of the LVIA [APP-036]. The interactions of effects are assessed in Chapter 16 of the ES [APP-046]. The cumulative assessments within the LVIA have reviewed the long list of cumulative schemes in relation to the Zone of Visual Influence (ZVI) arising from the Proposed Development and the likelihood of significant effects. The interaction of effects focuses on the combinations of significant effects across topics which are likely to be significant and therefore inform the decision-making process.</p> <p>In landscape and visual terms, these assessments are in-line with paragraph 7.5 of GLVIA3 [Ref 61] which states with regards to cumulative assessment that <i>"the challenge is to keep the task reasonable and in proportion to the nature of the project under consideration. Common sense has an important part to play in reaching agreement about the scope of the assessment [and that] it is always important to remember that the emphasis in EIA is on the likely significant effects rather than comprehensive cataloguing of every conceivable effect that might occur."</i> The cumulative assessments within the LVIA [APP-036] and the Interaction of Effects [APP-046] across topics are considered to be proportionate and focussed on the likely significant effects as advised within best practice guidance.</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>The visual effects on residents are addressed within the Residential Visual Amenity Assessment [APP-057] and the Amenity and Recreation Assessment [APP-058] which are factors contributing to the overall well-being of residents. As is the case with the LVIA, the assessment of the planning balance considers all the impacts identified in these assessments, both significant and non-significant, and the embedded mitigation presented in the Green Infrastructure Strategy Plan which seeks to secure a well-designed outcome that minimises impacts upon all receptors. All of the assessments within the ES have been taken into consideration when making the planning balance judgements within the Planning Statement [APP-203].</p>
Q8.0.3	The Applicant	<p>Both representative and illustrative viewpoints are assessed within ES Chapter 6: Landscape and Visual [APP-036]. Paragraph 1.1.48 of the Applicant's Landscape and Visual Assessment Methodology [APP-055] states that representative viewpoints have been "selected in locations and 'micro-sited' where significant effects are likely to be experienced" as well as some viewpoints which have been selected to demonstrate that a particular receptor would not be affected. No rationale is provided for the selection of illustrative viewpoints, although paragraph 6.3.52 of the ES [APP-036] states that these viewpoints "demonstrate a particular effect or specific issues". Paragraph 6.3.53 of the ES [APP-036] states that the representative and illustrative viewpoints were subject to consultation with the LCC, RCC and SKDC in January 2022. However, the letter sent to these authorities provided in ES Appendix 6.6 [AS-001] does not identify any illustrative viewpoint locations. It is</p>	<p>Paragraph 6.19 of the Guidelines for Landscape and Visual Impact Assessment 3<sup>rd</sup> Edition (GLVIA3) states that "<i>Viewpoints selected for inclusion in the assessment and for the illustration of the visual effects fall broadly into three groups:</i></p> <ol style="list-style-type: none"> <li>1. <i>Representative viewpoints, selected to represent the experience of different types of visual receptor, where large numbers of viewpoints cannot all be included individually and where significant effects are unlikely to differ – for example, certain points may be chosen to represent the views of users of particular footpaths and bridleways;</i></li> <li>2. <i>Specific viewpoints, chosen because they are key and sometimes promoted viewpoints within the landscape, including for example specific local visitor attractions, viewpoints in areas of particularly noteworthy visual and/or recreational amenity such as landscapes with statutory landscape designations, or viewpoints with particular cultural landscape associations;</i></li> <li>3. <i>Illustrative viewpoints, chosen specifically to demonstrate a particular effect or specific issue, for example, restricted visibility at certain locations."</i></li> </ol> <p>The locations of both representative and illustrative viewpoints were initially identified through Zone of Theoretical Visibility (ZTV) analysis and observations undertaken in the field by a Chartered Member of the Landscape Institute (CMLI). The rationale for selecting viewpoints as 'representative' or 'illustrative' was based upon the above criteria from paragraph 6.19 of GLVIA3 and paragraphs 1.1.47 to 1.1.52 of the LVIA methodology [APP-055].</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>noted that the third paragraph of page 4 of 7 of the Applicant's letters to the authorities states that "illustrative views will be identified during the assessment process to illustrate and describe particular points made within the assessment. These may include locations outside the study area to illustrate the nature of visibility, if necessary." Please provide further justification for the locations of illustrative viewpoints selected and explain the difference between the terms 'representative' and 'illustrative' viewpoints in this context.</p>	<p>The submission LVIA <b>[APP-036]</b> includes 28 no. representative and illustrative viewpoints which were identified and agreed through consultation with LCC, RCC and SKDC as submitted within Appendix 6.6 <b>[AS-001]</b> and the letter in receipt from AAH Consultants on behalf of LCC on 5<sup>th</sup> May 2022. The representative and illustrative viewpoints are considered to provide a proportionate selection and range of views at different distances and directions from the Order limits.</p> <p>The decision to include the viewpoint as either 'representative' or 'illustrative' was a matter of professional judgement based upon the above criteria from GLVIA3. However, notwithstanding this point, it should be noted that the assessments within this LVIA are not in any event restricted to these representative or illustrative viewpoints. The overall visual assessments for representative and illustrative viewpoints are undertaken within the relevant Visual Receptor Groups (VRGs) as set out in paragraphs 6.5.53 to 6.5.77 of the LVIA <b>[APP-036]</b>.</p>
Q8.0.4	The Applicant	<p>Paragraph 6.5.46 of the ES [APP-036] states that photomontages, showing the Proposed Development at Years 1 and 15 of operation, have been prepared for representative viewpoints 1, 2, 4, 8 and 11. Please provide additional photomontages of the Proposed Development from Field no. 35, approximately 50m north of VP06B [APP-138], as well as from any other locations which would aid the ExA's understanding of the likely visual impact of the Proposed Development once operational.</p>	<p>As requested by the ExA, an additional photomontage from within Field No. 35 approximately 50 metres to the north of Viewpoint 6B, has been submitted at <b>Appendix N</b> for Deadline 2. The additional visualisation has been submitted as Figure 6.10.F, Photomontage F and has been digitally modelled during year 1 and 15 of operation to show the effects of the Proposed Development along bridleway BrAW/1/1 and the proposed mitigation. As for the previous visualisations, Figure 6.10.F, Photomontage F, will be provided in accordance with the Landscape Institute's Technical Guidance Note 06/19 <i>Visual representation of development proposals</i>, Type 3 specification. The visualisations provided within Figure 6.10.A – 6.10.E <b>[APP-168 to APP-172]</b> are considered to illustrate the key landscape and visual effects in the surroundings of the Order Limits. The assessments within the LVIA are informed by the visualisations although not restricted to them. The submitted visualisations are illustrative and the Applicant would recommend these are reviewed during the site inspections by the Examining Authority to aid the understanding of the local context.</p>
Q8.0.5	Lincolnshire County Council, Rutland County Council and	Question not for The Applicant	

ExQ1	Respondent	Question	Applicant's Response
	South Kesteven District Council		
Q8.0.6	The Applicant	Figure 6.4 of the ES [APP-136] shows the local Landscape Character Areas (LCA). The colours used make this figure difficult to understand, particular for those with any degree of colour blindness. Please provide a revised Figure 6.4 using a more easily distinguishable range of colours, along with clear notation.	An update to Figure 6.4: Local Landscape Character Areas [APP-136] including clear notations for each of the character areas will be submitted to the Examination Library to aid legibility for people with colour blindness.
Q8.0.7	The Applicant	Paragraph 6.3.1 of the ES [APP-136] notes, under Baseline Conditions, that the Order limits comprise gently undulating arable land.  Please explain in further detail how the LVIA has taken the undulating nature of the site into account, including in terms of situations where the PV arrays may be more prominent on a sloping site.	Figure 6.1 [APP-133] illustrates the topography of the LVIA study area whilst Figure 6.7 [APP-138] illustrates the theoretical visibility of the Proposed Development based on the topography of the area along with vegetation. This informed the study area for the assessment as well as the selection of viewpoints which then formed the basis of assessment. Chapter 6: Landscape and Visual [APP-036] utilises a range of illustrative, representative and photomontage images to illustrate the topography of the area and how the Proposed Development would site within the landscape.  This informs the description of potential visual effects to identified visual receptor groups with observation made on topography where applicable, including where the Proposed Development may be more prominent or hidden by topography.
Q8.0.8	The Applicant	Paragraph 6.3.37 of the ES [APP-036] refers to the Lincolnshire Historic Landscape Characterisation (LHLC) informing the baseline study of the LVIA. Paragraph 8.2.33 of Chapter 8 (Cultural Heritage) [APP-038] also refers to the Leicestershire, Leicester and Rutland Historic Landscape Characterisation but not the LHLC.  a) Should both these documents be used in the assessments carried out for both the landscape and	The Lincolnshire Historic Landscape Characterisation (LHLC) Project was included within baseline study of the LVIA in response to a consultation request from LCC. The Leicestershire, Leicester and Rutland Historic Landscape Characterisation Project (LLR HLC) was not requested at scoping stage for the LVIA therefore it was not included within the baseline condition assessment.  In response to the questions:  a) Yes, both documents should be used to inform the baseline assessments of the LVIA and cultural heritage impacts.  b) A summary of LLR HLC in relation to the LVIA is included below. It is not considered necessary to provide an update to the LVIA for the reasons set out below.

ExQ1	Respondent	Question	Applicant's Response
		<p>visual impacts and the cultural heritage impacts?</p> <p>b) Please update both assessments accordingly. If either document is not relevant to either assessment then please explain why?</p>	<p>The purpose of the LLR HLC is to inform changes to land use and management as well as planning, conservation and historic environment services. However, there are no additional specific sensitivity assessments or judgements provided within the LLR HLC. The Solar PV Site and Onsite Substation are located within the following Broad Attribute Types and specific Historic Landscape Character Types:</p> <ul style="list-style-type: none"> <li>• Fields and Enclosed Land / Very Large Post War Fields (FIE-18) covering the eastern area of the Solar PV Site and Onsite Substation, described as:             <ul style="list-style-type: none"> <li>- 'Very large fields, over 8.1 ha and often significantly larger, created since the publication of the 1st Ed, 6" OS Map. In most cases this will be the result of Post-War agricultural improvements intended to meet the requirements of intensive arable cultivation.'</li> </ul> </li> <li>• Fields and Enclosed Land / Planned Enclosure (FIE-13) covering the north-western area of the Solar PV Site, described as:             <ul style="list-style-type: none"> <li>- 'Either small or large enclosures with a predominately straight boundary morphology giving a geometric, planned appearance. Laid out by surveyors these field patterns are the result of later enclosure during the 18th and 19th centuries. Included in the character type are commons enclosed by Act of Parliament.'</li> </ul> </li> <li>• Woodland / Other Plantations (WDL-33) covering the small woodland blocks within the Order Limits, described as:             <ul style="list-style-type: none"> <li>- 'Woods with no Forest Commission as coniferous. This is usually because they are less than 2ha in size or identified as having either been felled or containing young trees. Here straight boundary morphology or the woods name will suggest plantation at some point during the 19th or 20th century.'</li> </ul> </li> </ul> <p>These characteristics identified within the LLR HLC are broadly consistent with the other desk-based assessment and field observations regarding local landscape character value as outlined within paragraphs 6.3.71 to 6.3.71 of the LVIA [APP-036]. The LLR HLC does not change the overall findings with regards to the sensitivity of the Landscape Character Areas (LCAs) assessed within paragraphs 6.5.27 and 6.5.34 which are informed by the baseline conditions</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>study within Section 6.3 of the LVIA [APP-036]. The findings of the LVIA remain unchanged.</p> <p>Regarding the Cultural Heritage Assessment, the Lincolnshire HLC was accessed, reviewed and incorporated within the reporting. However, a specific reference to this source was inadvertently omitted from the ES Chapter [APP-038] and was also omitted from the Cultural Heritage Impact Assessment. The broad character area represented within the Order limits within Lincolnshire (Kesteven Parklands) was assessed in detail and the nature of the character mirrors that found within Rutland (i.e., the Very Large Post War Fields and occasional remnants of Planned Enclosure). The assessment and overall conclusions reported at 8.2.33 of the ES Chapter [APP-038] and at 3.100 and 4.32 of the Cultural Heritage Impact Assessment [APP-068] requires no updates or changes.</p>
Q8.0.9	The Applicant	<p>Paragraph 6.4.2 of the ES [APP-036], in considering 'embedded mitigation', states that compared to other technologies, solar photovoltaic (PV) installations can be easily and economically decommissioned and removed from the landscape at the end of their operational lifespan. Though, paragraph 6.5.10 subsequently acknowledges that during the operational phase, the Proposed Development would result in permanent effects.</p> <p>Given that there is no time limit within the dDCO for the operational period of the Proposed Development, what weight if any can be given to paragraph 6.4.2 in the assessment of landscape and visual effects?</p>	<p>Weight can be afforded to paragraph 6.4.2 of the LVIA. The weight attributed is a matter of the overall planning balance judgement. Although no timescale has been given for the decommissioning stage and the effects during operation are accordingly considered to be permanent in nature, as recognised at paragraph 3.10.59 of the draft revised NPS EN-3, the solar PV installation could be dismantled relatively easily and economically at the end of its operational lifespan. Its impacts are therefore reversible at the decommissioning stage.</p> <p>It is the case that technology has an operational lifespan, and it is noted that the definition of maintain in the draft DCO [PDA-003] means that the Applicant cannot replace the Proposed Development wholesale. As such, it will come to an end, but, given the possibilities of technological enhancement, a time limit has not been imposed. Therefore, while a time limited consent is not sought, it is anticipated that the Proposed Development will be decommissioned at some point in the future. Whilst the LVIA has assessed the operational impacts of the development as permanent effects, it is the case that any impacts arising from the Proposed Development related to the use of the land are considered to be reversible, pursuant to the management plans secured by the DCO Application. It is also noted that the conclusion of the operational phase of the development will hold for the lifetime of the development, whatever that may be, given the requirements to implement the mitigation measures set out in the detailed management plans in the draft DCO. If they were not continued to be implemented, then that would be a breach of the draft DCO. The draft DCO has</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>been amended at Deadline 2 to make it clear that the measures in the LEMP must be implemented and maintained in accordance with the approved detailed LEMP.</p> <p>As such, paragraphs 6.4.2 and 6.5.10 of the LVIA need to be taken together – it is a project that will eventually have to be removed; and whilst it is not, its impacts are mitigated.</p>
Q8.0.10	The Applicant	<p>Paragraph 6.5.2 of the ES [APP-036] lists the key components that would likely give rise to landscape and visual effects to varying degrees. Drawing on the development parameters and the project description, along with the illustrative material provided and the likely design and form of each component (including but not limited to the onsite substation and ancillary buildings), provide further narrative and explanation for how the likely design and appearance of the different components of the Proposed Development have been taken into account in the landscape and visual assessment.</p>	<p>The LVIA [APP-036] sets out the key components of the Proposed Development and has taken a maximum parameters based approach in terms of their assessment, which includes a maximum height of 13m and maximum footprint for the Onsite Substation.</p> <p>General comment is made throughout the LVIA for these key components where relevant as to the likely visibility/prominence of these specific elements. However, given that detailed design details are not yet fixed it would not be appropriate for the LVIA to assess a specific design of these key components.</p> <p>However, the Design Guidance set out within the Design and Access Statement (DAS) [APP-204] that provides a framework for detailed design responses (e.g., colour of facades) that reduce adverse impacts of key components have been considered as part of the LVIA. The assessment of 'design, form and appearance' can only therefore be undertaken on the basis that these measures will be applied.</p> <p>Importantly, the illustrative material should not be considered to form 'the Proposed Development' – they are illustrations of what the various parts of Proposed Development could look like, but not what they will actually look like. That is guided by the parameters and application of Design Guidance, which is what has been taken into account in the assessment.</p> <p>It is also noted that the LPA will be able to consider the choices made as to layout and external appearance when considering applications for the discharge of Requirement 6 of the DCO.</p>
Q8.0.11	The Applicant	<p>The Design and Access Statement [APP-204] sets out the need for good design and includes Design Guidance that would be used to inform the</p>	<p>a) Page 51 of the Design and Access Statement [APP-204] summarises the design response in relation to siting the Onsite Substation to minimise the potential impact in may have. The Onsite substation and ancillary buildings are contained within Field 19 which benefits from a strong boundary network</p>



ExQ1	Respondent	Question	Applicant's Response
		<p>detailed design process for different components of the Proposed Development.</p> <p>a) Provide further explanation of how the onsite substation and ancillary buildings (taking account of the different components within that part of the Proposed Development) would be capable of being laid out and designed in order to promote the best possible aesthetic and visual appearance and to minimise its landscape and visual effects.</p> <p>b) Explain in further detail how the proposed landscaping strategy has been designed in order to seek to minimise the effects of the onsite substation and ancillary buildings.</p> <p>c) What bearing would the proposed colour and any reflectivity of the solar panels have on their landscape and visual impact?</p> <p>d) Provide a summary of how the location and final appearance of the proposed invertors, transformers and switchgears (including any associated solar stations/storage containers) would be determined in order to minimise their landscape and visual effects?</p> <p>e) Would there be any differences between the dDCO controls for solar stations and storage containers (noting that Design Guidance PE.4.2 of the Design and Access Statement states that there</p>	<p>of vegetation which would be retained. Additional planting is also proposed to provide visual screening. The layout, configuration and orientation of the Onsite Substation is a matter for detailed design. As this is a detailed design matter in the LVIA photomontages <b>[APP-168 to 172]</b> it is modelled as a level compound based on the highest point in Field 19 as a worst case scenario. The design of the façade colours of ancillary buildings would be sensitive to the visual context as directed by Design Guidance PL3.6 set out in the Design and Access Statement <b>[APP-204]</b> to minimise its landscape and visual effects. It is also noted that the LPA will be able to consider the choices made as to layout and external appearance when considering applications for the discharge of Requirement 6 of the DCO.</p> <p>b) All existing perimeter vegetation to Field 19 would be retained. In addition, new tree planting as illustrated in the Green Infrastructure Strategy Plan <b>[APP-174]</b> along with the growing out of existing vegetation along the West Glen River, East Coast Mainline Railway and field boundary hedgerows would provide additional vegetative screening. The area around the Onsite Substation would be managed as tussocky grassland with wildflowers enhancing biodiversity.</p> <p>c) Solar panels are design to absorb light and not reflect it. Frames are also commonly of a rough matt finish and not glossy or reflective. Design Guidance PL3.12 within the Design and Access Statement <b>[APP-204]</b> directs that solar PV modules should be dark in colour and PL3.12 that mounting structures should also have a rough matt finish. This design approach assists in reducing potential landscape and visual effects by making the Proposed Development less prominent in views and aiding its assimilation into the landscape context. Minor variations in the tone of dark/natural colours would not have a substantial influence on the impact, the key being they are representative of the landscape context. The LVIA <b>[APP-036]</b> is informed by professional experience where Solar PV arrays appear visually as dark bodies of water (such as a lake) when viewed within the landscape. A glint and glare study has been submitted as part of the application <b>[APP-104]</b> which confirms there would be not significant effects arising from glint and glare once mitigation planting has been implemented.</p> <p>d) Given the flexibility required, the location of Solar Stations is not fixed at this stage. However, the Design and Access Statement (DAS) <b>[APP-204]</b> sets out the Project Principles and Design Guidance in relation to the location of these</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>will be a 50m offset of solar stations from Public Rights of Way). Should the Design Guidance be amended to also refer to storage containers in this respect?</p>	<p>in relation to sensitive receptors (PE4.2/PE.4.3/PL3.3/PL3.14) and their appearance (PL3.6/PL3.12) to ensure that any potential impacts are minimised. It is intended the final layout and colour treatments for facades for ancillary buildings and solar stations (inc. storage containers) would be agreed with the LPA pursuant to Requirement 6 of the draft DCO.</p> <p>e) The controls for storage containers would be same as for Solar Stations. Paragraph 5.4.33 of the Project Description <b>[APP-035]</b> confirms that solar stations and storage containers would be co-located as secured within Appendix 5.1 <b>[AS-012]</b>. The Applicant has updated the DAS to clarify this.</p>
Q8.0.12	The Applicant	<p>Paragraph 6.5.17 of the ES <b>[APP-036]</b>, discussing LCAs, states that the assessment of landscape effects particularly focuses on the Rutland LCA and the South Kesteven LCA as agreed through consultation with the LPAs. The assessment goes on to only assess the likely significant effects on these two LCAs with no assessment of landscape effects on other landscape receptors included in the Baseline Conditions such as National Character Areas or Landscape Features. Evidence of agreement with consultees is not provided in Appendix 6.3 (Landscape and Visual Consultation Summary) of the ES <b>[APP-056]</b>.</p> <p>a) Provide evidence of the agreement reached with relevant consultees on the scope of this assessment.</p> <p>b) Explain the reasoning as to why it was considered unnecessary to assess effects on National Character Areas and Landscape Features.</p>	<p>Paragraph 6.5.17 states that <i>"this LVIA particularly focuses on the Rutland Landscape Character Assessment (2003) [Ref 65], the South Kesteven Landscape Character Assessment (2007) [Ref 66] as agreed through consultation with the LPA's."</i></p> <p>In response to the questions:</p> <p>a) The agreement to focus on the Local Landscape Character Areas (LLCAs) was established through the Scoping Report <b>[APP-049]</b> and the Scoping Opinion <b>[APP-50]</b>. Paragraph 7.3.11 of the Scoping Report <b>[APP-049]</b> notes that <i>"the framework for the assessment of effects on landscape character will be relevant local landscape character areas as identified within local landscape character assessments, informed by other sources listed above; relevant policy and guidance documents; and field observations."</i> ID 3.1.3 of the Scoping Opinion <b>[APP-50]</b> makes no reference to the inclusion of NCAs in response to the Scoping Report <b>[APP-049]</b> and the LPAs did not suggest otherwise in the response to the Scoping.</p> <p>b) The reasoning for not assessing the NCAs is provided within paragraph 6.3.28 of the LVIA <b>[APP-036]</b>. Whilst the NCAs provide a national spatial framework of landscape character, the scale of mapping and information is of limited use as a strategic planning tool at the local scale. Given the strategic scale of NCAs, any effect on them would not be significant as a result of the Proposed Development. Due to the existence of more detailed Landscape Character Assessments (LCAs) undertaken by the local authorities, the NCAs are not further assessed within the LVIA. This is common practice where a more detailed LCA is in place to inform the assessments within the LVIA. The effects on landscape features are assessed within paragraphs 6.5.12 to 6.5.16 of the LVIA. The effects on physical landscape features form a</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>component of the assessments on landscape character within the following paragraphs 6.5.17 to 6.5.37 of the LVIA <b>[APP-036]</b>.</p>
Q8.0.13	The Applicant	<p>The assessment of likely significant effects only considers effects on Visual Receptor Groups and Key Transport Groups, in addition to residential receptors within the Residential Visual Amenity Assessment [APP-057]. Although the "scale of effect" for representative viewpoints is provided in Table 6-2 [APP-036] this indicates small, medium or large-scale effects and likely significant effects are not reported. Furthermore, no assessment of illustrative viewpoints has been provided. Please clarify the scope of the assessment of visual effects and whether there is potential for likely significant effects to occur on representative or illustrative viewpoints identified within the Baseline Conditions.</p>	<p>The representative and illustrative viewpoints identified within the LVIA <b>[APP-036]</b> encompasses a range of different receptor types often from a single location, such as from walkers, equestrians, cyclists or motorists on local roads, etc. The sensitivity of the viewpoint therefore varies depending on the type of receptor being represented. Therefore, the scale of effect is assessed for the representative viewpoints and the significance of effects is covered within the relevant Visual Receptor Group (VRG).</p> <p>Table 6.1 of the LVIA <b>[APP-036]</b> identifies which of the representative and illustrative viewpoints lies within the relevant VRGs. The LVIA concludes that significant visual effects would occur for VRG 1 which encompasses representative viewpoints VP5, VP7, VP18, VP20 and illustrative viewpoints C, D, and G.</p>
Q8.0.14	The Applicant	<p>The summary of landscape effects in paragraph 6.5.31 of the ES [APP-036] on the Rutland Plateau Clay Woodlands LCA and in paragraph 6.5.37 on the Kesteven Uplands LCA, state that the Proposed Development would be "small scale". Please explain the term "small scale" in this context.</p>	<p>Paragraphs 6.5.31 and 6.5.37 of the LVIA <b>[APP-036]</b> considers the effects of the Proposed Development in overall terms on the Rutland Plateau Clay Woodlands LCA (Dii) and the Kesteven Uplands LCA. To clarify, this assessment is based upon the effect on the geographical scale of the LCA which is proportionally greater than the Zone of Visual Influence (ZVI). The small-scale effect on landscape character considers the overall geographical area of the LCAs which would be affected by the Proposed Development in its location in the context of those LCAs.</p>
Q8.0.15	The Applicant	<p>The Residential Visual Amenity Assessment in Appendix 6.4 of the ES [APP-057] concludes that the 'Residential Visual Amenity Threshold'</p>	<p>a) The methodology for the RVAA is set out in Section 1.2 of the RVAA <b>[APP-057]</b> which has been undertaken in accordance with best practice guidance produced by the Landscape Institute and discussed with LPA representatives on an accompanied site visit on 5<sup>th</sup> October. The judgement as to whether the Residential Visual Amenity Threshold is breached is ultimately a subjective professional judgement based on evidence in terms of the baseline visual</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>would not be exceeded for any residential property.</p> <p>a) Please explain in further detail how a professional judgement is reached on whether or not the 'Residential Visual Amenity Threshold' is exceeded?</p> <p>b) Within Table 1 of the Assessment, no property is recorded as having a greater than 'Moderate' significance of effect' in Year One of operation, with North Lodge Farm, North Lodge Farm Bungalow and Wood Farm Cottages being subject to a moderate significance of effect. In the event that the significance of effect for any property was found to be greater than moderate (and therefore 'significant' using the assessment methodology in Appendix 6.3 [APP-055]) would this amount to the Residential Visual Amenity Threshold being exceeded?</p>	<p>amenity and the likely visual change to it as a result of the Proposed Development (inclusive of the mitigation measures proposed). This includes an understanding of the aspect of the dwelling (and domestic garden if applicable) and the likely views from it. It should be noted the test is not whether the Proposed Development would be visible or not but whether it would be visible to the extent that it results in being 'overwhelming/overbearing' or is 'overly intrusive' on the property. In this instance, given the Design Guidance adopted, and mitigation as part of the Green Infrastructure Strategy, it is not been necessary to move to Step 4 of the RVAA methodology and undertake a detailed assessment of individual properties as no 'overwhelming' or 'overly intrusive' effects to dwellings is concluded.</p> <p>b) The judgement as to whether the Residential Visual Amenity Threshold is breached is separate to its assessment as to its significance, but the two are interconnected. Whilst it is likely that higher residential visual amenity impacts of greater significance are more likely to result in the threshold being breached it does not automatically follow that a significant residential visual amenity impact results in an overwhelming or overly intrusive RVAA effect. Consequently, assessment within a RVAA could be found to be significant (i.e., greater than moderate) but not result in a breach of the RVAA threshold.</p>
Q8.0.16	The Applicant	<p>Chapter 16 of the ES (Interactions of effects and summary of cumulative effects) [APP-046] sets out in-combination effects. In-combination effects between landscape and visual effects and noise and vibration has been assessed for Public Rights of Way users. Can the Applicant confirm whether there is potential for other in-combination effects to occur between landscape and visual effects and other potential impacts or other landscape</p>	<p>Effect interactions are only considered where there is potential for likely significant effects. Effect interactions between landscape and visual effects and noise and vibration were assessed in Chapter 16 of the Environmental Statement [APP-046] for PRoW users because it was considered that there was potential for a significant adverse effect resulting from the interaction of the visual effects and noise disturbance effects on PRoW users.</p> <p>In relation to landscape and noise effect interactions on occupiers of residential properties, the noise chapter has concluded that no significant effects are anticipated to arise from the Proposed Development to humans, including within their residential properties; and so, could not combine with any landscape and visual significant impacts for humans. Within residential properties, it is noted that the Residential Visual Amenity Assessment did not identify any breach of the</p>

ExQ1	Respondent	Question	Applicant's Response
		and visual receptors (including effects on the occupiers of residential properties)?	Residential Visual Amenity Threshold from the Proposed Development. Similarly, to noise, the air quality and transport assessments do not identify any significant effects that could combine with landscape and visual impacts.
Q8.0.17	The Applicant and/or Rutland County Council	<p>Paragraph 6.5.106 states that the potential for cumulative landscape and visual effects are considered to be limited in scope to an approved warehouse development adjacent to Meadow Park Industrial Estate in Essendine (Ref. 2021/0379/MAF).</p> <p>a) Please provide a location plan, site layout plan and any relevant elevation plans or other illustrative material for this approved development.</p> <p>b) Set out details of the date of approval, time period of the planning permission and any relevant details of implantation for this approved development.</p>	<p>In response to the questions:</p> <ul style="list-style-type: none"> <li>a. Further details regarding (a) site location, site layout elevation plan and (b) approval dates and time periods for the planning permission for the approved warehouse development adjacent to Meadow Park Industrial Estate in Essendine (Ref. 2021/0379/MAF) have been submitted at <b>Appendix O</b> for Deadline 2.</li> <li>b. Planning permission was granted 24 June 2021 – the developer has three years from the date of the grant of planning permission to begin the development.</li> </ul>
Q8.0.18	The Applicant, Rutland County Council and South Kesteven District Council	Requirement 7 (Landscape and Ecology Management Plan (LEMP)) of the dDCO [APP-017] includes a five years maintenance period which is generally reflected in the Management Programme Schedule (Appendix 1) of the outline LEMP. Paragraph 6.2.5 of the ES [APP-036] explains that the LVIA assesses the landscape and visual effects at years 1 and 15 of operation to account for the visual screening provided by the proposed planting over time. It recognises that the exact timescales for visual screening can never be guaranteed as growth rates would be variable	<p>The oLEMP [APP-210] has been updated in at para 2.1.2 to clarify that maintenance will be undertaken for the duration of the operation of the Proposed Development.</p> <p>Appendix 1 of the oLEMP summarises the maintenance requirements that are required every year and every 5 years for the duration of the Proposed Development operation, with further details to be set out in the detailed LEMPs.</p> <p>Paragraph 6.2.2 of the oLEMP states that monitoring of the LEMP(s) will be undertaken every 5 years following completion of construction with a report of that monitoring to be submitted to the LPAs. This has been expanded in the updated oLEMP at paragraph 6.2.3 submitted at Deadline 2 to set out that replacement planting for planting that has failed to establish will form part of the remedial actions that will be taken during that 5 year period. This would allow for fixes to take place if growth rates are not being met.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>depending on a number of factors. Is the proposed maintenance period of five years appropriate, taking into account any benefits arising from the proposed landscaping in mitigating effects? If an alternative maintenance period is considered necessary, provide justification for this.</p>	
Q8.0.19	The Applicant	<p>Please provide copies, for inclusion into the Examination Library of:</p> <ul style="list-style-type: none"> <li>a) Ref 6-4: Historic England and the Lincolnshire Wolds Countryside Service (2001), Lincolnshire Historic Landscape Characterisation Project;</li> <li>b) Ref 6-5: David Tyldesley and Associates (2003), The Landscape Character Assessment of Rutland;</li> <li>c) Ref 6-6: FPCR Environment and Design Ltd (2007), South Kesteven Landscape Character Assessment; and</li> <li>d) Ref 8-8 (Cultural Heritage chapter): Leicestershire County Council 2019, The Leicestershire, Leicester and Rutland Historic Landscape Characterisation Project</li> </ul>	<p>Copies of these documents in digital pdf format has been submitted at <b>Appendix P</b> for Deadline 2.</p>

## Topic 9.0 Noise and Vibration

ExQ1	Respondent	Question	Applicant's Response
Q9.0.1	The Applicant	<p>Paragraph 1.1.24 of Appendix 10.2 [APP-078] of the Environmental Statement (ES) considers a level of 55dB LAeq,1h as a threshold of significant noise effects for Public Rights of Way (ProW) receptors for the operational phase of the Proposed Development (based on the guidance of BS 8233). Please provide further explanation of this threshold for significance and the criteria used in professional judgement to assess the construction, operation and decommissioning effects on recreational users of any PRoW (including the proposed new PRoW)? This should include the consideration given to existing background noise levels, the character of existing noise and the likely expectations of recreational users of the ProW within the countryside.</p>	<p>The derivation of the 55 dB operational noise significance criteria considered for PRoWs was detailed in paragraph 1.1.27-1.1.30 of Appendix 10.1 [APP-077]. This references relevant guidance on external amenity uses (which is limited) and broader guidance for context such as that of BS 8233. This also explains that the transient nature of PRoW use means they would normally be considered less noise-sensitive than public amenity spaces such as parks, which in turn are considered less sensitive than private amenity areas (i.e., gardens and patios) which were assessed using more stringent criteria such as those derived from BS 4142 (paragraphs 1.1.18-1.1.22 in Appendix 10.2 of the ES [APP-078]).</p> <p>A level of below 55dB would also still enable reliable speech communication for PRoW users even during the brief period of time in which they would experience these noise levels, based on the guidance of BS 8233.</p> <p>Figure 10.5.6 in Appendix 10.5 of the ES [APP-081] illustrates that even worst-case levels of operational noise (during peak loads) on PRoWs would be substantially lower than the 55 dB threshold in most instances. In cases where the maximum levels predicted on some PRoWs approach the 55 dB threshold, this would only be experienced in very limited portions of the PRoWs, when passing at the closest point to the Solar Stations.</p> <p>Sections of local PRoWs in proximity to A-roads in the area may already experience elevated noise levels from existing road traffic, whereas other PRoW sections experience quieter ambient noise levels. Operational noise from the electrical plant could be noticeable in these quieter areas and form an additional part of the soundscape for PRoW users (in addition to other non-natural sources of noise such as road traffic, train pass-bys or agricultural activities which are already part of the existing background noise). But this experience would be transient and limited to a short part of the PRoW in proximity to the Proposed Development and therefore considered unlikely to substantially affect the use and enjoyment of the PRoWs.</p> <p>For the assessment of construction and decommission effects, the PRoW receptors were considered as having medium sensitivity to noise or vibration, which is similar to what would be considered for public amenity areas such as parks, but as discussed above, the PRoW are used on a more transient basis,</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>which means that this is considered to represent a precautionary approach to the assessment (see paragraph 1.1.12 in Appendix 10.2 of the ES <b>[APP-078]</b>).</p>
Q9.0.2	The Applicant	<p>Tables 12 and 15 of Appendix 10.2 <b>[APP-078]</b> of the ES provide night-time assessment results. However, the third column in each is titled 'Typical day background noise level (dB)'. For clarification, should these columns be titled 'Typical night-time background noise level (dB)? Please amend as appropriate.</p>	<p>There are no Tables 12 and 15 in Appendix 10.2 <b>[APP-078]</b>, however, it looks like this question refers to tables in Appendix 10.5 of the ES <b>[APP-081]</b>.</p> <p>There is a typographical error in Tables 12 and 15 of Appendix 10.5 of the ES: the title of the second column of both these tables should indeed be 'Typical night-time background noise level (dB)'. All other values in these tables are correct.</p>
Q9.0.3	The Applicant	<p>Paragraph 1.1.20 of Appendix 10.2 (Noise and Vibration Methodology) <b>[APP-078]</b> of the ES refers to an external free field noise rating level criterion of <math>L_{ar,Tr}</math> 35 dB where background levels are low. It notes that BS 8233 advises average internal noise levels of 30dB for sleeping at night in bedrooms. For those residential properties potentially affected by the Proposed Development (including Wood Farm, Wood Farm Cottages, North Lodge Farm, North Lodge House, Banthorpe Lodge and Glen Lodge), explain in further detail how the assessment (including for construction and operation) has taken account of potential noise effects, including within the inside of rooms where windows might be left open at night-time during warmer weather.</p>	<p>As discussed in footnote 1 to paragraph 1.1.20 of Appendix 10.2 of the ES <b>[APP-078]</b>, a window left open during warm weather will still provide a noise reduction from outside to inside of at least 10 db. This means that an external operational rated noise level of no more than 35 dB would result in levels of 25 dB or lower within bedrooms and therefore clearly below levels of 30 dB which are recommended in British Standard BS 8233 to provide good conditions for sleep. The use of 'rated' noise levels accounts for the character of the noise and actual noise levels would be lower.</p> <p>This is particularly the case as the PV Arrays and Onsite Substation and associated electrical infrastructure is obviously unlikely to operate during the night-time for most of the year. Even during the summer months, where daylight periods may extend to early morning periods (05:00 to 07:00) and evening periods (18:00 to 23:00), the plant is likely to operate at reduced duty (due to reduced solar and heating loads). In practice, controlling day-time noise levels from the plant to rated levels of 35 dB means that operational noise levels should be lower than this during night-time periods and, as stated above, fall below the threshold considered to be good conditions for sleep within bedroom.</p> <p>Furthermore, as explained in paragraph 10.1.18 of Appendix 10.5 of the ES <b>[APP-081]</b>, 'rated' noise levels include a correction of +4 dB to account for the potential character of the noise. This means that actual noise levels would be even lower than 25 dB(A) in bedrooms even under worst-case noise assumptions.</p>



ExQ1	Respondent	Question	Applicant's Response
			<p>Construction noise would not normally be experienced at night due to the restriction on working hours. The exception would be for instances of Horizontal Directional Drilling (HDD) work, which are considered below in Q9.0.9. When drilling occurs, this would be controlled not to exceed levels of 45dB <math>L_{Aeq}</math> externally at the closest properties. Accounting as above for a loss of at least 10 dB through an opened window during warm weather, this would correspond to levels of 35dB or lower within bedrooms. According to BS 8233 guidance, a level of 35 dB(A) within bedrooms would still provide 'reasonable' sleeping conditions. On this basis and considering the limited instances and duration of the HDD works which may be required (please see the answer to Q9.0.9 below) and the management mitigation measures that would be put in place, it is considered that the noise effects arising from construction would not be significant.</p>
Q9.0.4	The Applicant	<p>Paragraph 10.8.19 of the ES [APP-040] concludes that there would be a low magnitude of impact on balance from the proposed Onsite Substation.</p> <p>a) As the precise details of the design and specific components of the Onsite Substation are not yet known, and considering the 'on balance' assessment, what level of certainty is there that potentially low level yet still potentially annoying levels of noise would not result for local residential properties, including at night-time and when windows might be open?</p> <p>b) Is it possible for further design related mitigation measures to be imposed to minimise any risk of any adverse effects from noise from the Onsite Substation?</p>	<p>The 'on balance' of paragraph 10.8.19 of Chapter 10 of the ES [APP-040] refers to the assessment of operational noise in line with the methodology of BS 4142 (please see paragraph 1.1.22 of Appendix 10.1 [APP-077]) which requires consideration of not only the difference between predicted noise levels and the background levels, but also of several contextual factors. Although predicted worst-case rated noise levels from the Onsite Substation (33dB) are potentially 7dB above the typical lowest night-time background noise levels (26dB) at the closest properties (North Lodge Farm and House), the following contextual factors have been taken into account as part of the ES assessment:</p> <ul style="list-style-type: none"> <li>• The character of the noise is likely to have a clear, tonal, low-frequency component (from the main transformer), and this has been taken into account in the addition of a +4dB penalty;</li> <li>• As noted in relation to Q9.0.3, during most night-time periods, the PV Arrays and Onsite Substation would either not be operating or would be operating at a substantially reduced duty, due to the absence of sunshine and likely reduced temperatures (and therefore reduced cooling loads). Therefore, in practice, the Onsite Substation is unlikely to emit the predicted worst-case rated noise levels during most night-time periods.</li> <li>• The typical lowest night-time background noise levels (26dB) derived in accordance with BS 4142 guidance are more representative of the quietest periods of the night, whereas, during early morning periods in the summer (05:00-07:00), where some daylight would be experienced and the PV Arrays and Onsite Substation are more likely to operate, increased</li> </ul>

ExQ1	Respondent	Question	Applicant's Response
			<p>background noise levels closer to 30 dB <math>L_{A90}</math> are also more likely (as is apparent in the charts in Annex B of Appendix 10.4 <b>[APP-080]</b>);</p> <ul style="list-style-type: none"> <li>The absolute level of the noise from the Onsite Substation is very low, which is particularly relevant at night. Predicted levels of 29 dB <math>L_{Aeq}</math> would correspond to noise levels of 19dB(A) or lower in bedrooms, assuming a loss of at least 10 dB through an opened window. These levels are very low even in relation to the stringent criteria applicable to assessing the noise conditions for sleep (please also see Q9.0.3 above). Even with the addition of a +4 dB for the tonal character of the noise (paragraph 10.8.19 of Chapter 10 of the ES <b>[APP-040]</b>), the resulting rated levels of 33 dB is clearly below a level of 35dB which is considered low in absolute terms (paragraph 1.1.20 of Appendix 10.2 <b>[APP-078]</b>)</li> </ul> <p>The use of 'on balance' therefore does not refer to a lack of certainty in the assessment but a consideration in the round of different factors requiring consideration in accordance with the BS 4142 methodology: a low magnitude of impact is therefore concluded on this basis.</p> <p>Although the final equipment specifications for the Onsite Substation are not known at this stage, the assessment was made on a robust basis (see paragraph 10.1.10 of Appendix 10.5 <b>[APP-081]</b>), with the assumed noise emissions representative of the upper end of the range of noise emissions for the equipment likely to be installed, and no further mitigation measures such as screening or enclosures. The final design and component specification of the Onsite Substation would be controlled through a DCO requirement (paragraph 16 of Schedule 2 of the draft DCO <b>[APP-017]</b>). This requires an operational noise strategy to be prepared by the Applicant and to be submitted and approved by the relevant local authorities. This strategy is to contain details of how the design has incorporated mitigation to ensure the operational noise rating levels set out in the ES have been complied with and no phase of the Proposed Development may become operational until it has been approved by the relevant local authorities. This represents standard practice for such developments and represents a robust control measure for achieving noise levels no higher than those assumed in the ES for the final design.</p>
Q9.0.5	The Applicant	Paragraph 5.11.4 of the National Policy Statement (NPS) EN-1 (and paragraph 5.12.6 of the revised draft NPS for	In accordance with the requirements of NPS EN-1 (and draft EN-3) and application of the relevant BS 4142 methodology, it is necessary for the assessment of operational noise to identify if a potential character in the noise

ExQ1	Respondent	Question	Applicant's Response
		<p>Renewable Energy Infrastructure (EN-3), March 2023) requires that the Applicant's assessment includes the identification of any distinctive tonal, impulsive or low frequency characteristics of noise.</p> <p>a) Please provide a summary, in the clearest possible terms, of how these characteristics have been identified. This may include examples of equivalent sounds sources to provide a guide to all Interested Parties.</p> <p>b) Give the design flexibility sought for particular elements of the proposal, what likelihood is</p>	<p>could occur which would enhance the audibility and therefore the impact of the sources considered. In the absence of final equipment selections, this is done based on experience of similar plant and equipment.</p> <p>Noise from the proposed electrical/mechanical equipment is relatively continuous in nature and is unlikely to have any impulsive characteristics (e.g., bangs, crashes and similar).</p> <p>Some of the equipment may however have a 'tonal' character which means the noise has a distinctive 'hum' or 'whine', although this character may not necessarily be audible at the receptor based on several factors such as the level of the noise and other masking sounds. As an example of a similar source in the area, the existing National Grid Ryhall Substation includes some transformers which may produce a noise of this nature which may be audible in close proximity to it.</p> <p>Transformers (the main source of noise for the Onsite Substation) are known to emit tonal noise at 100 Hz (and multiples thereof) which represents a low-frequency tone. This likely character was identified and taken into account by addition of a penalty of +4 dB which corresponds under guidance provided in BS 4142 to a "clearly perceptible" tone. This was described as a worst-case as it is unlikely that the tone would be more perceptible given the low levels of noise from the Onsite Substation predicted at neighbouring receptors.</p> <p>Paragraph 10.1.18 of Appendix 10.5 of the ES <b>[APP-081]</b> notes that, although the electrical components of solar inverters are also likely to be tonal in nature, noise emissions would likely be dominated by cooling equipment which is normally not tonal in nature. The tonal character of inverters would also be at higher frequencies than for the Onsite Substation transformer (more like a whine or buzz than a hum), which would attenuate more strongly with distance. Nevertheless, a +4 dB tonal penalty was also applied for this equipment as a precautionary measure in the ES assessment.</p> <p>The assessment presented in the ES was therefore robust in this respect, and representative of the nature of the equipment likely to be installed, with a low likelihood that different or more marked characteristics would occur. This assessment is based on standard equipment and guidance and the Applicant sees no reason why non-standard equipment would be used. The operational noise strategy required by the DCO (requirement 16 in the draft DCO <b>[APP-017]</b>) would in any case need to consider these characteristics in the assessment of the</p>

ExQ1	Respondent	Question	Applicant's Response
			final design and component specification for sources of operational noise; and the LPAs in approving the strategy would therefore be able to consider this.
Q9.0.6	The Applicant	<p>The third limb of paragraph 5.11.9 of NPS EN-1 (and paragraph 5.12.17 of the draft NPS EN-1 March 2023) requires that proposals, where possible, contribute to improvements to health and quality of the life through the effective management and control of noise.</p> <p>a) Please summarise how the Proposed Development does this, cross referencing where necessary to existing documents.</p> <p>b) If it has not been possible for the Proposal Development to achieve this then please explain why not.</p>	<p>ES Chapter 10: Noise and Vibration <b>[APP-040]</b> has demonstrated how the noise and vibration effects of the Proposed Development would be controlled and managed effectively through, in summary:</p> <ul style="list-style-type: none"> <li>a) Restriction of working hours for construction activities, and additional restrictions on daily duration of piling works. Specific management and mitigation measures to minimise the impact of out-of-hours HDD works required in specific instances. Communication of noisy works to PRoW users. Implementation of further good practice measures (Best Practical Means) in the CEMP to minimise construction noise as far as reasonably practicable.</li> <li>b) The design of the site includes a separation distance of more than 600 m from the Onsite Substation (Works Area 2) from noise-sensitive residential properties. The central inverter stations were identified as the other main potential source of operational noise: the final design of these components will include a minimum separation distance of 250m and 50m from residential properties and PRoWs respectively to central inverter stations.</li> </ul> <p>These measures mean that the potential generation of noise from the Proposed Development has been controlled to reduce the noise and vibration emissions which could have otherwise arisen, with implications on health and the quality of life for noise-sensitive receptors in the area.</p> <p>Although not assessed in the ES, the current baseline noise environment includes noise from agricultural activities which can impact some of the neighbouring receptors at times. In some areas, the installation of the PV Arrays will lead to reduced levels of agricultural activities and therefore reduced noise impacts at neighbouring receptors from these activities.</p>
Q9.0.7	The Applicant	Paragraph 5.12.6 of the draft NPS EN-1 (March 2023) requires that, where noise impacts are likely to arise from the proposed development, the applicant's assessment includes an assessment of any likely impact on health and well-	The assessment criteria derived in Appendix 10.2 of the ES <b>[APP-078]</b> were determined based on the guidance set out at paragraph 1.1.9 of Appendix 10.1 of the ES <b>[APP-077]</b> which were derived based on consideration of potential health impacts of noise on health and wellbeing. In particular, the thresholds of significance were based on guidance on what would constitute Significant

ExQ1	Respondent	Question	Applicant's Response
		<p>being where appropriate. Submissions have been made by local residents on the potential effects on health and wellbeing. Please explain further how the application has taken this draft policy requirement into consideration?</p>	<p>Observed Adverse Effect Level (SOAEL), based on the nature of the area, in line with national policy on noise. Below the SOAEL, it is not expected that significant adverse effects on health and quality of life would occur. The guidance referenced several British Standards which in turn refer to existing research on these effects and guidelines from the World Health Organization. As no residual significant impacts were identified in the assessment of Chapter 10 of the ES [APP-040], this means that no significant effects on health and wellbeing are expected.</p> <p>Minor adverse residual effects were identified in some cases. Based on the guidance of Planning Practice Guidance [Ref 10-13] quoted in Table 4 of Appendix 10.1 of the ES [APP-077], this may correspond to some small changes in behaviour, attitude or other physiological response effects, as well as in some instances to a small actual or perceived changes in quality of life, but these would be limited and not significant.</p>
Q9.0.8	The Applicant	<p>Paragraph 10.7.1 of the ES [APP-040] states that works likely to generate substantial levels of noise (including earthworks, trench construction and any piling) will be excluded from Saturday afternoons (13:00 to 19:00) along with HGV deliveries and movements. This is also included within the outline Construction Environmental Management Plan [APP-207] but with the caveat 'unless otherwise agreed with the relevant local authority'.</p> <p>a) Please provide a definition of 'substantial levels of noise' with reference as appropriate to the relevant ES methodology.</p> <p>b) Which other construction works would be likely to generate 'substantial levels' of noise?</p> <p>c) In what circumstances might the relevant local authority be likely to</p>	<p>a) "Substantial levels of noise" could be quantified in this context as activities likely to generate more than 45 dB L<sub>Aeq</sub> during evenings, Sundays, Bank Holidays or Saturday afternoons or more than 35dB L<sub>Aeq</sub> at night, corresponding to more than negligible impacts. In practice, the proposed restrictions means that heavy plant, vehicles, or machinery (which generate substantial noise levels) would not normally be used outside of the core construction hours, but personnel may travel to and from the site in light vehicles and undertake activities such as training, planning, record keeping or equipment inspections which have limited noise implications. This type of control is standard practice for such construction projects.</p> <p>b) As well as earthworks, trench construction and piling works that have been mentioned, the other form of construction work likely to generate "substantial levels" of noise are construction of temporary site compounds and the Onsite Substation and deliveries to site including heavy vehicles.</p> <p>Horizontal Directional Drilling (HDD) works are also likely to generate substantial levels of noise. These are considered separately in Q9.0.9 below because these works are not subject to the same restrictions as other works listed above and could be required to operate outside core construction hours.</p> <p>c) It is standard practice to allow potential specific exemptions to be agreed with</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>agree such construction works and what criteria would be used for the local authority to determine such requests?</p> <p>d) In order to provide greater certainty and clarity for local residents and recreational users during construction, explain why this approach has been proposed rather than more simply further restricting core construction hours?</p>	<p>the local authority in certain limited instances where work has to continue outside of the stated hours due to safety and operational requirements: this can be the case for example on some projects where a large concrete pour which has to be undertaken continuously without interruption and may therefore need to extend briefly outside of the core construction hours, or for abnormal load delivery (to minimise disturbance to the road network). Although these examples are unlikely to apply to the Proposed Development, there may be instances where similar limited works outside core hours could be required and having a controlled degree of flexibility would be justified. This would, however, not be used for routine extension of working hours due to the procedures required.</p> <p>The local authority would presumably consider the justification provided by the Applicant and the risks associated with interrupting the works, the potential extent, nature and duration of the works and any control measures put in place before authorising the additional works. Local authorities also have powers under the Control of Pollution Act (CoPA) 1974 to control noise and vibration from construction activities.</p> <p>d) The core construction hours are proposed to allow a full 12-hour shift per day for workers. The hours do not only relate to mitigating noise and vibration effects but are proposed to ensure that the road network is not utilised at peak busy periods, and to avoid deliveries and workers arriving and departing during school opening and closing times, in response to local concerns regarding children's safety. This information is further set out within the Construction Traffic Management Plan (oCTMP) [APP-212].</p>
Q9.0.9	The Applicant	<p>Paragraphs 10.7.3 of the ES [APP-040] states that Horizontal Directional Drilling (HDD) could be required in some cases to continue outside of the assumed day-time construction hours.</p> <p>a) In what circumstances and with what justification would HDD be expected to occur outside assumed day time construction hours?</p>	<p>a) Specific construction activities associated with cable laying works will require trenchless techniques such as horizontal directional drilling (HDD) when crossing certain obstacles: specifically, the East Coast Mainline Railway, West Glen River, as well as certain below-ground utility infrastructure.</p> <p>Once a HDD bore has been started, it is sometimes not possible to stop until it is completed due to safety and operational requirements, depending on several factors include ground conditions and drilling technique, hence the potential need for some night-time working (particularly to cross the East</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>b) What would be the expected frequency and duration of such HDD works and over what period might they be expected to continue in any specific location?</p>	<p>Coast Mainline Railway). In other instances, however, it may possible to safely interrupt the drilling outside of normal working hours.</p> <p>b) Works duration will depend on several factors such as the exact trenchless technique used, ground conditions etc. However, the duration of the actual HDD drilling activity (including potential night-time work) is likely to be less than one week per drilling location. Therefore, HDD work at night would be limited to a limited number of specific occurrences, be of a very limited duration in each instance and take place at distances of at least 500 metres from the nearest residents.</p> <p>Chapter 10: Noise and Vibration <b>[APP-040]</b> and Table 3-5 of the Outline Construction Environmental Management Plan (oCEMP) <b>[APP-207]</b> set out a number of control and management measures, such as informing the nearest affected residents and controlling night-time noise levels, such that no significant effects would be expected even in these specific instances where HDD is required. These measures will be implemented in the CEMP.</p>

## Topic 10.0 Socio-economic Effects

ExQ1	Respondent	Question	Applicant's Response
Q10.0.1	The Applicant	<p>Paragraphs 14.2.22 to 14.2.24 of the Environmental Statement (ES) [APP-044] identify the main visitor attractions in Rutland and South Kesteven within the vicinity of the Proposed Development. Tolethorpe Hall which hosts an open-air theatre is not referenced. Concerns have been raised regarding the impact of potential noise pollution [RR-1079]. Please can the Applicant clarify if effects on the Tolethorpe Hall have been assessed including any potential noise effects of the Proposed Development on the open-air theatre?</p>	<p>Tolethorpe Hall is located west of Ryhall and more than 2 km from the PV Arrays and the Onsite Substation areas where the main sources of construction, decommissioning and operational noise would be found. It was therefore outside the study area for the assessment of noise and vibration effects (paragraph 1.1.4 of Appendix 10.2 [APP-078]), as no significant noise effects would be expected at these distances.</p> <p>Given the separation distances involved, construction and decommissioning activities will not give rise to any significant effects at this receptor. Even under the worst-case assumptions described in Chapter 10 of the ES [APP-040], noise levels from these activities would be below 45dB L<sub>Aeq</sub>, which would correspond under the relevant criteria of Table 1 of Appendix 10.2 [APP-078] to a negligible impact magnitude. This would therefore represent a negligible significance of effect even for residential receptors (high sensitivity). The leisure use of Tolethorpe Hall means it would be considered to have a medium to high sensitivity to noise but this would still represent negligible effects.</p> <p>Chapter 10 of the ES [APP-040] also considered the noise impact of construction traffic on existing roads used for the access route for the Proposed Development. It was determined that construction traffic would represent negligible increases in traffic noise from properties located along the access route. Therefore, the construction traffic would not result in any perceptible increase in the distant traffic noise likely to be currently experienced at Tolethorpe Hall (from the A6121 for example).</p> <p>Operational noise is controlled to stringent noise levels at residential properties closest to the PV Arrays and the Onsite Substation areas, not resulting in any significant residual effects for the closest, highly sensitive receptors considered. Given the increased separation distances involved with the relevant source of noise, operational noise levels at Tolethorpe Hall would be substantially lower, as can be seen from Figure 10.5.6 in Appendix 10.5 of the ES [APP-081], corresponding to negligible operational effects. They are considered likely to be clearly below baseline background noise levels experienced at Tolethorpe Hall and therefore unlikely to be perceptible at this receptor.</p>



ExQ1	Respondent	Question	Applicant's Response
Q10.0.2	The Applicant	The Proposed Development would provide an additional 8.1km of permissive paths which would be open to horse riders and cyclists. What will happen to the permissive paths after decommissioning?	The oDEMP [APP-209] sets out the Applicant's proposals in respect of the permissive paths at paragraph 2.1.4. Upon decommissioning the permissive paths would be extinguished and the land returned to the landowners. The Applicant has obtained a lease from the relevant landowners and will not hold the freehold title of the land. This means that it is unable to dedicate the permissive paths in perpetuity. It is appropriate that when the Proposed Development is decommissioned and the land is handed back to the landowners that they are able to do with the land as they wish, subject to the usual planning constraints.
Q10.0.3	The Applicant	Paragraph 5.1.1 of the outline Employment, Skills and Supply Chain Plan [APP-211] states that "The Applicant proposes to enable research and innovation in the renewables sector, by facilitating access to the operational Proposed Development for appropriate research organisations on request." Appendix 1 to the plan sets out intended communications but appears to focus on employment opportunities and skills. Please explain what particular measures are proposed that would facilitate access to the operational Proposed Development for appropriate research organisations.	<p>The Applicant acknowledges that explicit reference should be made in outline Employment Skills and Supply Chain Plan to the measures it will undertake to promote the commitment in paragraph 5 of the plan. A revised version of the plan has been submitted at Deadline 2.</p> <p>It has amended outline Employment Skills and Supply Chain Plan so that table 1-1 makes explicit reference to research organisations. The actual research organisations have not been identified as they could change between now and operation of the Scheme, but they will be identified in the final plan which is subject to the approval of the relevant planning authorities.</p> <p>Appendix 1 of the outline Employment Skills and Supply Chain Plan has also been amended to make it clear that the Applicant will write to these bodies explaining the opportunity available to them.</p>
Q10.0.4	The Applicant	<p>Section 6 of the outline Employment, Skills and Supply Chain Plan [APP-211] includes an ethical procurement policy that would apply to potential suppliers. This includes various commitments to be met by potential suppliers including the need to publish an annual modern slavery and human trafficking statement (which is informed by a risk assessment).</p> <p>a) Would the statement be subject to scrutiny by a third party?</p>	<p>The Applicant has amended the outline Employment Skills and Supply Chain Plan for Deadline 2.</p> <p>Section 4 of the plan has been updated to make it a requirement that modern slavery and human trafficking statements prepared by relevant suppliers are uploaded to the Home Office Register for such statements.</p> <p>This will enable the relevant planning authorities to monitor compliance with the ethical procurement policy. If the requirements of the plan are not adhered to then this would represent a breach of the DCO requirement and the relevant planning authorities could take enforcement action under the Planning Act 2008 in the normal way.</p>

ExQ1	Respondent	Question	Applicant's Response
		b) How would an ethical procurement policy be monitored and enforced?	
Q10.0.5	The Applicant, Lincolnshire County Council, Rutland County Council, South Kesteven District Council, Mallard Pass Action Group and any other Interested Party	<p>Paragraph 14.4.2 of the ES [APP-044] explains that "...Furthermore, economic modelling identifies that the study area (Rutland and South Kesteven) is a popular destination for visitors, particularly for countryside pursuits like walking. Within the Rutland and South Kesteven Local Plans employment and economic activity are high on the list of priorities, and both local authorities have dedicated tourism teams promoting the area."</p> <p>a) Is any evidence available that quantifies how regularly the Public Rights of Way (PRoW) within and adjacent to the Order limits are used?</p> <p>b) Are there any particular routes or circular walks or rides that are promoted for recreational use by residents or visitors?</p>	<p>The Amenity and Recreation Assessment [APP-058] considers potential effects to the recreational assets within the locality.</p> <p>a) To the Applicant's knowledge there is no publicly available evidence that quantifies how regularly PRoW within and adjacent to the Order limits are used. As stated in paragraph 1.1.5 of the Amenity and Recreation Assessment, the PRoW routes within the locality are not of national significance (e.g., National Trails) and no other previous large scale DCO solar developments has undertaken user counts which in the Applicant's view would be disproportionate. Furthermore, the design of the Proposed Development retains all existing PRoW in their existing alignment and provides offsets of at least 15m either side from them as detailed within the Design and Access Statement [APP-204], minimising any potential impacts to them. The oCEMP [PDA-006] includes measures to ensure that access to all existing PRoW will be retained during the construction phase, with a limited number of temporary PRoW diversions to allow the construction of access tracks where they cross PRoW. The PRoW will be managed throughout the construction phase to ensure that they can continue to be used safely.</p> <p>b) The Macmillan Way is a long-distance walking path that runs from Boston, Lincolnshire to Abbotsbury in Dorset, a total of 470km. It is not a National Trail such as the Cotswold Way or Pennine Way. It runs within the Order limits for approximately 700m along an existing lane eastwards from Uffington Lane towards the East Coast Mainline and also adjacent to the Order limits for approximately 1.45km between Uffington Lane and Newstead Road (refer to Figure 1 of the Amenity and Recreation Assessment). The Amenity and Recreation Assessment concludes a slight adverse effect, reducing to minimal adverse post year 15 once planting had matured, would occur to the recreational amenity of this route. The Applicant is not aware of any locally promoted routes or circular walks or rides through the consultation process.</p>
Q10.0.6	The Applicant	Paragraph 14.4.22 of the ES [APP-044] refers to limited number of temporary PRoW diversions during construction.	a) Only Bridleway E169/1 and Bridleway BrAW/1/1 are located within the Solar PV Site area and would be crossed by an internal access track necessitating a temporary stopping up and diversion. The relevant powers

ExQ1	Respondent	Question	Applicant's Response
		<p>Paragraph 14.4.24 specifically identifies the need to temporarily divert Bridleway E169/1 and Bridleway BrAW/1/1 during the construction of internal access tracks.</p> <p>a) Please can the Applicant confirm if any further temporary diversions may be needed.</p> <p>b) For all temporary diversions, please provide any further details regarding the likely location of the diversions and the length of time they would be in place?</p>	<p>are included in Article 11 and Part 1 of Schedule 6 of the DCO <b>[APP-20]</b>. Article 11 does provide a general power to deal with PRoW subject to additional controls referred to in the Article, but at this stage the Applicant has identified the PRoW that is considers may need to be temporarily diverted in Schedule 6. All other PRoW within the Order limits are within mitigation and enhancement areas and would not be affected by construction activities. Any land management of these areas (e.g., seeding or creation of skylark plots) would be akin to existing agricultural operations and would not require the temporary diversion of these routes.</p> <p>b) It is not possible at this stage to identify where, or the length of time required for the diversions as the detailed design (location of access tracks) is not yet fixed. Table 3-10 (page 62) of the outline Construction and Environmental Management Plan <b>[PDA-005]</b> sets out requirements that will be followed in relation to limiting the disruption construction has on PRoW.</p>
Q10.0.7	The Applicant	<p>Paragraph 14.4.44 of the ES <b>[APP-044]</b> refers to a "growing body of research" that indicates that the presence of large-scale renewable energy development is not a significant factor for people when making holiday/leisure decisions. One example of research undertaken in 2013 in Cornwall in the context of a 172MW solar farm is cited. Please can the Applicant provide further examples of research that support the conclusion that large-scale renewables do not negatively impact upon holiday/leisure destination decision making? Is any more recent or local evidence available?</p>	<p>The 2013 SW Research Company report into 'The Impact of Renewable Energy Farms on Visitors to Cornwall' remains the most relevant indicator of the impact of solar farms on visitor behaviour. There is however a wider body of research that has been conducted into the impact on local tourism of onshore windfarms, which are significantly more prominent in the landscape than solar farms and have been an accepted renewable energy technology response for significantly longer than solar farms in the UK. To support this, Ladenburg (2014) finds that, in terms of the visual effects of onshore renewable energy infrastructure, there is an increased public preference for biomass and solar energy solutions relative to wind power as they are generally less visually impactful.</p> <p>In 2014 Northumbria University were commissioned by Northumberland County Council to undertake an 'Evaluation of the Impacts of Onshore Wind Farms on Tourism'. Their research was informed by a review of published impacts on the impacts of wind farms on tourism throughout the UK; an online survey of potential tourists to Northumberland; an online survey of Northumberland based, tourism-related, businesses on the impacts of wind farms on them; and a focus group with twelve people who represent the voice of concern regarding the impacts of wind farms on tourism in Northumberland. The research concluded that 'tourists to UK destinations where wind turbines are present, as well as prospective tourists to Northumberland, appear to be more positively</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>disposed toward onshore wind farms than Northumberland-related businesses. Moreover, they are certainly more positive toward onshore wind farms than the voices from Northumberland that speak with the greatest concern, and which insist they are also speaking on behalf of Northumberland tourists as well as others in the county'.</p> <p>Also in 2014, Regeneris were commissioned by the Welsh Government to conduct a 'Study into the Potential Economic Impact of Wind Farms and Associated Infrastructure on the Welsh Tourism Sector'. Their analysis of wind farm case studies in Wales highlighted that there was 'little evidence of impact on visitor numbers to date at a more local level, despite the presence of large wind farms in close proximity to tourism centres'. The report goes onto state that 'while there were clearly challenges for consultees in accurately assessing the effects of wind farms on visitor numbers, the majority believed there to have been no impact to date'. This view was held by most businesses, local authorities and trade body consultees. In addition, the study authors found no evidence to suggest that there would be any significant change in visitor numbers using routes visitor routes adjacent to wind farms.</p> <p>More recently, in 2021 Biggar Economics published 'Wind Farms &amp; Tourism Trends in Scotland: Evidence from 44 Wind Farms'. This study concluded that 'the analysis of trends at the local authority area found no relationship between the growth in the number of wind turbines and the level of tourism-related employment'. Furthermore, detailed analysis of 44 wind farms built between 2009 and 2019 found that 'in the majority of cases, tourism-related employment in the vicinity of wind farms has outperformed the trend for Scotland as a whole and for the local authority area in which the wind farm was based'.</p> <p>All of the papers and studies referenced in this response to Q10.0.7 have been submitted for Deadline 2 within <b>Appendix Q</b>.</p>

## Topic 11.0 Transportation and Traffic

ExQ1	Respondent	Question	Applicant's Response
Q11.0.1	The Applicant and Rutland County Council	<p>In relation to pedestrian and cyclist amenity during the construction phase, Paragraph 9.6.29 of the Environmental Statement (ES) [APP-039] acknowledges that the Proposed Development will result in a change above the threshold recommended within the Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Road Traffic (GEART) on Link 1 (Uffington Lane). It goes on to state that "Whilst there may be some associated recreational use of this link by pedestrians and cyclists, it is likely that this would be on an ad hoc basis and outside of the typical proposed construction site working hours, as well as being influenced by other factors such as time of year and weather.". However, construction will be undertaken on Saturdays when demand for recreational use may be higher. The ES concludes that the construction phase of the Proposed Development will have a non-significant effect on Pedestrian and Cyclist Amenity overall.</p> <p>a) Is any data available regarding the usage of Uffington Lane by pedestrians and cyclists?</p> <p>b) Can the Applicant please set out the possible implications for</p>	<p>There is no data available on the usage of Uffington Lane by pedestrians, however the traffic data that supported the ES Chapter 9 [APP-039] included cyclist flows on both weekdays and weekends from the week commencing 11th October 2021. A summary of the daily two-way cyclists flows extracted from the data along Uffington Lane is provided below:</p> <ul style="list-style-type: none"> <li>• Monday - 17 cyclists;</li> <li>• Tuesday - 8 cyclists;</li> <li>• Wednesday - 16 cyclists;</li> <li>• Thursday - 7 cyclists;</li> <li>• Friday - 13 cyclists;</li> <li>• Saturday - 8 cyclists; and</li> <li>• Sunday - 14 cyclists.</li> </ul> <p>The data suggests that there is no increase in the use of Uffington Lane on weekends, with it being fairly consistent across the duration of the week.</p> <p>In any event, the level of demand by cyclists is considered to be low, as there would be just over one cyclist per hour based on the peak demand of 17 cyclists per day during the window that the deliveries to the primary compound can take place within (9am to 3pm). Whilst there are no baseline pedestrian flows available, using professional judgement it is predicted that the daily demand for cyclists would be comparable to the pedestrian demand, in that it would reflect routes that are used recreationally outside of the peak hours by non-motorised users, with the cycle demand providing a suitable benchmark for comparison and observing any trends. As the demand for cyclists is low and consistent across both weekdays and weekends, it is assumed that this would also be applicable to the pedestrian demand.</p> <p>Based on professional judgement, it is not considered that there is sufficient demand for cyclists or pedestrians along Uffington Lane to lead to any significant impacts on amenity, as the likelihood for any conflict with construction traffic is</p>

ExQ1	Respondent	Question	Applicant's Response
		pedestrian and cyclist amenity of construction works on Saturdays?	<p>low (due to the low numbers of cyclist flows) and the available data suggests that this is not a well-used recreational route.</p> <p>As demonstrated by the available data on daily two-way cyclist flows along Uffington Lane, impacts on pedestrian and/or cyclist amenity due to construction works would be no different to any other day of the week, as the data collected suggests that flows are typically consistent across weekdays and weekends, with no clear distinction or peak across the surveys. Furthermore, through the addition of the permissive paths, which provide additional offroad recreational routes for pedestrians and cyclists to utilise, it is considered that the impact of construction works on Saturdays would not be significant.</p>
Q11.0.2	The Applicant	<p>Paragraph 3.8.3 of the outline Construction Traffic Management Plan (oCTMP) [APP-212] includes provisions to control Heavy Goods Vehicle (HGV) movements, only allowing deliveries to the primary construction compound between the hours of 9am and 3pm. This is proposed to mitigate the impact of HGVs on sensitive receptors, including schools within Great Casterton. However, it might result in HGV movements through Great Casterton before 9am. Can the applicant provide any further details of any analysis that has been undertaken to inform the proposed time restrictions for HGV deliveries to ensure that they have the apparent desired effect of avoiding school drop off/pick up times? This should include details of school opening and closing times and any coach/bus drop-off points in local villages such as Essendine.</p>	<p>The two schools that have influenced the proposed delivery window for HGVs are Great Casterton Primary School and Great Casterton College, which are both located within Great Casterton along Ryhall Road. Ryhall Road is used by the proposed 'Route 1' from the Strategic Road Network (SRN) to the primary compound, via the A6121. The start/end times for each establishment have been confirmed and are as follows:</p> <ul style="list-style-type: none"> <li>• Great Casterton Primary School:             <ul style="list-style-type: none"> <li>○ Start - 8:40 (with registration at 08:50); and</li> <li>○ Finish - 3:20pm.</li> </ul> </li> <li>• Great Casterton College:             <ul style="list-style-type: none"> <li>○ Start - 8:30 (with registration at 8:40); and</li> <li>○ Finish - 3:30pm.</li> </ul> </li> </ul> <p>The proposed delivery window for HGVs is 9am to 3pm, which avoids both the start and closing time of each establishment. The estimated drive time from Great Casterton to the primary construction compound along Route 1 is less than ten minutes, so it is unlikely that there will be much overlap between HGVs and school start time and drop-off, with the vast majority of drop-offs likely to be complete before HGVs enter the area. In addition, the use of a one-way routing arrangement limits interaction with the schools, as vehicles egressing the site will utilise Route 3 and the A6121, avoiding Great Casterton and the schools entirely. The location of the secondary construction compounds and their proximity of the</p>

ExQ1	Respondent	Question	Applicant's Response
			<p>primary construction compound also means that any deliveries between the two compounds will be away from the schools in Great Casterton.</p> <p>It is noted that, on Fridays, Great Casterton College finishes at 2:35pm, however this only gives a 25-minute window for any potential overlap. There is also no conflict with the Great Casterton Primary School which is considered to be a more sensitive receptor given the age range of the children.</p> <p>The 183-bus services, which serves both establishments, links through to Essendine and the villages to the northeast, however the arrival time in these locations is post 3pm, with the timetable suggesting it arrives in Essendine (which is the closest village) around 3:53pm. On that basis, it is unlikely that there will be any overlap with these services and HGVs given the 3pm cut-off for HGV deliveries to the primary compound.</p> <p>It is acknowledged that there other schools within the wider area, such as Witham High School and those in Bourne, although it is not considered that these establishments are in close enough proximity to the access routes (namely 'Route 3, the egress route from the primary compound towards Bourne) to be impacted by HGVs and these establishments will also finish post 3pm, giving a sufficient window to not result in any conflict or significant impact.</p>
Q11.0.3	The Applicant	<p>Paragraph 5.3.16 of ES Appendix 9.4 [APP-074] reports an increase in HGV movements of 167% along Uffington Lane during the construction phase. This is not identified as a significant effect on the basis that there are very low levels of existing traffic along this route. The transport methodology is based on the GEART which suggests that increases of traffic flows of 30%, 60%, and 90% should be considered minor, moderate, and major effects respectively.</p> <p>Can the Applicant justify why a significant effect has not been reported in relation to the increase in HGV</p>	<p>Overall, across the extent of the study area, which is identified within Figure 9.1 of ES Chapter 9 [APP-039], the impact of the HGV movements is considered to be non-significant based on the GEART thresholds.</p> <p>It is acknowledged that there is an increase along Uffington Lane (referred to as Link 1 within ES Chapter 9 [APP-039]) which experiences a 48% increase in daily vehicles and 167% increase in daily HGVs. The increase in HGVs in particular could constitute a 'major' impact based on the GEART guidance, when considered in isolation from other factors relevant to this assessment.</p> <p>However, for the assessment of impacts of increased HGVs on Link 1, reference is made to paragraph 4.5 of GEART which states:</p> <p>"A critical feature of an environmental assessment is determining whether a given impact is significant. Having quantified the magnitude of impact, there are various ways of interpreted whether or not this is significant. For many effects, there are no simple rules or formulae which define thresholds of significance and there is,</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>movements along this route in relation to published guidance, noting that the provision of passing bays will not reduce the number of HGV movements.</p>	<p>therefore, a need for interpretation and judgement on part of the assessor, backed-up by data and quantified information wherever possible.”</p> <p>In this instance, due to the low baseline HGV flows along Uffington Lane, which based on professional judgement is due to there being few existing desire lines for HGVs to use Uffington Lane, the proportional impact appears greater in percentage terms. However, this does not suggest a significant impact in isolation when considering the already low baseline flows in comparison to the rest of the study area</p> <p>With the addition of the proposed mitigation strategy, which includes passing places and junction widening with the A6121 junction, as well as the additional vehicle control and management measures set out within Section 4 of the oCTMP <b>[APP-212]</b> which will be implemented on vehicles arriving to and leaving primary construction compound, it is considered that the impact on Uffington Lane will be non-significant. Such measures include the use of a delivery booking system, holding vehicles upon entry/exit and releasing vehicles in stages to prevent two-way conflicts, meaning whilst the overall number of HGV movements is the same, the risk of any conflicts leading to a significant impact is appropriately mitigated.</p>
Q11.0.4	The Applicant, Lincolnshire County Council, Rutland County Council and National Highways	<p>Paragraphs 9.3.2 – 9.3.4 of the ES [APP-039] state that operational effects have been scoped out of the ES based on a worst-case scenario that 20 staff arrive and depart the order limits by car each day.</p> <p>a) Have the operational effects in terms of the potential need to replace photovoltaic (PV) panels and other supporting infrastructure that may necessitate the need for HGVs been assessed?</p> <p>b) If so, what are the effects of additional HGV movements during the operation phase, including abnormal indivisible loads (AIL)?</p>	<p>a) The effects of replacing any photovoltaic panels during the operational phase have not been assessed as it is estimated that this would only take place on an ad-hoc basis and is unlikely to generate any significant effects, given it will be less than what is required during construction / decommissioning. Whilst it is difficult to estimate the number of vehicles that could be required for such maintenance, it is estimated that this could be in the region of one vehicle a week/month, rather than per day, which is significantly less intensive than during construction.</p> <p>b) It is estimated that the need for any abnormal deliveries during the operational phase would only be in exceptional circumstances and again would be much less intensive than what is required during construction.</p>



ExQ1	Respondent	Question	Applicant's Response
		c) Do Lincolnshire County Council, Rutland County Council and National Highways have any comments in relation to the effects and related implications for HGV and potential abnormal indivisible loads during the operational phase?	
Q11.0.5	The Applicant	Paragraph 9.3.15 of the ES [APP-039] states that "It is acknowledged that Light Goods Vehicles could reasonably utilise Routes 1-3 to access the Order limits. On that basis, it is assumed for the purposes of assessment that LGV trips will utilise Routes 1, 2 and 3 evenly." What is the basis for the assumption that LGV trips will utilise Routes 1, 2 and 3 evenly?	The assumption that LGVs will utilise all Routes evenly to access the Order limits is based on the fact that the origin/destination of LGV trips is unknown at this stage, and there are no physical restrictions in place which would prevent any of the Routes being used by LGVs.
Q11.0.6	The Applicant, Lincolnshire County Council and Rutland County Council	The Transport Assessment [APP-074] analyses collision data provided by Lincolnshire County Council and Rutland County Council over the latest three-year period. Can collision data over the past three years be considered representative given the possible impacts in terms of traffic movements of the Covid-19 pandemic?	<p>The assessment of collision data within the Transport Assessment (TA) [APP-074] is considered to be suitable as whilst there may have been some temporary changes to traffic due to Covid-19 (the extent of which is not known) within the three-year data period, it is considered that the local highway geometry has remained consistent and unchanged throughout this time. If there was an existing highway safety issue present, it is logical to assume that this would still cause issues and present itself within the collision data, irrespective of the impact of Covid-19 and any changes to the traffic flows.</p> <p>However, as there is no evidence of any highway safety concerns or collision clusters within the study area assessed in the TA, which covers the extent of the vehicle routes around the Order limits, it is considered that the conclusions obtained from the assessment of collision data remain valid, in that there are no existing highway safety concerns that would be exacerbated by the Proposed Development.</p>
Q11.0.7	The Applicant	Section 9.9 of ES [APP-039] states that "Ongoing monitoring of construction traffic and staff travel matters will be	Whilst there is not proposed to be any specific monitoring regimes directly associated with the effects discussed in Table 9-4 of ES Chapter 9 [APP-309], general ongoing reviews and monitoring will be required as part of the respective

ExQ1	Respondent	Question	Applicant's Response
		<p>undertaken pursuant to future iterations of the CTMP and TP, that are secured by way of a DCO requirement. This will ensure that the impacts of the Proposed Development will remain non-significant." However, Table 9-4 identifies monitoring requirements for each of effects/activities assessed as "none". Please confirm monitoring requirements for each of the effects/activities considered.</p>	<p>CTMP and TP to ensure these documents are fulfilling their respective purposes, namely mitigating the impacts of construction traffic and ensuring that staff can travel to and from the Order limits in the most sustainable manner possible.</p> <p>The CTMP will be reviewed regularly by the appointed contractor and individual responsible for the delivery of the CTMP, who is likely to also fulfil the role of Transport Coordination Officer (TCO). The role of the TCO is discussed further in response to Q11.0.14, with this individual responsible for keeping records of each delivery and capturing details such as (but not limited to):</p> <ul style="list-style-type: none"> <li>• Date/Time;</li> <li>• Vehicle used;</li> <li>• Material delivered;</li> <li>• Compliance with CTMP; and</li> <li>• Any issues or other comments.</li> </ul> <p>The Outline Construction Traffic Management Plan <b>[APP-212]</b> includes monitoring and review obligations which will be expanded upon within the detailed CTMP.</p> <p>Section 5 of the outline TP <b>[APP-215]</b> identifies the indicative scope of surveys that will be undertaken as part of the future TP, which includes surveys of staff every three months calculating the mode share of travel, use of the car/cycle parking facilities and suggestions to improve the TP or accommodate any staff-specific travel requirements, such as the need for disabled car parking or additional cycle parking. The oTP is included as one of the documents to be certified by the Secretary of State in Schedule 13 of the dDCO.</p>
Q11.0.8	The Applicant	<p>ES Chapter 9 <b>[APP-039]</b> lists the following potential environmental effects:</p> <p>a) Severance;</p>	<p>The assessment of hazardous loads was agreed to be scoped out of the assessment in ES Chapter 9 <b>[APP-039]</b> by the PINS within the ES Scoping Opinion <b>[APP-050]</b> on the basis that suitable mitigation would be provided within the oCEMP and/or OCTMP as part of the Application to ensure safe transportation of such loads. It was also noted in the Scoping Report that it was</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>b) Driver Delay;  c) Pedestrian Delay;  d) Pedestrian and Cyclist Amenity;  e) Fear and Intimidation;  f) Accidents and Road Safety; and  g) Hazardous Loads.</p> <p>Chapter 9 goes on to provide specific commentary to inform the conclusions drawn on all of the above except from g. hazardous loads.</p> <p>Please provide commentary and information to substantiate the conclusions of negligible (non-significant) effects identified in Table 9-4 of the ES for hazardous loads.</p>	<p>unlikely that any hazardous loads would be required for the Proposed Development.</p> <p>The relevant mitigation measures to ensure the safe transportation of all goods are discussed within Section 4 of the oCTMP [APP-212] and include the use of Freight Operator Recognition Schemes (FORS), ensuring that all haulage providers used during construction are committed to best practice and hold a certain level of accreditation - details of which will be confirmed and agreed with the Local Highway Authorities within the detailed CTMP.</p> <p>As no hazardous loads are likely to be required and in the event that they are, appropriate mitigation is provided by way of the oCTMP, it is concluded that the effects of the Proposed Development in terms of hazardous loads is negligible (not significant).</p>
Q11.0.9	The Applicant	<p>Paragraph 2.4.4 of the oCTMP [APP-212] states that "Initially, the car park will be located within the primary compound, however, this may be located to other parts of the Order limits, subject to the construction methodology. Further information on the temporary car parking arrangements will be confirmed within later iterations of the CTMP once full details are available on staffing numbers."</p> <p>To what extent have other potential locations within the order limits to accommodate the car park been identified to date and assessed in terms of impacts and likely significant effects?</p>	<p>The location of any temporary car parking will be confirmed within the CTMP, secured by way of Requirement 13 of the dDCO once the phasing of the construction works is confirmed and agreed with the relevant Local Authorities as part of the detailed design for the Proposed Development.</p> <p>The provision of mitigation measures such as the staff shuttle service (both from the primary compound to the relevant phase of work and to the primary compound from the location of accommodation) will limit the need for car parking and the associated environmental effects that may be generated. In addition, the shift rota for staff discussed within Section 2.3 of the oCTMP [APP-212] will see staff arriving/departing outside of typical network peak hours, which are identified as being 08:00-09:00 for the AM peak and 17:00-18:00 for the PM peak, which will in turn limit the likelihood of any significant effects from any car parking that may be provided.</p>

ExQ1	Respondent	Question	Applicant's Response
Q11.0.10	The Applicant	<p>The oCTMP [APP-212] proposes that HGVs access the primary compound via Route 1 and depart via Route 3 to reduce the impact of two-way HGV traffic on Ryhall Road. This arrangement would be utilised unless Route 1 was not available. Construction routes from the primary compound to secondary compounds are identified in Figure 3-2 of the oCTMP [APP-212]</p> <p>a) Please clarify the circumstances under which Route 1 would not be available to be used.</p> <p>b) Can the Applicant clarify how road safety, including for people undertaking journeys to and from school has been taken into account when defining these routes?</p> <p>c) Please provide a plan illustrating how the proposed construction traffic routes relate to schools and school bus routes</p>	<p>a) Route 1 will be used for all HGVs to access the primary compound unless there are any unforeseen circumstances which makes this not possible, such as road closures or major accidents etc. In these events, it is assumed that Route 3 would be used as the alternative, however this will be managed by the on-site construction team to reduce the likelihood of any conflicts along Route 3, including methods such as the use of holding vehicles within the Order Limits and releasing them in stages. An overview of the vehicle routing is provided within section 3 of the oCTMP [APP-212], with further details on the routing contingency plans to be provided within the CTMP.</p> <p>b) In determining the access routes to the site, the routing was discussed with both Rutland County Council (RCC) and Lincolnshire County Council (LCC) as part of scoping discussions prior to the DCO submission. It was agreed that the proposed use of Route 1 and Route 3 provided the most direct routes to the Order limits along the roads which were deemed to be the most suitable in terms of carriageway width, surfacing and having an already existing level of HGV activity – which in turn promotes safety for all users of the local highway network by reducing the likelihood of any accidents occurring. Whilst the use of Route 1 brings HGVs in close proximity to the school and college, through appropriate management and use of restricted delivery hours, it is considered that the use of the proposed routes will not lead to any detrimental impacts on road safety to people undertaking school journeys.</p> <p>c) A plan (<b>drawing reference: Exq1 - 11.1 Appendix R</b>) is provided which highlights the proximity of the proposed construction access routes to the local schools and bus services. However, as noted in the response to Q11.0.9, it is considered that the use of restricted delivery hours effectively mitigates against any significant effects to the local schools and bus services.</p>
Q11.0.11	The Applicant	<p>Section 4.8 of the oCTMP [APP-212] commits to the preparation of an Incident Management Plan for inclusion in the CTMP to set out procedures should any parts of the Local Road Network (LRN) or Strategic Road Network (SRN) be impacted by the Proposed Development. Please</p>	<p>Preparation of the Incident Management Plan (IMP) will be the responsibility of the contractor who will be responsible for implementing the CTMP. The IMP will be specific to each contractor and specific to the relevant phase(s) of construction, which will be determined by the nature of the works. At this stage, it is expected that the future IMP(s) will include but not be limited to:</p> <ul style="list-style-type: none"> <li>• Time and Date;</li> <li>• Location of incident;</li> </ul>

ExQ1	Respondent	Question	Applicant's Response
		submit a draft of the Incident Management Plan for comments.	<ul style="list-style-type: none"> <li>• Conditions during incident (light, weather);</li> <li>• Reason for incident; and</li> <li>• Any other comments or actions for future consideration.</li> </ul> <p>On that basis, it is proposed to submit the IMP for approval as part of the eventual CTMP (secured by way of Requirement 13 on the dDCO) when the document will more accurately reflect the details and requirements of construction.</p>
Q11.0.12	The Applicant and any other Interested Party	<p>Section 5 of the oCTMP [APP-212] proposes the appointment of a Transport Coordination Officer who will be responsible for monitoring the CTMP and ensuring that the mitigation measures are sufficient. The Traffic Coordination Officer will report to a Traffic Management Working Group. The Group is proposed to consist of, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• National Highways</li> <li>• Rutland County Council</li> <li>• Lincolnshire County Council</li> <li>• South Kesteven District Council</li> <li>• Great Casterton Primary School and Great Casterton College</li> <li>• Essendine Parish Council</li> <li>• Ryhall Parish Council</li> <li>• Stamford Parish Council</li> </ul> <p>Which other organisations could be beneficially included in the Traffic Management Working Group? Please provide justification as required.</p>	<p>It is considered that the stakeholders and organisations identified in Section 5 of the oCTMP [APP-212] initially captures all relevant organisations that would input to the Traffic Management Working Group (TMWG), as it incorporates all Local Planning Authorities and Local Highway Authorities, the latter of which are anticipated to have the most input to any issues or matters arising from construction traffic. In addition, inclusion of both the relevant Parish Councils and Schools ensures that local stakeholder's views are also taken into consideration in the ongoing CTMP monitoring. However, should other parties wish to join or engage within this group then there will be scope to contact the Transport Coordination Officer to join the TMWG or provide comments to the relevant authorities to raise within this forum.</p>
Q11.0.13	The Applicant	Appendix E to the oCTMP [APP-212] provides details of access from primary to secondary compounds. However, whilst "Route to Secondary Compound"	An updated version of Appendix E to the oCTMP (Revision P1) has been provided which details the routes to the secondary compound and access references.

ExQ1	Respondent	Question	Applicant's Response
		<p>and "Access Reference" are listed in the legend, no corresponding icons or alignments are provided on the plan. Please can an updated Appendix E be provided that includes the routes to secondary compounds and access references?</p>	
Q11.0.14	The Applicant	<p>Section 2.1 of the outline Travel Plan [APP-215] states that a Travel Plan Coordinator will be appointed to take responsibility for the management of the Travel Plan. How will the respective roles of the Travel Plan Coordinator and Transport Coordination Officer (as proposed in the oCTMP [APP-212]) align?</p>	<p>There will be some overlap between the role of the Transport Coordination Officer (TCO) and Travel Plan Coordinator (TPC) in that both will be seeking to mitigate the transport impacts of the Proposed Development. The individual(s) responsible for both roles will be identified within the CTMP secured by way of Requirement 13 in the dDCO.</p> <p>The focus of the TCO will be to act as a point of interface with external key stakeholders and other parties, such as those identified within the Traffic Management Working Group (TMWG), should there be any transport issues that arise during construction or need for engagement that means there is a need to amend the CTMP. The TCO will have oversight of the CTMP and will be able to ensure that the agreed transport principles are adhered to during construction.</p> <p>The TPC will focus on delivery of the objectives of the Travel Plan and ensuring that staff can travel to/from the Order Limits in the most sustainable manner possible.</p>

## Topic 12.0 Water Environment

ExQ1	Respondent	Question	Applicant's Response
Q12.0.1	The Applicant	The Flood Risk Assessment (FRA) [APP-086] refers to land drains, drainage ditches, watercourses and surface water features located within the Order limits, however, a figure clearly depicting these features has not been provided. Can the Applicant provide a figure clearly depicting the location of existing land drains, drainage ditches and any other surface water features within the Order limits?	<p>Figure 11.6: Water Bodies in a River Basin Management Plan [APP-200] shows watercourses within the Order limits and the wider catchment.</p> <p>In addition, Figure 6.11 Green Infrastructure Strategy Plan [APP-173] identifies water courses, drains, and other surface water features within the Order limits.</p> <p>For clarity a figure showing natural watercourses, drainage ditches and potentially modified watercourses is provided at <b>Appendix S</b> submitted for Deadline 2.</p>
Q12.0.2	The Applicant, the Environment Agency (EA) and the Lead Local Flood Authorities (LLFA)	<p>Section 2.4 of the outline Surface Water Drainage Strategy (oSWDS) [APP-087] details that surface water flows will be directed to existing outfalls along existing topography towards the West Glen River. It is further stated that as the West Glen River is an Environment Agency (EA) Main River an Environmental Permit will be sought at least three months prior to the construction phase. Article 6 (e) of the draft Development Consent Order (dDCO) [APP-017] seeks to disapply Environmental Permitting in “respect of a flood risk activity only”.</p> <p>a) Does the Applicant, EA or LLFA foresee any potential impediments in connection with gaining such a permit for this activity?</p> <p>b) Can the Applicant clarify how this relates to provisions in Article 6 (e) of the dDCO [PDA-003]?</p>	<p>a) The Applicant does not foresee any impediments in connection with obtaining an environmental permit.</p> <p>b) Article 6(e) of the dDCO [PDA-003] is only seeking to disapply Regulation 12 of the Environmental Permitting (England and Wales) Regulations (“EPR”) 2016 insofar as a ‘flood risk activity’ permit is required.</p> <p>The activity detailed in section 2.4 of the oSWDS [APP-087] does not fall within ‘flood risk activities’ defined under Paragraph 3, Part 1 of Schedule 25 of the EPR 2016 and therefore does not fall within the disapplication sought under Article 6(e) of the dDCO [PDA-003].</p>

ExQ1	Respondent	Question	Applicant's Response
Q12.0.3	The Applicant	<p>In relation to allowances made for climate change, the FRA uses the higher central band for the 2050s climate change allowance for peak river flow (Section 2.2.1). It is noted that the revised peak river flow allowances for the Welland Management Catchment for the Higher 2050s is 10% and so the assessment uses a conservative approach. There is no mention of climate change allowances for peak rainfall intensity; it is not clear what allowance has been applied. Please can the Applicant clarify what climate change allowance has been applied for peak rainfall intensity within the FRA?</p>	<p>The Flood Risk Assessments: Climate Change Allowances Guidance (Environment Agency 2022) state that 'for modelling large areas (larger than 5 square kilometres) with rural land use, direct rainfall modelling is unlikely to be appropriate'. As such, the Flood Risk Assessment <b>[APP-086]</b> uses the best available dataset, which is the Environment Agency pluvial flood depth datasets (Risk of Flooding from Surface Water Depth), which do not apply a climate change allowance.</p> <p>Appendix D of the Flood Risk Assessment <b>[APP-086]</b> shows that the deepest pluvial flooding depths are largely confined to depressions in landform, such as the land drain from Park Farm to the railway line, meaning that any uplift for climate change in peak rainfall intensity is likely to cause the extent for pluvial flooding around the ditches to increase rather than see significant increases in depths to unmanageable levels (using the 0.1 % AEP event as a proxy for the 1 % AEP event plus climate change), as water spreads out over topography.</p> <p>As PV Arrays are located above ground level with the leading edge being approximately 0.8 m above the ground, they would be above pluvial flood depths. The electrical connections on the PV Arrays will be located on the upper edge of the panels and therefore well above ground level and would still function should areas of the Solar PV Site be under water following such an extreme rainfall event.</p> <p>Section 3.1 of Appendix 11.6: Outline Surface Water Drainage Strategy <b>[APP-087]</b> concludes that the introduction of planting within the Mitigation and Enhancement Areas will increase the interception potential of surface water within the Solar PV area. This is evidenced by the 2D surface water model which shows increasing the roughness of the surface cover within the Order limits, specifically under the PV Array drip lines, retains water onsite for longer <i>i.e.</i>, reducing the surface water run-off rate compared to the baseline agricultural scenario and therefore having a beneficial impact on surface water flooding.</p> <p>The impact of the Proposed Development on surface water risk is considered in Appendix 11.6: Outline Surface Water Drainage Strategy <b>[APP-087]</b> which describes how surface water run-off from all aspects of the Proposed Development will be managed. Section 2.3 of the document states a 25% climate change allowance has been applied to rainfall volumes for drainage calculations,</p>



ExQ1	Respondent	Question	Applicant's Response
			<p>which is compliant for the Central allowance banding for the 2070 epoch for both the 3.33 % and 1 % Annual Exceedance Probability (AEP) events.</p> <p>Therefore, whilst a climate change allowance has not been applied for peak rainfall events to assess pluvial flooding, it is likely that any increase in rainfall intensity as a result of climate change would cause the extent of pluvial flooding north of the railway line to increase and depths not to affect the electrical connections on the upper edge of the panels. The introduction of planting is also likely to lead to a decrease in surface water run-off rates compared to the baseline scenario, therefore reducing the rate at which surface water pools in topographical low points, such as in the area north of the railway line.</p>
Q12.0.4	The Applicant	<p>In relation to limitations of the Environmental Statement (ES), Paragraph 11.1.8 [APP-041] refers to changeable weather conditions with extended periods of dry weather during site walk overs. Paragraph 11.1.9 [APP-041] states that it was not possible to obtain a response from all Private Water Supplies identified by Rutland County Council (RCC) and South Kesteven District Council (SKDC). Regarding Private Water Supply (PWS) Bowthorpe Park, where it was not possible to agree on the process of supplying information on the specifics of the supply, information from the SKDC was used to inform the assessment. Paragraph 11.1.10 [APP-041] states that with the exception of the private water supplies consultation and walkover, all data considered necessary to identify and assess the likely significant effects was available. Figure 11.5 in the ES [APP-199] locates private water supplies but PWS Bowthorpe Park is not identified.</p>	<p>Bowthorpe Park is located approximately 1.7 km north of the Order Limits and therefore falls outside the 1 km Study Area for Private Water Supplies. South Kesteven District Council (SKDC) supplied information identifying the property as being served by a borehole and the grid coordinate was centred on the western building within the farm. Whilst it is acknowledged that the supply location could be closer to the Order Limits than identified by SKDC, it is unlikely to be located within the 1 km Study Area. Regardless of distance of the supply to the Order Limits, Chapter 11: Water Resources and Ground Conditions [APP-041] assesses potential quality and quantity effects on watercourses and groundwater as being of negligible magnitude and significance. As such, if the supply at Bowthorpe Park is drawing water from either or both water sources then the effects on the supply would also be of negligible magnitude and significance. This does not affect the conclusions of Chapter 11: Water Resources and Ground Conditions of the ES [APP-041].</p> <p>As the exact location of the supply was not provided by the resident of Bowthorpe Park it was not included within Figure 11.5: Private Water Supplies [APP-199], as using the location supplied by SKDC could lead to inaccuracy in its placement on the map.</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>a) Can the Applicant comment on whether this gap in data could affect the findings of the assessment?</p> <p>b) Can the Applicant clarify if the omission of PWS Bowthorpe Park from Figure 11.5 is due to the outlined difficulties in obtaining information?</p>	
Q12.0.5	The Applicant	<p>Mitigation measures are set out in the submitted management plans as well as embedded within the Works Plans and Design Guidance [APP-204]. There does not appear to be an indication on the plans of where elements of the proposed drainage systems are proposed to be located within the Order limits and the current wording of the dDCO [APP-017] allows full flexibility of their location. Section 2.8 of the oSWDS [APP-087] states that the exact locations of drainage measures will be confirmed prior to the construction phase within a Detailed Drainage Strategy.</p> <p>Can the Applicant provide an update of the anticipated location of these proposed drainage system features?</p>	<p>Appendix 11.6: Outline Surface Water Drainage Strategy of the Environmental Statement [APP-087] describes how surface water run-off from all aspects of the Proposed Development will be managed during the operational phase of the Proposed Development, including the use of managed vegetation and free draining sub-base.</p> <p>Table 1-1 Summary of Mitigation Measures of the Outline Water Management Plan [APP-214] specifically refers to drainage features (cut-off ditches, swales and retention ponds) to be employed for the construction phase for the dual function of reducing run-off rates and sediment control. These features need to be designed and located by the appointed construction contractor and these are to be secured through the Outline Water Management Plan [APP-214] and outline Construction Environmental Management Plan [APP-207].</p> <p>The exact location of the settlement lagoons will be a matter for the appointed contractor following determination of the location and configuration of the Primary Construction Compound, however they will be located between the West Glen River and the Primary Construction Compound and out of the flood plain. Section 2.3.13 of the oWMP [APP-214] states that settlement lagoons will be implemented at the Primary Construction Compound and that they will not be sited within the Mitigation and Enhancement Areas. It is assumed that settlement lagoons will be located downgradient of the Primary Construction Compound, allowing the construction areas to drain by gravity.</p>
Q12.0.6	The Applicant	<p>Section 3.1 of the oSWDS [APP-087] states that the installation of photovoltaic (PV) panels may increase runoff rates by approximately 256%. However, it is then stated that "the calculated increase does not represent the impact of the PV</p>	<p>a) Calculations presented in Table 7 of Section 3.1 of Appendix 11.6: Outline Surface Water Drainage Strategy [APP-087] assumes that the PV arrays are placed on the ground, which would reduce the potential for infiltration, hence theoretically increasing run-off by 256 %. The raised nature of PV Arrays will not prevent soil from absorbing rainwater as the panels will not be placed</p>

ExQ1	Respondent	Question	Applicant's Response
		<p>Arrays on surface water runoff" and "PV Arrays will not result in an increase in hardstanding areas and therefore will not significant increase surface water runoff rates". These statements appear to be contradictory. Section 3.1 also acknowledges that the "energy of the flow which drains from PV Arrays will be greater than that of the rainfall". Therefore, this could result in erosion under the driplines and possibly lead to ground instability. Proposed mitigation to address this includes seeding with a suitable grass mix in the area under the drip line of the PV Arrays to prevent rilling. Paragraphs 12.4.57 and 12.4.58 of the ES [APP-042] state that the land under and around the PV Arrays could be used for the grazing of sheep.</p> <p>a) Can the Applicant provide an explanation as to whether the installation of PV panels will increase surface runoff rates for the site?</p> <p>b) Does the proposal for sheep grazing under the PV Arrays pose any risks to the suitability of grass mix seeding as a mitigation measures to address erosion following rainfall?</p>	<p>directly on the ground and each PV Row will be separated, with the same area of soil available for infiltration as per the baseline scenario. Therefore, the calculated increase does not represent the impact of the PV Arrays on surface water runoff. The assessment concludes that the introduction of planting within the Mitigation and Enhancement Areas will increase the interception potential of surface water within the Solar PV area. This is evidenced by the 2D surface water model which shows increasing the roughness of the surface cover within the Order limits, specifically under the PV Array drip lines, retains water onsite for longer <i>i.e.</i>, reducing the surface water run-off rate compared to the baseline agricultural scenario.</p> <p>b) As outlined in Kampherbeek <i>et al.</i> (2023)*, using sheep for vegetation maintenance on solar farms can assist in improving biodiversity and soil activity, if grazing pressure is not too high. Sheep can create micro-climates with their hooves in the soil (through compaction), spread seeds with their wool, and spread diaspores from some plants with their hooves and faeces. Therefore, there needs to be a balance between biomass management and livestock stocking rate to ensure the grass mix is maintained and soil cohesion is managed, especially following periods of heavy or prolonged rainfall. Section 2.1.1 of the outline Landscape and Ecological Management Plan (oLEMP) [APP-210] commits to ongoing future management for biodiversity benefits including haymeadow style management of new grassland areas, including low intensity grazing. This will be implemented by the Environment Manager, as outlined in the Outline Operational Environmental Management Plan [APP-208].</p> <p>* A preliminary investigation of the effect of solar panels and rotation frequency on the grazing behaviour of sheep (<i>Ovis aries</i>) grazing dormant pasture. Kampherbeek <i>et al.</i> (2023). Applied Animal Behaviour Science. Volume 258, January 2023, 105799</p>
Q12.0.7	The Applicant	<p>Section 5 of the oSWDS [APP-087] refers to the potential for onsite foul water storage and states that either a cesspit or porta-loo will be required. It is not clear on what basis a cesspit will be required.</p> <p>Can the Applicant confirm whether a decision has been reached regarding</p>	<p>A decision regarding the storage method for foul water prior to disposal will depend on the number of staff onsite during the operational phase and the frequency of visits. The decision will be made prior to the construction phase by the appointed principal construction contractor, in discussion with the Environment Agency.</p>

ExQ1	Respondent	Question	Applicant's Response
		the onsite foul water storage or indicate what would trigger the need for a cesspit?	
Q12.0.8	The Applicant and Lincolnshire County Council	<p>Section 1.4 of the Flood Risk Assessment [APP-086] states that the Order limits are not within the operational boundary of an Internal Drainage Board (IDB). However, consultation feedback summarised in ES Appendix 11.3 [APP-084] revealed the Order limits do fall within the extended operational boundaries of the Black Sluice and Upper Witham IDBs as they act as an agent to the Lead Local Flood Authority (LLFA), namely Lincolnshire County Council. ES Appendix 11.3 details evidence of engagement between the Applicant and the IDBs. However, it is not clear from Appendix 11.3 if the Upper Witham IDB has provided any feedback to the Applicant to confirm the 6m buffer or on any other matters.</p> <p>a) Please can the role of the IDBs and their relationship with the LLFA be clarified?</p> <p>b) To what extent has feedback been obtained from the Upper Witham IDB and how has this been addressed by the Applicant?</p>	<p>a) During consultation with Lincolnshire County Council (LCC) (see Table 1 of Appendix 11.3: Water Resources and Ground Conditions - Consultation Summary [APP-084]) it was highlighted that LCC holds a memorandum of understanding with IDBs that operate within Lincolnshire, with IDBs acting as agent to the LLFA. The Order limits are shown to fall within the extended operational boundaries of the Black Sluice and Upper Witham IDBs. The Order limits are shown to fall within the 'extended area' management boundaries of the Black Sluice and Upper Witham Internal Drainage Boards (IDB). Consultations with LCC has confirmed that IDB consents and byelaws are not applicable for the extended operational areas which the Order limits falls within.</p> <p>b) The Applicant contacted the IDBs during pre-application both directly and via the formal Stage 2 consultation (S42) processes. A response was received by Guy Hird from Upper Witham IDB on the 14/06/2022, cc-ing Andrew Scott of the Black Sluice IDB, which is recorded on page 141 of the Consultation Report - Appendices 5-6 [APP-027]. The correspondence confirms the position outlined in the Applicant's response to question a) above and that a minimum 6_m maintenance strip to all watercourses is required. Table 1 of Appendix 11.3: Water Resources and Ground Conditions - Consultation Summary [APP-084] also details correspondence with the IDBs prior to submission of the DCO Application to discuss buffers to watercourses and consenting requirements in the context of the DCO Application. As outlined in Section 11.3 <i>Embedded Mitigation</i> of Chapter 11: Water Resources and Ground Conditions [APP-041], a 50 m buffer for major works and a 10 m buffer for minor construction works has in any event been applied to watercourses within the Order limits and is secured through the Works Plans. A minimum 6_m offset from ditches is applied as secured in design guidance V5.6 included in the Design and Access Statement [APP-204]. As such, the design of the Proposed Development is compliant with Byelaw 9 <i>No Obstructions within 9 Metres of the Edge of the Watercourse</i> of the Upper Witham Internal Drainage Board Byelaws.</p>
Q12.0.9	The Applicant	Section 2.2 of the FRA [APP-086] identifies that the PV Arrays within the 1	a) Annex F – Flood Zones of the Flood Risk Assessment [APP-086] shows PV array areas overlain on the 1 % Annual Exceedance Probability (AEP) and

ExQ1	Respondent	Question	Applicant's Response
		<p>in 1,000-year extent are limited to a section of PV Arrays north of Browne's Oaks woodland in the east of the Order limits and a section of PV Arrays south of Heath Farm in the north of the Order limits. A Flood Risk Map is provided at Figure 11.4 [APP-198] but the areas identified above are not clearly identified.</p> <p>a) Please can plans be provided that clearly identify the areas within the Order limits proposed to accommodate PV Arrays that fall within the 1 in 1000 year flood risk area?</p> <p>b) Please quantify the area of land proposed to accommodate PV Arrays that fall within the 1 in 1000 year area in Hectares.</p>	<p>0.1 % AEP (1:100 and 1:1,000 year) flood extents. As requested, a drawing clarifying the 0.1 % AEP areas has been submitted at Appendix T for Deadline 2.</p> <p>b) 13.23 ha of PV arrays are located within the outline of the modelled 0.1 % AEP (1 in 1,000 year event) as defined by the Environment Agency Flood Map for Planning dataset.</p>
Q12.0.10	The Applicant	<p>Section 2.4 of the FRA [APP-086] states that "the electrically sensitive infrastructure (the Onsite Substation) is not located within the 1 in 100-year pluvial event, as shown in Annex D." However, it goes on to state that "Where required, the electrically sensitive infrastructure will be located within contained units upon ground mounted platforms within aggregate based embankments which will lift the infrastructure above ground level by approximately 200 to 300 mm and provide additional protection from surface water flooding as shown in Plate 4." Please can the Applicant clarify what is deemed to be "electrically sensitive</p>	<p>Sensitive infrastructure includes all aspects within the Onsite Substation and Solar Stations.</p> <p>Annex D – 100-Year Pluvial Flood Depths of the FRA [APP-086] shows the minor areas within the Order limits modelled to flood during the 1:100 year event. No electrically sensitive infrastructure is planned to be located within these areas. As such, ground mounted platforms should not be required.</p>

ExQ1	Respondent	Question	Applicant's Response
		infrastructure” in the context of flooding and provide details of where ground mounted platforms may be required?	
Q12.0.11	The Applicant	Section 2.7 of the FRA [APP-086] provides commentary on reservoir flood risk from a breach or failure at Rutland Water. The Reservoir Flooding Extent map at Annex E indicates that a sizeable proportion of the Proposed Development would be affected should such an event occur, particularly when potential flooding from rivers is also taken into account. This includes land adjacent to the on-site substation. The FRA refers to the Reservoirs Act 1925 that requires all large reservoirs to be regularly inspected and supervised. The FRA concludes by stating that the residual risk of flooding from reservoirs is negligible. What mitigation measures are proposed to minimise impacts should such a flooding event occur?	The most electrically sensitive aspect of the Proposed Development (the Onsite Substation) is located outside the extent of the Reservoir Flooding (River Levels Normal scenario) and the regular inspection of reservoir retaining wall means that the residual risk of reservoir flooding is negligible. As such, no specific mitigation is proposed for a breach of reservoir scenario, also noting that PV arrays are located above ground on a racking system, and therefore would be elevated during an inundation from reservoir breach scenario.
Q12.0.12	The Applicant	In relation to the Sequential Test, Section 4.1 of the FRA [APP-086] acknowledges that a minor area of PV Arrays fall within Flood Zone 2 “demonstrating a sequential design approach to remove PV Arrays from the extent of the Proposed Development within the floodplain.” The same section goes on to highlight the key factors considered in Chapter 4 of the ES [APP-034] regarding Alternatives and Design Development. However, aside from the removal of some land for PV Arrays along the West Glen River (Table 4-1),	The design evolution of the Solar PV Site has removed PV Arrays from within Flood Zone 3a and 3b along the West Glen River Corridor. It should be noted that essential infrastructure is acceptable in both Flood Zone 3a and Flood Zone 2 – as per Table 2: Flood risk vulnerability and flood zone ‘incompatibility’ of Flood risk and coastal change Guidance, but the Applicant has chosen not to locate PV Arrays within Flood 3a. The minimum height of the Solar Panels as set out in Appendix 5.1 [APP-053], ensures that there is sufficient freeboard where PV Arrays are located within Flood Zone 2 so not to require the PV Arrays to be raised above the flood levels, increasing the overall height of the panels. In addition, the Applicant has committed that the Solar Stations will be located within Flood Zone 1 (Design Guidance PL3.3 withing the Design and Access Statement [APP-204]), avoiding the need for the electrical equipment to be raised above the flood levels.

ExQ1	Respondent	Question	Applicant's Response
		Chapter 4 does not fully explain how flood risk matters have informed the design evolution. Please can the Applicant provide further details of how it has considered alternatives to the design and extent of Order limits to minimise the siting of PV Arrays within Flood Zone 2?	

## Topic 13.0 Other matters/issues

ExQ1	Respondent	Question	Applicant's Response
Q13.0.1	The Applicant	<p>Paragraphs 15.4.54 and 15.4.55 of the ES [APP-045] report no potential impacts from 'glint and glare' upon the ATC Tower or Approach Paths for RAF Wittering.</p> <p>a) Could the Applicant set out whether any engagement and consultation has taken place with RAF Wittering and/or Ministry of Defence on this assessment and provide any copies of any consultation responses received.</p> <p>b) If no such engagement/consultation with RAF Wittering has taken place, please can this be done so and submitted at the first practicable deadline, so that any response can be considered in the Examination.</p>	<p>The Ministry of Defence were consulted during Stage 1 and Stage 2 of the application. MOD Safeguarding - RAF Wittering responded at Stage 1 on the 05 January 2022, indicating that they receive the correspondence that the Applicant sends to the Ministry of Defence and did not mention glint and glare as a concern. See <b>Appendix U</b> submitted for Deadline 2. No response was received at Stage 2. The Ministry of Defence was also provided the Section 56 Notice via post and via email on 05 January 2023, to which no response was received.</p> <p>The modelling undertaken as part of the Glint and Glare Study, Appendix 15.3 <b>[APP-104]</b>, showed that no solar reflections were geometrically possible towards the ATC Tower and the 2-mile approach paths towards RAF Wittering. Details of the assessment and conclusions are contained within Section 3, Figure 4, Section 7, and Section 10, of this report.</p> <p>As no impacts were predicted, no further consultation with the Ministry Of Defence / RAF Wittering has been undertaken regarding glint and glare</p>
Q13.0.2	The Applicant	<p>Chapter 15 of the ES (Other Environmental Topics) [APP-045] explains the anticipated waste streams for the construction, operational and decommissioning phases, however specific quantities of waste are not provided.</p> <p>In line with the requirements of the Overarching National Policy Statement for Energy [EN-1] can the Applicant confirm the anticipated volumes of waste from the Proposed Development, the proposed waste management strategy on-site, and the impact of waste generation from the Proposed Development on the capacity of waste</p>	<p>Given the need for flexibility in the design of the Proposed Development and type of technology used, it is not possible to set out specific quantities of waste. However, large quantities of waste are not anticipated given that excavated soil will be stored in mounds within the Order limits and reinstated during decommissioning. It is not anticipated that there will be any contaminated soils that will require disposal offsite. As such, construction waste will be limited to small volumes of construction material waste/offcuts, packaging, welfare facilities waste etc. which will be minimised through the measures outlined in Section 15.7 of the ES and the oCEMP.</p> <p>Furthermore, the Joint Municipal Waste Strategy for Lincolnshire, 2019 considers the waste needs of the county (reviewed on an annual basis) and considers allocated sites and other forms of strategic development, therefore consideration has been made at the regional level for the cumulative waste generated by these</p>



ExQ1	Respondent	Question	Applicant's Response
		management facilities, particularly when considering other waste arising in the area?	<p>developments and the capacity of regional waste infrastructure to accommodate this.</p> <p>In order to control the waste generated during site preparation and construction, the contractor(s) will separate the main waste streams on-site, prior to transport to an approved, licensed third party waste facility for recycling or disposal. Prior to construction, a Construction Resource Management Plan (CRMP) will be prepared by the contractor(s) as part of the detailed Construction Environmental Management Plan (CEMP), which will specify the waste streams which would be monitored and targets set with regards to the waste produced, including any re-use and recycling of materials. The CRMP will be finalised with specific measures to be implemented prior to the start of construction. All waste to be removed from the Order limits will be undertaken by fully licensed waste carriers and taken to licensed waste facilities. This has been added to the updated version of the oCEMP submitted at Deadline 2.</p>
Q13.0.3	The Applicant	<p>For the assessment of embodied climate change emissions within the ES Chapter 13 [APP-043] the Applicant has utilised published estimates of lifetime emissions for typical solar farms.</p> <p>a) Can the Applicant explain how this information has been applied to the Proposed Development with reference to the embodied carbon associated with manufacturing components and transportation to the Order limits, particularly for any that have been sourced outside the UK.</p> <p>b) Please confirm the appropriateness of the median lifetime emission scenario for determining the worst-case scenario of the assessment rather than the maximum lifetime emissions scenario?</p>	<p>a) The Intergovernmental Panel on Climate Change (IPCC) Annex III: Technology-specific cost and performance parameters (2014) provides estimated emissions of CO<sub>2</sub> for a range of electricity generation types. The Proposed Development involves the construction, operation and decommissioning of utility scale solar photovoltaic (PV) cells, for which the IPCC Annex III (2014) estimates a lifetime emission of 48 kgCO<sub>2</sub>eq/MWh (based on the median value from a range between 8 and 180 kgCO<sub>2</sub>eq/MWh). The lifetime emissions values provided in Annex III and used in the assessment of lifecycle GHG emissions for the Proposed Development, include embodied carbon emissions associated with the production of energy required in the manufacturing and transportation of solar PV components globally.</p> <p>b) The IPCC (2014) estimated full life-cycle emissions of CO<sub>2</sub> for a range of electricity generation types. For utility scale solar photovoltaic cells, it estimated an emission intensity of 48 kgCO<sub>2</sub>eq/MWh (based on the median value from a range between 8 and 180 kgCO<sub>2</sub>eq/MWh). In 2014, solar farms were expected to operate for 25 years, and the emissions data would have been based on this lifetime. The Mallard Pass DCO submission makes use of this median lifecycle emissions value of 48 kgCO<sub>2</sub>eq/MWh in its assessment of overall avoided emissions during the lifetime of the project. This is considered appropriate as it is in accordance with the approach used and</p>

ExQ1	Respondent	Question	Applicant's Response
			agreed with by the Secretary of State in the Cleve Hill project and is conservative having regard to other solar panel lifecycle emissions intensities found in literature.
Q13.0.4	The Applicant	ES Chapter 13 [APP-043] reports a beneficial effect on climate change resulting from the renewable energy production of the scheme. It is noted from paragraph 13.4.10 that the operational energy output is calculated based on the assumption that the Proposed Development would operate on a 24/7 basis. Considering the reliance of the Proposed Development on solar irradiation, please justify in further detail this assumption?	<p>For the purposes of the assessment, the ES has assumed an installed Direct Current (DC) capacity of 350MW. The effects of degradation on the solar panels and the supply chain emissions were factored in to produce the profile of emissions, from which the beneficial effect could be ascertained.</p> <p>The beneficial effect of 350MW on climate change is calculated by multiplying the installed capacity by the number of hours in a year (assuming the plant is continually operational on a 24/7 basis) by the solar load factor estimated for the East Midlands. The solar load factor represents the ratio of actual energy produced in a period of time to the theoretical maximum output if the facility were operating at capacity for 24 hours a day, 7 days a week, and accounts for periods of maintenance and unavailability (intermittency and hours of darkness).</p>
Q13.0.5	The Applicant	There are inconsistencies within ES Chapter 13 [APP-043] where the effect of the Proposed Development on climate change is considered significant in places but not in others. ES Chapter 17 [APP-047] summarises the effect as not significant whereas the Non-Technical Summary [APP-106] states that the effect is significant. Furthermore, the climate change assessment methodology (ES Appendix 13.2 [APP-097]) does not provide a clear explanation as to how significant effects are determined. The Applicant is requested to confirm whether the identified positive effect on climate change is considered significant and explain the methodology for determining significance.	<p>The Proposed Development is considered to have a significant positive effect on climate change. This is a qualitative assessment, typically made as per IEMA guidelines (Institute of Environmental Management &amp; Assessment (IEMA) Guide: Assessing Greenhouse Gas Emissions and Their Significance).</p> <p>According to the IEMA guidelines, the Proposed Development should be categorised as having a significant beneficial impact:</p> <p><i>A project that causes GHG emissions to be avoided or removed from the atmosphere has a beneficial effect that is significant. Only projects that actively reverse (rather than only reduce) the risk of severe climate change can be judged as having a beneficial effect.</i></p> <p>The Proposed Development meets the IEMA criteria for a project that has significant beneficial impact by virtue of the estimated avoided GHG emissions arising from generation at a lower carbon intensity of 48 gCO<sub>2</sub>e / kWh against the same electrical output being generated at the national grid carbon intensity of 182 kgCO<sub>2</sub>e / MWh.</p>
Q13.0.6	The Applicant	Details of several of the monitoring requirements proposed in the Outline	a. It is unlikely that any ground contamination is present within the Order limits. The outline Construction Environmental Management Plan (oCEMP) <b>[PDA-</b>

ExQ1	Respondent	Question	Applicant's Response
		<p>Construction Environmental Management Plan [PDA-005] are limited. Whilst acknowledging the plan is in Outline, please provide further details of the following monitoring requirements:</p> <ul style="list-style-type: none"> <li>a) Potential for risk to human health from contamination.</li> <li>b) Greenhouse gas emissions from construction vehicles and equipment.</li> <li>c) Impacts to local residents, businesses and community facilities and disruption to users of Public Rights of Way.</li> <li>d) Impacts of major accidents and disasters.</li> </ul>	<p><b>005]</b> and Outline Soils Management Plan <b>[PDA-007]</b> incorporating the Excavated Material Management Plan (EMMP) will inform the preparation of detailed versions of these plans in addition to a Pollution Prevention Plan (PPP), Emergency Response Plan, Emergency Spillage Action Plan and Health and Safety Plan (H&amp;SP). These plans (where required) will provide the detail about monitoring requirements in relation to the potential risk to human health from contamination.</p> <ul style="list-style-type: none"> <li>b. Monitoring of greenhouse gas emissions is not required because no related significant effects have been identified as stated in paragraph 13.7.1 of Chapter 13: Climate Change <b>[APP-043]</b>.</li> <li>c. Section 5 of the outline Construction Traffic Management Plan (oCTMP) <b>[APP-212]</b> sets out the monitoring requirements in relation to ensuring that mitigation measures are sufficient to address transport related adverse effects on local residents and users of Public Rights of Way. This involves the appointment of an individual who will oversee the final CTMP and act as a point of contact for all key stakeholders, acting as the Transport Coordination Officer (TCO). In relation to noise disturbance on local residents, businesses, and community facilities, the oCEMP sets out proposed monitoring that will be confirmed in detail once Section 61 Consents have been obtained and which involves setting construction noise limits for nearby noise sensitive receptors.</li> <li>d. Section 15.5 of Chapter 15: Other Environmental Topics <b>[APP-045]</b> sets out the mitigation related to monitoring and responding to major accidents and disasters. The oCEMP and outline Operation Environmental Management Plan (oOEMP) <b>[APP- 208]</b> require that an Emergency Response Plan is prepared which will include details of monitoring major accidents and disasters.</li> </ul>

