



Longfield Solar Farm

Applicant Responses to ExA Further Written Questions

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Deadline 4

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Longfield Solar Energy Farm Ltd

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1. Introduction

1.1 Introduction

- 1.1.1 This report responds to the Examining Authority's (ExA) further written questions, issued on 18 October 2022 [PD-009]. It responds to each of the questions posed to the Applicant.
- 1.1.2 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 5.
- 1.1.3 Section 2 onwards of this report is tabularised to include the ExA's questions and a response to each question as follows:
- Section 2 – Air Quality (1 question)
 - Section 3 – Biodiversity, Ecology and the Natural Environment: Habitats Regulations Assessment (5 questions)
 - Section 4 – Compulsory Acquisition and Temporary Acquisition (2 questions)
 - Section 5 – Draft Development Consent Order (4 questions)
 - Section 6 – General Matters (2 questions)
 - Section 7 – Landscape and Visual Effects (1 question)
 - Section 8 – Land Use, Agriculture and Socio-economics (3 questions)
 - Section 9 – Noise and Vibration (1 question)
 - Section 10 – Transport and Traffic (1 question).

2. Air Quality

ExQ.	Respondent	Question	Applicant Response
2.1.1	Applicant	<p>Tables 14-11 and 14-12 of ES Chapter 14 appear to contain some errors (e.g. Table 14-12 refers to mitigation 'as outlined in Table 14-10 and 14-11' and use of the phrase 'negligible with mitigation with adequate mitigation').</p> <p>Please review Tables 14-11 and 14-12 and update accordingly.</p>	<p>The typographic errors noted by ExA should have referred to embedded mitigation in both instances. This has been amended in the revised Chapter 14 submitted at Deadline 4. Table 14-11 now refers to being Negligible with embedded (industry standard) mitigation. Table 14-12 now refers to Table 14-5 and 14-6, which present the embedded mitigation.</p>

3. Biodiversity, Ecology and the Natural Environment: Habitats Regulations Assessment

ExQ.	Respondent	Question	Applicant Response
2.2.1	Applicant	<p>In its response to Relevant Representations [REP1A-002] (Table B-17), the Applicant notes that the Glint and Glare assessment (ES App 10G: Glint and Glare Assessment [APP-087]) analyses the effects of glint and glare on people rather than ecological receptors. It goes on to state that the Applicant is liaising with Statutory Bodies to identify whether they consider additional work is required in respect of ecology and will, if necessary, provide supplementary information.</p> <p>Please provide an update on these discussions and confirm whether the Applicant intends to undertake further work in relation to the effects of glint and glare on ecological receptors. If so, please provide an indication of when this information will be submitted into the Examination.</p>	<p>The Applicant considers that the scope of the glint and glare assessment submitted with the Application is comprehensive. The Applicant is aware that the host councils have procured an independent specialist to review the Glint and Glare report; and we understand that the outcome of that review is imminent. Should the review by the host councils' consultants identify that further work is necessary this would be discussed between the parties, and if necessary additional information submitted into the examination. The progression of engagement on this matter is, and will continue to be, recorded within the Statement of Common Ground between the parties.</p>
2.2.2	Applicant	<p>The ExA notes that the most recent oLEMP [REP3-012] indicates a Biodiversity Net Gain of 87%, an increase on the previous figure of 79%. Please provide an update on the minimum BNG the Applicant intends to include in Requirement 9 of the dDCO</p>	<p>The Applicant confirms it can commit to providing a minimum of 87% biodiversity net gain during the operation of the Scheme, calculated using Metric 3.1. The dDCO has been amended at Deadline 4 to include that updated figure, and also to make clear that figure has been arrived at based on calculations made under Natural England's Metric 3.1.</p>

		(and make any necessary update to the dDCO at the next iteration).	
2.2.3	Applicant	<p>The Arboricultural Impact Assessment (AIA) [REP3-033 & REP3-034] indicates that there is potential for a veteran tree (T9) to be impacted by a proposed access route and fencing. It states that this can be avoided by micro-siting the track to avoid the amended RPA of this tree which will not be impacted. Furthermore, it indicates that this will be illustrated on a revised version of the illustrative concept design and updated vegetation removal plan (to be submitted during the Examination (See para 5.2.2).</p> <p>Please indicate where in the Examination documents these can be found and explain how they have taken the findings of the AIA into account.</p>	<p>The revised ES Figure 2-5 Illustrative Concept Design [EN010118/APP/6.3(A)] was submitted at Deadline 3. The revised ES Figure 10-15: Vegetation Removal Plan [EN010118/APP/6.3(B)] is submitted at Deadline 4. Both of these figures have been updated to reflect the micro-siting of the track to avoid the RPA of the veteran tree.</p> <p>Design principles [EN010118/APP/7.3 A (C)] for work nos. 4 and 7 require that vegetation loss be restricted to the maximum extents shown on the Vegetation Removal Plan. The Outline Construction Environmental Management Plan [EN010118/APP/7.10(C)] also secures at Table 3-14(a) that tree and hedgerow removal will not exceed that shown on the Vegetation Removal Plan.</p> <p>The outline CEMP has been updated for Deadline 4 and now incorporates an additional mitigation measure in Table 3-13 to secure the protection of Tree T9.</p>
2.2.4	Applicant	<p>At ISH1, the Applicant explained that there would be monitoring of the mitigation and enhancements made under the oLEMP, and that results of monitoring would be compared with the baseline data. The ExA notes that at Deadline 3, the Applicant provided an updated oLEMP [REP3-020] which included further details of the Ecological Advisory Group and its role in this process. However, as the ExA noted at ISH2, it would be useful to understand how the results of the monitoring would be used to inform decisions on whether changes to the proposed management measures are required and what the</p>	<p>As stated in the updated oLEMP [EN010118/APP7.13(B)], results from the post-construction monitoring will feed into the management plan and, if required, management may need to be amended accordingly based on this monitoring. This may be triggered if the target habitats are not establishing properly. This may include potential problems with invasive species or unexpected damage to habitats.</p> <p>Based on advice from the Ecological Advisory Group, triggers for remedial action for habitats would be based on a habitat condition assessment, for example, similar to that undertaken for the Biodiversity Net Gain Report [EN010118/APP/6.5(A)] that would identify the species composition/richness, damage and presence of invasive non-native species. Where target habitats are not developing or resembling those as proposed in the oLEMP, for example, they are in poor condition or do not resemble the target habitat types within the timescales set, then interventions would be implemented. Where habitats designed as mitigation or enhancement for species (e.g. for breeding birds) are not functioning correctly to support the species, then changes would be made. This may be triggered by comparing pre-construction and post-construction data.</p>

		triggers are for when the remedial measures will be considered? For example, where the monitoring demonstrates the absence of/ differences in expected species abundance and diversity.	Targets for habitats and species will need to be presented in the Landscape and Ecology Management Plan (LEMP) prior to the commencement of works. Remedial action and amendments to the management interventions that could be undertaken are listed in Paragraphs 4.1.6 and 4.1.7 of the oLEMP [EN010118/APP7.13(B)] .
2.2.5	Applicant	The ExA notes the additional information provided in the oLEMP [REP3-020] in relation to the Ecological Advisory Group. However, the make-up of the group remains somewhat unclear. Furthermore, with reference to paragraphs 4.1.1 and 4.2.7 of the oLEMP [REP3-020], it remains unclear whether the Ecological Advisory Group would have a role in discussing and agreeing any remedial action. The Applicant is asked to provide further details of the group.	The role of the Ecological Advisory Group is being discussed with the host councils and the detail will be provided at Deadline 5.

4. Compulsory Acquisition and Temporary Possession

ExQ.	Respondent	Question	Applicant Response
2.3.1	Applicant	Please continue to provide regular updates on discussions with affected persons and whether agreement for the voluntary acquisition of land and rights has been reached.	The Applicant will continue to provide the CA Schedule at regular intervals throughout the examination with a version being submitted at this deadline (Deadline 4) as Revision 4.0. The CA Schedule details the position in relation to ongoing negotiations with affected persons for acquisition by agreement.
2.3.2	Applicant	The Applicant explained at CAH1 that plot 1/1a had been removed from the BoR and Land Plans in anticipation of the land being adopted. Please provide an update on the expected timescale for adoption and whether this is likely to take place before the close of the Examination.	The section of road, Generals Lane to Radial Distributor Road (RDR) formerly within plot 1/1a has been removed from the Order land as this section of road no longer links into the wider highway network. The RDR, which is fully accessible to the public now links in to plot 1/1a and is subject to a Section 278 Agreement under the Highways Act 1980 dated 24 November 2021. A Certificate of Completion is expected to be imminent (prior to the close of examination).

5. Draft Development Consent Order

ExQ.	Respondent	Question	Applicant Response
2.5.1	Applicant	<p>Art 2 – Definition of Commence The definition of ‘commence’ is tied to s.56(4) TCPA 1990, which appears incorrect.</p> <p>Please review and consider whether the definition should instead refer to s.155 PA 2008.</p>	<p>Section 155 of the Planning Act 2008 does ultimately lead back to section 56(4) of the Town and Country Planning Act 1990, via the definition of “development”. However, the Applicant is content to amend the definition of “commence” in the dDCO to refer to section 155 of the PA 2008, in line with recently made energy DCOs.</p>
2.5.2	Applicant	<p>Art 2 - definition of “commissioning”. The ExA notes the second part of the definition appears to exclude the generation of electricity during ‘commissioning and testing’. Is this intended? If so, please explain.</p> <p>Furthermore, there appears to be some duplication in this definition and the following definition of “date of final commissioning”. Please can the Applicant review and redraft as necessary.</p>	<p>The Applicant agrees that clarification is required to make clear that the “date of final commissioning” is when the commissioning process has been completed and when “operation” or commercial generation of electricity would effectively commence. The “commissioning” definition has been amended to mean “the process of testing all systems and components of numbered work 1 in order to ensure that they, and the authorised development as a whole, function in accordance with the plant design specifications and the undertaker’s operational and safety requirements”. The original “date of final commissioning” has been reinstated with some minor amendments. Requirement 3(3) has also been amended slightly to align with these definitions, given the notification for the date of final commissioning should be linked to when that occurs rather than the start of commissioning.</p>
2.5.6	Applicant	<p>Schedule 15, Part 3 of the dDCO [REP3-006] - The ExA draws the Applicant’s attention to the Office for Parliamentary Counsel Guidance which discourages the use of the word ‘shall’.</p>	<p>This is noted, and amendments have been made to paragraph 22(3) in Part 3. Other amendments have also been made in Schedule 15 to paragraphs 38, 70, 77, 77, 81 and 97 in line with the advice.</p>

6. General Matters

ExQ.	Respondent	Question	Applicant Response
2.6.1	Applicant	<p>Regarding potential effects from magnetic fields, in response to ExQ 1.9.3 the Applicant states that: "For permanent residents, taking into account this guidance and the UK limits set for safety of members of the public, the maximum reported EMF for high voltage cables buried at 0.9m would comply with the ICNIRP limits even if the cabling were directly under a residential property."</p> <p>Can the Applicant explain how the ODPs would secure a minimum buried depth for the 400kv cable, particularly where it is located in proximity to receptors sensitive to effects from magnetic fields?</p> <p>The ExA notes that a minimum buried depth for the 400kv cable is specified in the ODPs for sections below watercourses.</p>	<p>The Outline Design Principles submitted at Deadline 4 [EN010118/APP/7.3 A (C)] include a commitment that the 400kV will be buried to a depth of a minimum of 0.9m when within 50m of receptors sensitive to electromagnetic fields.</p>
2.6.2	Applicant	<p>ES Chapter 2 (the Scheme) notes that Phase 2 of the BESS (Work No. 2B on the Works Plans) will commence operation not less than 5 years after commencement of operation of the wider Scheme and will comprise a maximum area of 1.8ha. Please can the Applicant explain whether, and if so where, this is secured in the dDCO/ODP.</p>	<p>The Outline Construction Environmental Management Plan (CEMP) details the construction programme. Requirement 13 of the dDCO requires a Construction Environmental Management Plan to be submitted and approved to the host councils, which is required to be substantially in accordance with the Outline CEMP.</p>

7. Landscape and Visual Effects

ExQ.	Respondent	Question	Applicant Response
2.8.1	Applicant	<p>Table B-20 (LVIA) of the Applicant's Response to Relevant Representations [REP1A-002], (responding to RR-48 and RR-59), states that an assessment of the proposed lighting on ecology has been undertaken in ES Figure 10-12: Outline Landscape Masterplan [APP-179].</p> <p>Please indicate where on the Outline Landscape Masterplan this assessment can be found.</p>	<p>The reference document referred to for the assessment of the proposed lighting on ecology is incorrect. This assessment has been undertaken in the Environmental Statement, Chapter 8: Ecology [EN010118/APP/6.1]. Lighting is discussed in paragraphs 8.8.12, 8.8.13 and the assessment of likely impacts and effects on relevant ecological features (designated sites, habitats and species) is shown in Tables 8-9 and 8-10.</p>

8. Land Use, Agriculture and Socio-economics

ExQ.	Respondent	Question	Applicant Response
2.9.1	Applicant	<p>ES Chapter 12 [APP-044] describes the loss of approximately 150ha of BMV agricultural land during construction as a temporary effect (reversible after operation) and concludes that this would not be significant. The Planning Statement [REP1b-028] (paragraph 6.7.32) explains that higher grade agricultural land "...is very prevalent in the vicinity of the Scheme, and in the wider area...".</p> <p>Can the Applicant provide an estimate of the total area of BMV agricultural land (Grades 1, 2 and 3a) within the regional area, and express the area of temporary loss from the Proposed Development as a percentage of that total area? The Applicant's response should also explain how these figures support the ES conclusion of no likely significant effect from the loss of BMV agricultural land.</p>	<p>According to Defra¹, East England has 1.4 million hectares of farmland, of which 1.1 million is arable farmland. (England as a whole has 9.2 million ha of farmland).</p> <p>In 2021, Braintree was reported as having 53,262ha of farmland². The majority, 41,404ha of this was used for cereals and arable crops.</p> <p>Longfield Solar Farm requires 439ha of farmland for construction (Table 12-22 of ES Chapter 12: Socio-economics [EN010118/APP/6.1]), of which 15ha is permanently lost to planting and a National Grid Substation Extension and would not be returned to farmland on decommissioning (Table 12-23 of ES Chapter 12: Socio-economics [EN010118/APP/6.1]). The 439ha required for construction constitutes 0.8% of the total farmland in Braintree (1.0% of the land used for cereals or arable farming) and <0.04% of arable farmland in East England. The 15ha of permanent loss constitutes <0.03% of the farmland in Braintree (<0.04% of the land used for cereals or arable farming) and 0.001% of arable farmland in East England.</p> <p>In terms of BMV, East England contains 618,789ha of BMV (based on the post-1988 dataset in England³). Longfield Solar Farm will utilise 150ha of BMV for the Scheme, with 6ha being lost permanently due to not being returned to farm use following decommissioning (Tables 12-22 and 12-23, ES Chapter 12: Socio-economics [EN010118/APP/6.1]). The former – i.e., the BMV being used by the Scheme during its construction and operation - represents 0.02% of the regional BMV. The latter – the BMV not being returned to farmland at the end of the Scheme - represents <0.001% of the region's BMV.</p> <p>These figures are all 1% or less, further supporting the conclusions of the ES that the effect on BMV land is not significant.</p>

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/972093/regionalstatistics_east_23mar21.pdf

² <https://www.gov.uk/government/statistical-data-sets/structure-of-the-agricultural-industry-in-england-and-the-uk-at-june>

³

<p>2.9.2</p>	<p>Applicant</p>	<p>ES Chapter 12 (and the Applicant's responses to Relevant Representations [REP1a-002] Table B-25) refers to a local skills and employment plan which will set out the measures that the Applicant will implement to advertise and promote employment opportunities associated with the scheme in construction and operation. The ExA understands that these will be secured as part of a s106 agreement. Please provide an update on the progress of the s.106 agreement and confirm that a final, executed copy will be submitted before the close of the Examination.</p>	<p>The Applicant continues to engage with the host councils in relation to the draft DCO and the draft legal agreement. The Applicant maintains the commitment it made at the hearings to submit a draft of the legal agreement at Deadline 5 and submit a final, executed copy before the close of the examination.</p>
<p>2.9.3</p>	<p>Applicant</p>	<p>ES Chapter 12 (para 12.9.3) refers to a community benefit fund structure document. Please signpost where this document can be found and whether, (and if so how) the Applicant proposes to secure it in the dDCO.</p>	<p>There is no community benefit fund structure document that has been submitted to the examination, and reference in Chapter 12 of the ES is likely to have been to the Heads of Terms of the legal agreement securing the fund (at Appendix B to the Planning Statement [EN010117/APP/7.2(B)] as at the time of submission of the Application).</p> <p>The Applicant has proposed securing the community benefit fund via the legal agreement with the Councils (proposed to be an agreement under section 111 of the Local Government Act 1972 with respect to the community benefit fund, and under section 106 of the Town and Country Planning Act 1990 with respect to the planning obligations the agreement secures). Pursuant to the legal agreement, the Applicant would need to submit details of the community benefit fund to the local authorities for approval. This would include the terms of reference for the fund, its purpose, how it will be administered and by whom, and the method of calculation for the amount to be paid into the fund annually by the Applicant (based on the total megawatts generated each year). The agreement would require the parties to implement the fund in accordance with the approved details.</p> <p>The Applicant continues to engage with the host councils in relation to the draft DCO and the draft legal agreement. The Applicant maintains the commitment it made at the hearings to submit a draft of the legal agreement at Deadline 5 and submit a final, executed copy before the close of the examination.</p>

9. Noise and Vibration

ExQ.	Respondent	Question	Applicant Response
2.10.1	Applicant	<p>The oCEMP [REP3-018] states that 'operational phase noise monitoring will be carried out to verify the significance of effects presented in the ES [Chapter 11 of Volume 1, APP-043] and if required remedial action such as silencers or acoustic barriers (where not present) will be installed.</p> <p>Can the Applicant indicate what remedial action will be installed where the operational phase monitoring identifies remedial action is required at locations where silencers or acoustic barriers are already present?</p>	<p>The operational monitoring was added in response to discussions with stakeholders; it is not expected that remedial action will ever be needed for noise once operational. The sound modelling presented in Chapter 11 of Volume 1 of the ES [EN010118/APP/6.1] has been based on worst case sound power levels to allow flexibility on the choice of equipment, coupled with the assumptions that it operates at this maximum all the time and under worst case meteorological conditions that favour the transmission of noise.</p> <p>The Applicant will aim to select quieter infrastructure than has been modelled; it is unlikely that the most noisy equipment on the market which has been modelled would be procured. The equipment sound power levels would be checked at detailed design to determine if either acoustic barriers or silencers are needed for equipment near to residential receptors. Should it be decided necessary, one or the other would be installed to reduce the sound power levels by 10dB.</p> <p>The addition of silencers and acoustic barriers is not expected to be required but has been allowed for in the Design Principles for equipment near residential receptors. Each measure would be able to lower the sound by around 10 dB. Should one or the other be found to not be sufficient, the other would be installed to provide additional mitigation.</p> <p>Operational noise levels will not exceed the significance of effects presented in Chapter 11 of Volume 1 of the ES [EN010118/APP/6.1] following the steps above.</p>

10. Transport and Traffic

ExQ.	Respondent	Question	Applicant Response
2.12.1	Applicant	<p>The ExA notes the recent acceptance of National Highways' proposed A12/A120 road widening scheme as an NSIP and that, as a result, new information may have become available. Can the Applicant indicate if this influences the cumulative assessments in the ES (in particular, Transport and Access) and their conclusions and if so, describe how?</p>	<p>A SoCG has been prepared by the Applicant in collaboration with National Highways to review and seek resolution/agreement on any issues. A meeting was held between the Applicant and National Highways on 20/09/22 to review any remaining points, including with respect to the A12 Chelmsford to A120 Widening Scheme. Therefore, it is expected that any new information relating to the A12 Chelmsford to A120 Widening Scheme was covered as part of these recent discussions and the SoCG was updated accordingly.</p> <p>The main (agreed) considerations in relation to the A12 Chelmsford to A120 Widening scheme are currently set out within Section 4 of the National Highways SoCG [EN010118/EX/8.4(C)]. In summary:</p> <ul style="list-style-type: none"> • Both Applicants are committed to ensuring the private road to/ from Bulls Lodge substation is shared by both schemes. • There is expected to be overlap of the construction programme i.e. A12 Chelmsford to A120 Widening scheme construction is set to begin in 2023, ending in 2027, with construction of Longfield Solar Farm due to begin no earlier than 2024, ending no earlier than 2026. • All parties agree that Longfield Solar Farm should not have a significant impact on the A12 or the A12 Chelmsford to A120 Widening scheme. • The A12 Scheme will require narrow lane running to create the necessary working space. Single carriageway night-time or weekend closures will be required to install and remove the narrow lane running. The A12 and Boreham Interchange will remain open to traffic during weekdays daytime, except for emergencies, and closures may occur during night time and weekends. Closures are therefore unlikely to affect Longfield Solar Farm, except perhaps during Saturday works. The Longfield Solar Farm Contractor will work with the A12 Chelmsford to A120 Widening scheme Contractor so that any closures on Saturdays are known about and can be planned around. <p>In terms of construction vehicle trips associated with Longfield Solar Farm, only 21 additional vehicles are expected to use the Boreham Interchange during the AM network peak (08:00-09:00) with 14 arriving from the A12(T) south and seven arriving from the A12(T) north. In addition, only 20 additional vehicles are expected to use the Boreham Interchange during the</p>

PM network peak (17:00-18:00), with 13 heading southbound on the A12(T) and seven heading northbound on the A12(T). The PM peak hour for Longfield Solar Farm's construction workers is anticipated to be 18:00-19:00 which is the hour after the peak of the A12 Chelmsford to A120 widening scheme (17:00-18:00). Therefore, these additional traffic flows are expected to have very little impact on the junction.

In addition, a cumulative review of both projects has been carried out as part of the **TA [EN010118/APP/6.2], Framework CTMP [EN010118/APP/6.2(C)]** and **ES [EN010118/APP/6.1]** which supported the Longfield Solar Farm DCO submission. The Longfield Solar Farm **ES [EN010118/APP/6.1]** concluded that no cumulative impacts were envisaged upon the highway network based on the assessment undertaken.

It is expected that the CTMP by the A12 Chelmsford to A120 Widening Scheme team will include measures to reduce the cumulative effects of both Longfield Solar Farm and the A12 Chelmsford to A120 Widening Scheme during the construction phase.

In view of the above, it is considered that the cumulative assessment in the ES (for Transport and Access) remains valid, and further details will be set out within the Detailed CTMPs when these are prepared post-consent.