

Planning inquiry Supplementary Statement.

Land East of Hawksworth and Northwest of Thoroton,
Nottinghamshire, NG13 9DB.

On behalf of Renewable Energy Systems (RES) Ltd.

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1. Introduction

- 1.1. This Planning Inquiry Supplementary Statement has been prepared of behalf of Renewable Energy Systems (RES) Ltd ('The Appellant') and relates to the planning appeal at Longhedge Solar Farm.
- 1.2. The Appeal Inquiry commenced on 10th June 2024 and was adjourned on the 14th June, to resume online at 0930 on Thursday 1 August 2024.
- 1.3. Subsequent to the adjournment the Inspector provided an Inquiry note dated 14th June 2024 raising a number of matters and Inspector's questions and a second Inquiry Note was issued on 17th June 2024, setting out further matters on which the views of the parties were requested.
- 1.4. The Inquiry Notes set a deadline of 12th July 2024 for submission of responses on the matter and Inspectors questions. It is confirmed in the Inquiry Note of 14th June that the resumed Inquiry will not be an opportunity to revisit matters that have already been considered in the proceedings during the Inquiry's sitting from 10th – 14th June.
- 1.5. Copies of the Inspector's notes of 14th and 17th June are attached at Appendices 1 and 2

Submissions arising from the Inquiry Cross Examination

- 1.6. In addition to the matters raised in the Inquiry Notes, during the course of the inquiry the Inspector requested additional notes on certain matters from Mr Smart, Mr Urbani, Mr Kenyon and Mr Cussen and additional notes were requested. For clarification, these matters are addressed below.

Staythorpe Grid Supply Point – Explanatory Note

- 1.7. During Mr Smart's oral evidence, a note was requested addressing the implications for the Longhedge Solar scheme of the Transmission Active Network Management (TANM) scheme linked to the operation of the existing SGTs in the Staythorpe GSP. This note was submitted to PINS on 19th June 2024.

Request to National Grid Electricity Distribution (NGED) for Grid Connection Agreement Disclosure

- 1.8. The Appellant has sought permission from NGED to disclose a full copy of the Grid Connection Agreement or a fully redacted version. However permission has not been granted from NGED to provide either of these documents.
- 1.9. The Appellant maintains that INQ22 contains all relevant material confirming the Grid Connection Agreement and NGED's ability to control and/or vary the design of the connection infrastructure.



Note on Anaerobic Digestion

- 1.10. The Inspector requested a note providing the information relayed by Tony Kernon in his oral evidence as to the current contribution of crops from the Appeal Site to the Anaerobic Digester plant at Gonerby. This note was provided to PINS on 19th June 2024.

Longhedge DC Sizing Breakdown Note

- 1.11. During Mr Urbani's oral evidence, a note was requested explaining the factors influencing the DC capacity of the proposed development. This note was provided to PINS on 28th June 2024.

Site Constraints table (INQ 32)

- 1.12. During Mr Cussen's evidence to the Inquiry it was noted that figures within the Site Constraints Table were provided in acres. The Inspector requested that the figures be provided as hectares. The revised table is attached at Appendix 3, providing the figures in both hectares and acres.

Matters raised in the Inquiry Note of 14th June

ZTVs and Visualisations for Viewpoint 6

- 1.13. Point 1 of the inspectors note of 14th June 2023 requested:

"A further ZTV and visualisations will be prepared by the appellant to include the details shown on Figures 12a and 12b concerning grid connection infrastructure."

- 1.14. The ZTVs and visualisation were submitted to PINS on 21st June 2024.

The effects of the development shown on Figures 12a and 12b – Pylon Tower options to enable grid connection

- 1.15. The DNO have identified two potential scenarios to connect the appeal scheme to the distribution network, referred to as options 1 – tower option (shown on CD1.16) and 2 – wooden poles (shown on CD1.17).
- 1.16. None of the parties to the appeal assessed the impacts of the connection infrastructure as all parties understood that it did not form part of the application or appeal scheme.
- 1.17. On the working day prior to the inquiry opening, the LPA raised a concern about the omission of the connection infrastructure. Both the LPA and Rule 6 party belatedly suggested that the connecting infrastructure formed part of the appeal scheme and should be assessed. Without prejudice to the validity of that suggestion, the Inspector requested that the experts for each relevant discipline should prepare an assessment of the grid connection infrastructure.
- 1.18. The Appellant's witnesses in the topics of landscape, heritage and ecology have undertaken assessments of the connection infrastructure comprised on options 1 and 2, which are considered further in section 2 below.



RBC Solar Farm Capacity Study

- 1.19. The Inquiry Note of 14th June made reference to the Council's emerging solar farm capacity study, requesting that in the event of this being published prior to the resumption of the inquiry on 1st August 2024, the parties provide a written statement setting out any considerations relevant to this appeal, no later than 7 days after publication of the study.
- 1.20. The Council's study was published on 4th July 2024. On Monday 8th July the Appellant sought agreement of PNS to provide comment on this document along with the suite of information requested by the Inspector for submission on 12th July 2024.
- 1.21. Accordingly, the Appellant's comments are addressed at section 3 of this statement.

Written submissions dealing with the inspector's without-prejudice questions

- 1.22. At the inquiry the Inspector raised a series of "without-prejudice questions" and these were set out in the writing in the Inquiry Note of 14th June, with a request that the parties provide written responses to each question by 12th July 2024.
- 1.23. The Appellant's responses to these questions are set out at Section 4 of this statement.

Written statement setting out how the WMS applies to this appeal

- 1.24. The Inquiry Note of 14th June noted that the WMS relating to "*Solar and protecting our Food Security and Best and Most Versatile (BMV) Land*" was published on 15th May 2024, after Proofs of Evidence had been submitted. The Inspector asked the parties to submit a written statement on the relevance of the WMS to this appeal.
- 1.25. The Appellant's response on this matter is addressed in Section 5 of this statement.

Matters raised in the Inquiry Note of 17th June following the Inspector's site visit

The height above the ground level of the 132kV pylons on the appeal site

- 1.26. Point 1 of the Inquiry Note of 17th June requests confirmation of the height above ground level of the existing 132kV pylons on the appeal site.
- 1.27. Appendix 6 of Mr Cook's Landscape and Visual Impact Assessment Addendum (considered further at Section 2) identifies the route of the 132kv line through the site and the locations of pylons. The heights of the 3 pylons within the appeal site (from north to south) are as follows:
- TZ34 = 29.018m
 - TZ35 =29.09m
 - TZ36 (PoC) = 29.09m

Visualisations from VP1 and VP2 for the appeal scheme showing Options 1 and 2 as depicted on CD1.16 and CD1.17.

- 1.28. The requested visualisations illustrating the two pylon options from viewpoints 1 and 2 are provided as Appendix 4 to his statement.
- 1.29. For each location a view representing the respective option is provided at year 1 and year 10.

Cross sections (bare earth) through the appeal site from the highest section of Bridleway BW6 towards (a) St Helena spire and (b) Pylon 3.

- 1.30. The two requested cross sections have been prepared on drawing ref P24-0105_EN_28, attached as Appendix 5.
- 1.31. The drawing includes the following key plan (figure 1) as an inset, confirming the locations of the cross sections.

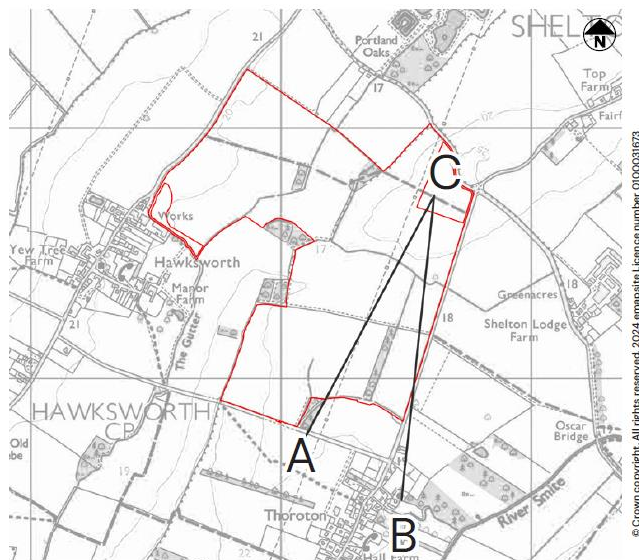


Figure 1 – Key plan illustrating locations of cross sections

Ownership of the hedgerows along the site boundaries

- 1.32. The Inquiry Note of 17th June included a plan which identifies 3 hedgerows where clarification of ownership was sought. The Appellant confirms the following:
 - Hedgerow 1 & 2 – The Landowner has investigated the title deeds from which ownership is unclear however the Landowner has confirmed that he has owned the adjacent land since 1985 and maintained these hedgerows in that time with no comment from other landowners or third parties in that period
 - Hedgerow 3 – is wholly within the ownership of the landowner of the appeal site



Inspector's questions 5 to 8 regarding drainage matters.

- 1.33. The Inquiry Note of 17th June raised queries regarding the climate change allowance included within the flood risk assessment (matter 5); clarification of the difference between existing ground level and FFL for inverter pairings affected by draft condition 9 (matter 6); the effect on heights of other inverters (matter 7) and clarification as to the relevant "other vulnerable infrastructure" referred to in draft condition 9 (matter 8).
- 1.34. The Appellant's responses to these matters are set out in a note "Response to Inspector's Flood Risk Questions" attached at Appendix 6. The conclusion of this note are considered at Section 6 below.

Planning Conditions

- 1.35. A number of the draft planning conditions were discussed during the Inquiry and further consideration has been given to the planning conditions including the suggested soil management condition.
- 1.36. Updated set of draft conditions are included at Appendix 10.

2. The effects of the development shown on Figures 12a and 12b – Pylon Tower options to enable grid connection

- 2.1. As noted above and confirmed in the Inquiry and the Inspector's subsequent Inquiry Note, the parties have been requested to provide assessment as to the effects arising if the Inspector were to consider the Pylon Tower options as part of the application proposals.
- 2.2. The Appellant's position in regard to the pylon proposals is set out within the "Note on connection to the National Grid" submitted at the commencement of the inquiry (INQ4).
- 2.3. In response to the Inspector's request, the Appellant's technical witnesses have made assessments of the effects of the pylon options which are included as the following Appendices to this note:
- Appendix 7 – Landscape and Visual Impact Assessment Addendum
 - Appendix 8 – Addendum to Heritage Assessment
 - Appendix 9 – Longhedge Pylon Ecology Assessment
 - Appendix 6 – Response to Inspector's Flood Risk Questions

Summary of the proposed alternative pylon options

- 2.4. The two alternative options for providing the grid connection were derived through consultation with the DNO. Preliminary design options are set out in the drawings provided as Figures 12 a and 12b (CD1.16 and CD1.17).
- 2.5. For each option a set of 4 drawings has been prepared which show the footprint and layout in plan form (sheet 1). Sheet 2 shows the elevation of the proposal as elevation A. Sheet 3 shows elevation B and sheet 4 shows the connection infrastructure to the existing overhead line (OHL). These sets of 4 drawing sheets have been prepared for the two design connection options; 1 and 2
- 2.6. Option 1 proposed a lattice tower structure for the 132kV connection. This lattice tower would sit within a fenced compound of 15 m² for security. The lattice tower would form a terminal tower connecting to the substation. It would have an overall width of 16 metres and extend to 23 metres in height. The lattice tower would be of a steel construction with a matt finish identical to the existing adjacent electric pylon towers. (CD1.16).
- 2.7. Option 2 comprises a 132kV tower structure set within a 15m² security fence, this structure would comprise 2 wooden poles which would extend to 9 metres in height. (CD1.17).
- 2.8. Both pylon options are shown immediately adjacent to the substation infrastructure.
- 2.9. The assessment of effects of the pylon options have been made with reference to the above drawings in addition to the revised ZTV and visualisations prepared subsequent to the inquiry and shared with the other parties.

Landscape and Visual Assessment conclusions

- 2.10. The landscape and visual addendum prepared by Mr Cook has assessed the effects on landscape elements including topography, trees, hedges, land-use/landcover/openness, public rights of way and water features.
- 2.11. For both options, he concludes that the tower options would result in negligible adverse effects on topography and landuse/landcover/openness and no effects are envisaged for the remaining landscape elements.
- 2.12. In terms of landscape character, the assessment concludes at paragraph 4.45:
- “With the proposed tower in place (either option) there would be a minor adverse effect upon the landscape character of the site itself. Beyond the boundaries of the appeal site the physical character of the surrounding landscape would remain and prevail with the proposed tower (either option) in place resulting in a negligible degree of effect upon the character beyond the site itself”.*
- 2.13. The general visual effects of the two tower options are also assessed, with the landscape addendum explaining at paragraph 5.5 that:
- “This LVA analysis demonstrates that much of the landscape within the locality would be visually unaffected by the proposed tower (either option). In reality, the actual visual envelope from where the proposed scheme would be seen would be very limited and highly localised owing to the layering effect of vegetation, principally the extensive woodlands and hedges in the intervening landscape between the visual receptor (person) and the site boundary. Each of the eight LVA viewpoints are assessed for the purpose of this assessment of the two options for the tower.”*
- 2.14. Effects on residential visual amenity are assessed as being reduced by existing well-established vegetation including individual trees, tree belts and hedgerows along the boundary between residential properties and the proposed tower (either option), to the degree that the effect on the outlook of properties would not breach the public interest test.
- 2.15. The addendum LVIA has a series of appendices. Appendix 4.1 and 4.2 consider each of the 8 viewpoints with both pylon options in combination with the solar farm. With either option in overall terms there would be no material difference in terms of degree of visual effect with the connection option and solar farm in place, when compared against Mr Cook’s assessment of the solar farm documented in his proof of evidence.
- 2.16. For completeness, Appendix 9 of the addendum LVIA summarises visual effects for each of the 8 viewpoints for both options 1 and 2, post decommission of the solar farm, i.e. with the grid connection infrastructure retained as a permanent element, post decommissioning stage of the solar farm. Both schedules at Appendix 9 assess both connection options in isolation.
- 2.17. In terms of landscape elements, landscape character and general visual amenity the overall conclusions that are set out in Mr Cook’s landscape proof of evidence would not change with either connection option in place, in combination with the overall solar farm.

2.18. Cumulative effects are also assessed and it is concluded that there would be no cumulative landscape or visual effects arising from either tower proposal together with other schemes.

Heritage Assessment conclusions

2.19. The heritage assessment has considered the effect of the two pylon tower options on the following heritage assets:

- Grade I Listed Church of St Helena, Thoroton
- Thoroton Conservation Area
- Grade II Hawksworth Manor and adjoining Pigeoncote
- Grade II* Listed Church of St Mary and All Saints, Hawksworth
- Grade II Listed Model Farm Buildings at Top Farm, Hawksworth
- Hawksworth Conservation Area -

2.20. The overall heritage conclusions set out at para 11.3 of Ms Garcia's Heritage Assessment Addendum confirms that;

"there would be no harm arising to the significance of any of the identified heritage assets from either of the two grid connection options. As a result of this, the levels of harm, where identified, to heritage assets within my Proof of Evidence to the significance through changes to aspects of setting which contribute, will remain as set out and tested under cross examination at the recent Inquiry."

Ecology Assessment conclusions

2.21. The Ecology Assessment Addendum considers the potential ecological effects of both Pylon options, noting that *"When considering the existing mitigation outlined within the submitted ecological reporting, all facets of potential ecological impacts are suitably mitigated or compensated"*.

2.22. In terms of Biodiversity net gain, the Ecology Addendum notes that the scale of the proposals, constituting up to just 0.002% of the total Appeal Site area, would not constitute significant deviation from the metric already presented to the Inquiry.

2.23. In considering the potential for ornithological impacts, it is noted that the inclusion of either Pylon tower option would not result in any impacts exceeding a negligible status.

2.24. Furthermore, collision risk for bat species would be significantly lower than that of larger birds. Considering the scale of both proposed tower options, the impact to bat species would also be negligible.

2.25. Accordingly, the overall conclusion drawn is that both options would result in a negligible change to the potential ecological effects.



Flood Risk and Drainage Assessment conclusions

- 2.26. The note provided in response to the questions raised by the inspector with regard to flood matters (Appendix 6) includes a section addressing the question of any additional impacts caused by the pylon options.
- 2.27. The location of the proposed pylons is entirely within Flood Zone 1 and is not predicted to be at risk of flooding during a 1 in 1,000 year fluvial or tidal flood event.
- 2.28. In terms of drainage, it is noted that the location of the proposed pylon options are within the substation impermeable area for which the submitted Flood Risk and Drainage Impact Assessment (CD 1.24) has proposed a sustainable drainage systems (SuDS) to be implemented to manage surface water runoff.
- 2.29. It is therefore concluded that *"the proposed Pylon is not considered to be at risk of flooding and with the proposed SuDS in place, will not increase surface water runoff rates or associated flood risk elsewhere."*

Effect on Planning Balance

- 2.30. In the event that the Inspector takes the view that the pylon options constitute part of the Appeal Scheme, the above assessments have taken account of the potential effects arising from that infrastructure.
- 2.31. The assessments undertaken have concluded that there would be no more than negligible adverse impacts on matters of landscape, heritage, ecology and flood risk/drainage. No other adverse impacts are considered to arise.
- 2.32. Therefore, in terms of the planning balance, the inclusion of the Pylons within the wider scheme would not generate more than a negligible increase to the level of harm arising from the proposal. As set out in the planning balance, presented in the evidence already before the Inquiry, the benefits of the proposal are considered to outweigh the harms identified and this is considered to remain the case, even with the addition of this negligible increase in harm.
- 2.33. Mr Cussen's view remains that substantial weight should be accorded to the benefits of generating renewable energy and this benefit alone (even before other benefits are taken into account) is sufficient to outweigh the limited harm arising from the Appeal Scheme, even with the inclusion of either pylon option.

3. RBC Solar Farm Capacity Study

- 3.1. As noted in point 8 of the Inquiry Note of 14th June, the Council had advised that a Solar Farm Capacity Study was in preparation at the time of the inquiry and the Inspector requested comments on this document, in the event that it was published prior to the resumption of the inquiry on 1st August 2024.
- 3.2. The Council's Study was published on 4th July and Mr Cook has provided a review on behalf of the Appellant, at Appendix 7.
- 3.3. It is noted that Section 4 of the report deals with design principles and includes mitigation principles, with which Mr Cook considers the proposed development accords.
- 3.4. The study analyses the District with regard to fourteen Landscape Assessment Units (LAUs), including LAU K Aslockton Village Farmland within which the Appeal Site lies. Mr Cook notes that the Study's conclusions on value, susceptibility and sensitivity of the landscape of LAU K concurs with the analysis and methodology set out in Appendix 9 of Mr Cook's evidence presented to the Inquiry.
- 3.5. Mr Cook notes that the study does not address the built form that is required to connect the solar farm to the grid as it is assumed (implicitly) that this connecting infrastructure would be subject to a different consenting regime.
- 3.6. Whilst there is no reference to such pylon infrastructure in the typology description of solar proposals, it is noted in the description of the LAU K landscape area that pylons are a constant feature in views due to the topography. In addition, within the value descriptions in table 25 under "Perceptions (wildness and tranquillity)" it is stated that the "*Presence of urban features such as pylons and the modern scale of agriculture reduce the perception of wildness*".
- 3.7. The authors of the Council's report, ARUP, conclude that the LAU K landscape area has a high capacity to accommodate large-scale solar farm development and could have potential to accommodate multiple solar farms.
- 3.8. In the Council's study, the Appeal Site falls within one of 3, out of 14, LAUs within Rushcliffe which are noted as having high capacity to accommodate large-scale solar development. No matters are raised in the Study which would suggest that the proposed development would conflict with the advised approach. Accordance with the Study is therefore considered to be a positive factor in support of allowing the appeal.

4. Inspector's without-prejudice questions on various scenarios

4.1. In the second part of the Inquiry Note of 14th June, the Inspector seeks responses to a series of "what if" questions. The questions and the Appellant's responses are set out below.

The appropriate approach to distinguishing, on the basis of capacity, between an NSIP scheme and one which is not. The first question is whether this could be achieved by means of a suitably worded planning condition?

4.2. Section 14 and 15 (2) of the Planning Act 2008 confirms that electricity generating stations fall within the definition of "nationally significant infrastructure project" if:

(a)- it is in England,

(aa) - it does not generate electricity from wind,

(b) - it is not an offshore generating station, and

(c) - its capacity is more than 50 megawatts.

4.3. In addition, the NPS EN -1 confirms at paragraph 3.3.24 that:

"Applications for offshore wind above 100MW or solar above 50MW in England, or 350MW for either in Wales, will continue to be defined as NSIPs, requiring consent from the Secretary of State (see EN-3)"

4.4. EN 3 states:

"From the date of designation of this NPS, for the purposes of Section 15 of the Planning Act 2008, the maximum combined capacity of the installed inverters (measured in alternating current (AC)) should be used for the purposes of determining solar site capacity." (para 2.10.53)

"The capacity threshold is 50MW (AC) in England and 350MW (AC) in Wales." (Para 2.10.54)

4.5. Accordingly, in order to distinguish between a scheme that is an NSIP and one which is not, it is relevant to consider the generating capacity of the proposed scheme. Provided it has an AC capacity of less than 50MW, it will fall below the NSIP threshold and be appropriately determined under the Town and Country Planning Act regime.

4.6. In the present case, the generating capacity is already controlled by the connection agreement between the Appellant and the DNO, which limits the export capacity to 49.9MW. The maximum generation can also be suitably controlled by means of a planning condition. The Appellant considers that the planning condition already included within the draft planning conditions list is appropriate and suitably enforceable. The proposed condition 6 is worded as follows:



The installed electrical generating capacity of the development hereby approved shall be restricted to a maximum of 49.9 megawatts (MW) measured as the AC installed export capacity.

- 4.7. A review of recent planning decision has been undertaken to seek to identify alternative conditions and whether it is appropriate to include any further matters which may provide an any additional controls. No such changes have been identified. The proposed form of condition accords with the conditions generally applied on similar proposals, including in appeal decisions, including APP/J1535/W/23/3334690 – Condition 31 provided as Appendix 11.

IF the answer is no – would the proposed development then meet the criteria for an NSIP scheme that would require development consent, and if so would that preclude granting planning permission?

- 4.8. In Durham County Council v Secretary of State for Levelling Up, Housing and Communities [2023] EWHC 1394 (Admin) at paragraphs 49 – 55, the High Court (Chamberlain J) considered the question of whether an Inspector would have jurisdiction to consider an appeal under the TCPA if the project in question constituted an NSIP. It found that an Inspector would have jurisdiction to consider such an appeal and to grant planning permission. The Court’s reasoning on this issue was *obiter dictum*, in circumstances where the Court had concluded that the scheme was not an NSIP but it is nonetheless persuasive. A copy of the judgment is provided at Appendix 12. At paragraph 55 of the judgment, the Court found that “*the local planning authority’s power to grant planning permission, and the inspector’s jurisdiction to entertain appeals, are not dependent on the projects not being an NSIP.*”

- 4.9. The judgment in Durham was considered in R (on the application of Galloway) v Durham County Council [2024] EWHC 367 (Admin) at paragraphs 65 – 66. There was no suggestion that Durham had been wrongly decided..

IF the answer is yes – would it be the case that ‘overplanting’ would no longer be a consideration that was relevant to answering the NSIP question – irrespective of the dc/MEC ratio for a scheme?

- 4.10. “Overplanting” is a phrase used in NPS EN-3 to refer to a situation in which the installed generating capacity (or nameplate capacity) is larger than the generator’s grid connection. The Note provided by Mr Urbani explains that the installed capacity of the appeal scheme (measured in DC) is greater than the grid connection (measured in AC) to account for the fact that panels will not achieve their Standard Test Conditions in practice; to account for the degradation of panels over time; and to maximise both the number of hours of production at maximum authorised capacity and the energy production within the 49.9MW (AC) limit.

- 4.11. Given that the AC capacity will be controlled by condition to ensure that the combined inverter capacity will not exceed 49.9MW, the extent of overplanting does not affect the consideration of whether the appeal scheme constitutes an NSIP.

IF that is correct whether overplanting should nonetheless be taken into account in considering the planning merits of the proposal?

- 4.12. The Appellant has prepared a separate technical note “Longhedge DC sizing Breakdown Note” which was provided to PINS on Friday 28th June which explains the rationale for providing a scheme with a DC capacity exceeding the maximum AC capacity. The note confirms that

the reasons for installing a DC capacity in excess of the AC capacity are to account for the fact that panels will not achieve their Standard Test Conditions in practice; to account for the degradation of panels over time; and to maximise both the number of hours of production at maximum authorised capacity and the energy production within the 49.9MW (AC) limit. The benefits of maximising energy output within the Maximum Export Capacity of 49.9MW are relevant to the planning merits of the scheme.

IF so would the extent of overplanting be a consideration likely to affect the area of land occupied by PV panels?

- 4.13. This question is addressed in the Longhedge DC Sizing Breakdown Note.
- 4.14. In summary the note identifies 3 elements of additional DC energy generation, which account for the following proportions of the schemes panel coverage:
- STC rating Vs reality – 8% of application panel area
 - To take account of panel degradation – 16–22% of application panel area
 - To maximise energy output within the MEC of 49.9MW – 8 – 14% of application panel area

IF the PV panels in the local context would be likely to result in some harm to relevant planning considerations would there be more harm with more overplanting?

- 4.15. The key aspects of harm considered in the appeal relate to heritage and landscape effects and these are set out in the evidence of Ms Garcia and Mr Cook. Further consideration has been given to the Inspector’s question and the responses are provided below.

Heritage and Landscape Considerations

- 4.16. If the DC capacity in excess of the 49.9 AC were removed from the scheme this would result in a scheme which is between 8% and 22% smaller. Should any element of this additional DC capacity be removed, there are a multitude of permutations as to how this could be achieved. The reduction in the size of the scheme may not necessarily only result in a reduction in area of land take, but could result in part from a different configuration of panels within the existing redline area. Equally, any reduction in the size of the scheme from a reduced area of land take could take many forms, from the removal of entire fields, to a ‘shrinking’ of the scheme from the edges.
- 4.17. The assessments undertaken on behalf of the Appellant on the whole current scheme find that all impacts are acceptable and the planning benefits outweigh harms. A reduction of the scale of the nature suggested above would make no material difference in planning balance.
- 4.18. In terms of quantifying this non material reduction, whilst there may be localised variations on different disciplines, in absence of any specific reduced scheme it is not possible to undertake a detailed assessment.
- 4.19. The Appellant remains firmly of the view that the adverse impacts of the current scheme are limited and substantially outweighed by the benefits and that it would not be possible to achieve the same energy generation and benefits on a reduced area.



IF so would additional overplanting increase the quantum of harm in the planning balance?

- 4.20. The extent of the scheme has been fully assessed and takes accounts of the degree of AC and DC energy generation proposed, as set out in the technical notes. The levels of harm arising have been set out in the Appellant’s evidence and examined already in the Inquiry. The Appellant’s position is that the degree of harm identified is of an acceptable level.
- 4.21. Developable area is limited to that identified in the proposed scheme drawings and the assessment of harm is based on this physical arrangement.

IF overplanting would be likely to utilise the available grid connection more effectively by exporting at the MEC for a greater proportion of the time, would that increase the MWhr / year of renewably generated electricity exported to the grid above that which would be exported from a scheme with less overplanting?

- 4.22. We have calculated the ratio of additional MWh per MWp on this site to be 911, i.e. that each additional MWp of installed capacity over 49.9MW brings an addition of 911MWh generation per annum. That figure can be applied to any amount of dc panel installation to assess the energy expected to be generated by it, however when applied to the amounts of installed capacity referred to in the Longhedge DC Sizing Breakdown Note the following figures result :

Amount of DC capacity identified ¹	Ratio of additional MWh produced per MWp of DC capacity installed	Resulting MWh produced pa
6.5	911	5,922
12.5 – 17.5	911	11,388 – 15,943
6– 11	911	5,466 – 10,021

IF so would that increase the quantum of benefit in the planning balance?

- 4.23. The planning balance already undertaken takes account of the scheme as proposed and no further additional overplanting is proposed.
- 4.24. The energy generation benefits of installing DC capacity in excess of 49.9mwAC can be derived from the table above.
- 4.25.

¹ c/ref column 3, para 10, Longhedge DC Sizing Breakdown Note, 28 June 2024

In that scenario would the appropriate planning balance weigh any overall harm from the scheme over the duration of the development, along with any legacy harm, against the overall benefits of the scheme, including the addition to the grid of x MWhr / year of renewably generated electricity for the duration of the development, along with any legacy benefit?

- 4.26. Yes, it is appropriate to balance any overall harm arising from the scheme over the duration of the development together with any legacy harm the Inspector finds against the overall benefits of the scheme, including the addition to the grid of the energy generated by providing a DC capacity in excess of the 49.9MW(AC) MEC together with any legacy benefits in the overall planning balance.

IF so how would that approach to the assessment of overplanting square with Footnote 92 of EN-3?

- 4.27. Footnote 92 of NPS EN-3 explains that “overplanting” refers to the situation in which the installed generating capacity or nameplate capacity of the facility is larger than the generator’s grid connection. The footnote goes on to explain that this allows developers to take account of degradation in panel array efficiency over time, thereby enabling the grid connection to be maximised across the lifetime of the site. Such reasonable overplanting should be considered acceptable in a planning context so long as it can be justified and its impacts are assessed through the planning process on the basis of its full extent, including any overplanting.
- 4.28. The proposal to install DC capacity in excess of the 49.9MW (AC) maximum export capacity to account for the degradation of panels over time has been fully explained and justified in the evidence of Mr Urbani. In addition, Mr Urbani explains that the scheme has been designed to optimise the energy output from the scheme and to reflect the fact that panels will not achieve their Standard Test Conditions in the real-world meteorological conditions at the Appeal Site. It is not wholly clear from footnote 92 whether the NPS treats “overplanting” as any situation in which the DC capacity exceeds the AC grid connection (as suggested in the first sentence of footnote 92) or whether the phrase “overplanting” relates only to increases in DC capacity to account for panel degradation. In either scenario, there is nothing in EN-3 which precludes the design of a scheme so as to maximise the energy generation within the appropriate limit. Indeed, given that NPS EN-1 treats solar generation as a critical national priority and EN-3 describes solar as a key part of the Government’s strategy for low-cost decarbonisation of the energy sector, the design of such schemes to maximise energy output within appropriate AC limits is a matter which should weigh in favour of a scheme. The evidence to this inquiry fully assesses the impacts of the scheme, including overplanting, as required by EN-3.
- 4.29. In all respects, the appeal scheme meets the policy in EN-3. For the reasons explained in Mr Cussen’s evidence, it sits comfortably within the “typical” size of a 50MW solar farm (125 – 200 acres) and likely number of panels (between 100,000 and 150,000) identified in paragraph 2.10.17 of EN-3.

5. Written statement setting out how the WMS applies to this appeal

5.1. Point 10 of the Inquiry Note of 14th June notes that the WMS of 15 May 2024 was issued after submission of proofs of evidence and invites the parties to provide a statement addressing the relevance of the WMS applies to this appeal.

5.2. The WMS is a material consideration in this appeal. The LPA's planning witness confirmed in cross-examination her view that the WMS repeats and does not add to existing policy and guidance in respect of BMV agricultural land, particularly paragraph 015 of the Planning Practice Guidance. The Appellant agrees that the WMS does not affect any material change to existing national policy and guidance. The WMS reiterates the Government's commitment to solar energy generation, stating in respect of energy security and rising energy bills:

"We are combatting this by racing ahead with deployment of renewable energy; nearly half of our electricity today is produced from renewables which is up from only 7 percent in 2010. Solar power is a key part of the Government's strategy for energy security, net zero and clean growth. This position was reinforced in the new National Policy Statement (EN-3), published in January this year, which stated that "Solar also has an important role in delivering the government's goals for greater energy independence and the British Energy Security Strategy states that government expects a five-fold increase in combined ground and rooftop solar deployment by 2035 (up to 70GW)."

5.3. The WMS aligns with the NPSs designated in January 2024 and introduces no new policy tests.

5.4. Reference is made within the WMS to Town and Country Planning Act applications, restating the approach to agricultural land set out in the NPPF. Again, no additional policy tests are set by the WMS, beyond those already fully assessed and considered in evidence before the Inquiry.

5.5. Reference is made within the WMS to "Improving Soil Surveys", however to date there has been no further guidance or methodological approach advocated by the Government. The conclusions of the agricultural land survey, in terms of the proportions of land falling within each defined grade of the classification, are agreed with the Council and Rule 6 Party in the respective Statements of Common Ground. No challenge to the adequacy of the survey undertaken or its findings has been made by the Council or its relevant consultee Natural England.

5.6. The WMS also advises in relation to additional measures to encourage roof top solar. This is accords with the published strategy for the significant increased deployment of both rooftop and ground mounted solar panels. The Strategy set out in the Government's statement "Powering UP Britain" (CD 3.20) notes at page 37:

"The UK has huge deployment potential for solar power, and we are aiming for 70 gigawatts of ground and rooftop capacity together by 2035. This amounts to a fivefold increase on current installed capacity. We need to maximise deployment of both types of solar to achieve our overall target."



5.7. The Powering up Britain document goes on to state:

“Ground-mounted solar is one of the cheapest forms of electricity generation and is readily deployable at scale. The Government seeks large scale ground-mount solar deployment across the UK, looking for development mainly on brownfield, industrial and low and medium grade agricultural land. Solar and farming can be complementary, supporting each other financially, environmentally and through shared use of land. We consider that meeting energy security and climate change goals is urgent and of critical importance to the country, and that these goals can be achieved together with maintaining food security for the UK. We encourage deployment of solar technology that delivers environmental benefits, with consideration for ongoing food production or environmental improvement. The Government will therefore not be making changes to categories of agricultural land in ways that might constrain solar deployment.”

5.8. The WMS makes no change to policy which conflicts with that approach, nor withdraws the earlier statement of the Governments objectives.

5.9. It is therefore concluded that the approach to evidence on Agricultural Land matters presented to the Inquiry accords with the WMS and the underlying policy requirements. No additional considerations are raised by the WMS which would suggest that alternative conclusions should be reached and there is nothing in the WMS to displace or cast doubt on the High Court’s analysis of the relevance of BMV agricultural land to solar schemes in Bramley Solar Farm Residents’ Group v Secretary of State for Levelling Up, Housing and Communities [2023] EWHC 2842 (Admin).

6. Response to Inspector's Flood Risk Questions

6.1. The Inquiry Note of 17th June sets out at questions 5 to 8 a number of matters relating to Flood Risk and Drainage.

6.2. A technical note has been prepared responding to those questions (Appendix 6). The responses to the questions are summarised below:

Question 5 – “A note to set out your respective views about the climate change allowance that would be appropriate here for flood risk assessment [CD1.24 p4.79 applies 100 year + 20%]”

6.3. Whilst it is acknowledged in the note that the climate change allowance used in the Flood Risk and Drainage Impact Assessment (CD1.24) is 3% lower than the most recent guidance, the use of a climate change value of 20% is considered appropriate for the following reasons:

- The expected flood level difference this extra 3% may incur is considered highly likely to be within the 600mm freeboard allowance applied to the Inverter pairing raising to reach a Finished Floor Level of 18.20m AOD.
- Neither the Environment Agency nor the Lead Local Flood Authority have not objected to the proposals, nor the use on a 20% climate change allowance.

Question 6 – “Suggested planning Condition 9 would set a FFL of 18.2 m AOD for inverter pairings. For all inverter pairings to which this provision would apply what would be the difference between the existing ground level and the FFL for each of those inverter pairings?”

6.4. The note confirms only one inverter pairing where the requirements would need to be applied, resulting in up to 0.79m of raising being required in a single location.

Question 7 – Would all other inverter pairings be subject to the 300mm FFL requirement, and if so would that mean their above ground height would be 3.3 m based on ‘typical inverter substation’ [CD1.15] ?

6.5. The note refers to “Figure 6 – Inverter Station”. This Figure shows the inverters have a typical total height of 3m. When accounting for the 300mm of raising, this will take the top of the inverter stations to 3.3m.

6.6. In terms of potential effects of the inverter on the capacity of flood water storage, the area of the Inverter equates to less than 0.1% of the current flood zone extent, a negligible effect.

Question 8 – “In suggested planning Condition 9 what would be included as ‘other vulnerable infrastructure’ ?”

6.7. The note confirms “other vulnerable infrastructure” as being inverters, substation and spares containers.

Town & Country Planning Act 1990 (as amended)
Planning and Compulsory Purchase Act 2004

Leeds

Pavilion Court, Green Lane, Garforth,
Leeds, LS25 2AF
T 0113 2878200
E Leeds@pegasusgroup.co.uk
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