Date: 12 January 2023

Our ref: 417158 Your ref: EN010106 NATURAL ENGLAND

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BY EMAIL ONLY

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Dear Mr Kean

NSIP Reference Name / Code: Sunnica Energy Farm, EN010106
Natural England's comments in respect of Sunnica Energy Farm Project, promoted by Sunnica Ltd

Examining authority's submission deadline 5, 13 January 2023

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

The following constitutes Natural England's formal statutory response for Examination Deadline 5.

1. Comments on Written Summary of Applicant's Oral Submissions at the ISH3

- 1.1. With regards to the Applicant's position on Benefit to Soil Health as set out in section 4.1.5, Natural England has the following comments to make:
 - 1.1.1. As previously stated, we welcome the inclusion of the reference to Defra R&D SP08016 to provide evidence on the assessment of a 'moderate beneficial impact on the soil resource during operation' as a result of a land use change from arable cultivation to grassland. It should be noted that whilst arable reversion to grassland has been shown to benefit Soil Orgnaic Matter (SOM), this benefit will only extend to the duration of this reversion.
 - 1.1.2. However, due to a lack of evidence, it is currently unknown as to what impact the solar panels may have on soil health in the UK, as a result of changes in shading; temperature changes; rain shadows; preferential flow pathways; micro-climate; and vegetation growth caused by the panels. Therefore, it is unknown what the overall impact of a temporary Solar development will have on soil health, including SOM content.
 - 1.1.3. A key mitigation measure to minimise the potential detrimental impact of construction on the soil resource is that the grass sward is fully established (i.e. no bare ground), prior to the

- installation of the panels and associated infrastructure, as specified in the Construction Environment Management Plan (CEMP; Appendix 16C).
- 1.1.4. In point (b), the Applicant references cross compliance. It should be noted that cross compliance will end after the 2023 scheme year.
- 1.1.5. In response to point (d), Natural England wish to reference the work of Clarkson and Wood¹ who undertake routine monitoring of a number of ground mounted solar PV sites across the UK looking at the biodiversity impacts. The most recently available data from 2020 indicate that bare ground was recorded in 35% of quadrats surveyed, which is in conflict with the statement in paragraph 4.1.5 (d) of the Applicant's submission that 'Solar farms in the UK can be and are manged to maintain a year-round vegetated cover both between and below rows of solar panels'.
- 1.1.6. Furthermore, the subsequent statement in paragraph 4.1.5 (d); 'there is no legitimate concern that the same land management below a solar farm will not deliver the similar benefits', is deemed to be unsupported due to a lack of evidence.

2. <u>Comments on Appendix A to Written Summary of Applicant's Oral Submissions at the ISH3:</u> Technical Note: Clarification requested by Natural England on ALC

- 2.1. Natural England welcomes the production of this Technical Note to provide clarification on the ALC following a meeting on the 30th November 2022.
- 2.2. The additional description of the soil characteristics and the complex, small scale changes in soil depth in paragraph 2.1.1 and 2.1.2 is welcomed.
- 2.3. Whilst Natural England broadly agree with the justification of the ALC Grading presented in Figure 12-2 and 12-3, Natural England would like to update the statements in paragraph 2.1.4 and 2.1.5 to more accurately reflect the discussions held between the applicant and Natural England on the 30th November 2022:
 - 2.3.1. During the call on the 30th November 2022, Natural England queried the lack of mapped Subgrade 3a and Grade 4 in Figure 12-2, not just the absence of Grade 4 as suggested in paragraph 2.1.4.
 - 2.3.2. Furthermore, Natural England queried the lack of mapped Subgrade 3a at Elms Road in Figure 12-2, not the absence of Subgrade 3b as suggested in para 2.1.4.
- 2.4. In section 2.1.6 the applicant provides a brief written explanation as to how the Moisture Balance was calculated, in particular the depth considered and adjustment for stone content. Justification for these assumptions however is not provided (i.e if these assumptions have been verified through pit excavation). For instance:
 - 2.4.1. The applicant acknowledges that the additional depth and stone content considerations provide a 'generous additional allowance'. Has the adjustment for coarse soil textures in the subsoil been taken into account? (Reduce AP of subsoil horizons by 20%)

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- 2.4.2. Natural England would welcome the provision of the Moisture Balance (MB) calculations for each point. This could be provided as an excel spreadsheet. This was raised in the meeting held between the Applicant and Natural England on the 09 January 2023.
- 2.5. Section 2.1.7 2.1.8 discusses gaps in sample point data. Gaps in sample point data identified during the meeting held between the Applicant and Natural Enlgand on the 30 November 2022 have been provided in this Appendix. An additional 31 sample points were included in Appendix A. This included either a justification as to why the data had not been included in the report or the inclusion of the soil auger information.

3. Answers to the Examining Authorities Written Questions ExQ2

- 3.1. Q2.2.5 asks Natural England to clarify our position on the status of stone curlew within the order limits with regards to Breckland SPA.
- 3.2. Natural England is currently finalising a piece of work that looks at when populations of stone curlew are functionally linked to Breckland SPA and when they are not. As a result of this work, we now consider that the birds found within the order limits and within 500m of the order limits are not functionally linked to the SPA and therefore do not need to be considered within the scope of a Habitats Regulations Assessment.
- 3.3. However, stone curlew remain a protected species under the Wildlife and Countryside Act 1981 as well as the EU birds directive and, therefore, all mitigation measures and concerns raised to date remain relevant.
- 3.4. We have discussed this position with the Applicant in the meeting on the 09 January 2023 and it has been agreed to continue to consider the mitigation measures through the robust mechanism provided by an appropriate assessment. Natural England is satisfied with this approach. This will not need to be considered when preparing their Report on Implications for European Sites (RIES).
- 3.5. Natural England does not consider there to be any impact pathways on other qualifying features such as woodlark and nightjar due to the distance from the SPA.

4. Outstanding concerns

4.1. In this letter, Natural England has not commented on outstanding issues which have not been directly addressed by the submissions to date. This includes our concerns raised over the completeness of the stone curlew surveys. We will update our advice on these issues as new documents are submitted in to the examination process.

This concludes Natural England's advice at this time, which we hope you will find helpful.

Yours sincerely

Joanna Parfitt Norfolk and Suffolk Area Team