APPLICATION BY ONE EARTH SOLAR FARM LIMITED

POST HEARING SUBMISSIONS ON BEHALF OF LINCOLNSHIRE COUNTY COUNCIL [ISSUE SPECIFIC HEARING TWO]

Introduction

Lincolnshire County Council ("LCC") attended the second Issue Specific Hearing (ISH) on 3rd September – 4th September 2025. A summary of LCC's oral representation for ISH2 appears below.

ISH2

Item 4 – Landscape and Visual Amenity

- 2. The five discrete issues under item 4 are now addressed in turn.
- 3. **Agenda Item 4 (i)** seeks views on the suitability of a 2km search area and a broader understanding of the effect on landscape character areas. LCC have not identified anything on Site or within the wider landscape to contradict the Applicant's position that there would not be Significant effects of the One Earth scheme in isolation beyond 2km. Typically distance reduces the likelihood of Significant effects occurring. Therefore, we agree that a 2km study area for the One Earth scheme in isolation is appropriate.
- 4. In terms of the landscape effects of the scheme in isolation, LCC agree with the Applicant that there will be significant adverse residual (15+years) landscape effects across the order limits of the site scheme: meaning the identified adverse landscape effects upon all areas of the site are not able to be adequately mitigated. The initial LVIA review as part of the LIR queried why at a published landscape character scale (with the order limits falling across several landscape character areas identified in published landscape character assessments) the findings of the LVIA appeared inconsistent, with some character areas not having significant effects with others judged as not-significant. Subsequent meetings with the Applicant along with a site visit have clarified the findings of the LVIA. We agree that some of the identified character areas would

not have significant effects due to their being limited above ground development directly affecting these areas.

- 5. The effect on wider landscape character areas affected by the site cumulatively with other schemes: the future landscape baseline is covered in LVIA paras. 11.4.147 and 11.4.148 and the development of solar farm projects in the area is acknowledged to be a factor in the future baseline, although LCC consider that this is underplayed within the LVIA. This is a landscape undergoing extensive change to land-use, predominantly changing from agriculture to large scale solar development. Whilst published character assessments do identify the power stations of Cottam and West Burton in the region, as well as presence of pylons and overhead lines, there is no identification of solar and BESS development at a local, district or national scale. Solar development, particularly at an NSIP scale, will be a completely new element covering thousands of hectares, that will be introduced across the region at an unprecedented scale and pace. This will not appear as a natural evolution of this agricultural and rural landscape, but a rapid alteration, replacing extensive areas of agriculture with energy infrastructure. Large scale solar is a completely different element to two relatively small-scale power stations and isolated pylons and overhead lines.
- 6. Regarding cumulative landscape effects: as identified at the statutory consultation stage, LCC have concerns regarding cumulative effects on the landscape at a wider district and regional scale. The mass and scale of several NSIP energy projects combined has the potential to lead to adverse effects on landscape character over an extensive area across multiple published character areas. The landscape character of the region, across the Nottinghamshire and Lincolnshire County areas, will be altered over the operational period through an extensive area of land use change, and introduction of energy infrastructure in an area that is predominantly agricultural. While it is not suggested that agriculture will not remain as a defining characteristic, over a short period of time large scale solar will undoubtable become a widespread characteristic in the region. Subsequently, LCC consider that solar development would be a key characteristic in any updates to published character assessments from local to national scale.
- 7. However, given the absence of a unified, county-wide landscape character baseline across Lincolnshire and Nottinghamshire, this presents a challenge when assessing cumulative effects over a strategic regional scale to consider all these energy projects. Therefore, an approach we are promoting is to extract common landscape attributes of the area from the multiple character area assessments that cover the region, enabling a reasoned, evidence-led baseline, and

subsequently assessment, of cumulative landscape effects across the wider area. For example, across Lincolnshire and east Nottinghamshire: the Land Use is strongly rural and predominantly arable farmland; Field Patterns are predominantly medium to large-scale; the Topography has a predominantly flat to gently undulating landform; Perceptual Qualities are predominantly quiet and with a rural character and high levels of tranquillity; the Settlement Pattern is generally dispersed villages and market towns; Vegetation & Tree patterns are generally open with sparse or isolated tree or woodland cover; and regarding Views & Openness, there is generally a strong sense of openness, big skies, and long expansive views. Therefore, across the region of Lincolnshire and east Nottinghamshire, based on these shared characteristics large scale solar development and new energy infrastructure would create cumulative change of the landscape character through an extensive Land Use change, directly affecting the perceived openness, and rural tranquillity. We judge large scale solar, battery and energy infrastructure will subsequently become a distinctive key characteristic across the region as a whole.

- 8. Reference has also previously been made to the Joint Interrelationships Report from other, previous, NSIP DCOs, with the Joint Interrelationships Report from the Tillbridge examination provided at Appendix D of the Written Summary of Applicant's Oral Submissions at the Issue Specific Hearing 1 (ISH1) (REP1-077 & REP1-078) at DL1. LCC disagree with the findings of this report as visual effects relate only to "in combination views" where two schemes may be seen in the same view. The report does not consider sequential views of multiple schemes, nor does it consider landscape effects through extensive land use change, or perceptual changes through the introduction of above-ground built elements.
- 9. In respect of Action Point 1 from ISH2, we were asked to 'provide national policy requirements for concerns on cumulative landscape impacts of solar schemes.' In this regard we would refer to the ExA to the LCC ISH 2 Action point submission made at DL3.
- 10. The concerns LCC raise are based upon the assessment of landscape and visual effects identified in the LVIA chapter of the ES and well-established principles of landscape assessment. AAH Consultants have reviewed the LVIA in the ES on behalf of the authorities, and this is the basis for judgements made on landscape and visual matters.
- 11. Agenda Item 4 (ii), concerns whether the landscape and visual assessment is based on a temporary period. By way of clarification, comments made are in relation to the time-period given for the ES and subsequently used for the assessments made within the LVIA chapter. Given the stated operational time of 60 years, a concern was raised regarding the assumptions

of reversibility and duration. Having reviewed the sections relating to this from GLVIA3 and other related technical guidance, it is clear that this project is long term. Given that 60 years is comparable to at least two generations, there is some considerable strength to the consideration that this would amount to a permanent project, as opposed to a temporary one, especially considering the average lifespan of building design is circa 50 years. If deemed a permanent development, which it is our position, this may have a bearing on the judgements of effects, as typically a temporary scheme may reduce the assessed magnitude of change. However, the Applicant clarified at ISH2 that the LVIA assessment has not reduced the assessment of effects due to being either temporary or permanent, and therefore the judgement of effects is unlikely to change based on this.

- 12. Agenda Item 4 (iii), raises the assessment of visual effects relative to static positions and sequential views, including an explanation of the routes where cumulative effects are considered to occur, and an understanding of how this may change any assessed effect. LCC maintain the position that the visual assessment does not fully align with guidance provided within LI *Technical Guidance Note LITGN-2024-01*, appended hereto for reference (as requested at the ISH). This Note clearly states that the focus of a visual assessment should be on visual receptors, with viewpoints being utilised to illustrate potential views. Section 6(7): "Assessing viewpoints or visual receptors?" clarifies: "The focus of the visual assessment should be the visual receptors (i.e. the people as set out within paragraph 6.31. of GLVIA3). The purpose of viewpoints is covered at paragraph 6.19 (i.e. for illustration of the visual effects)."
- 13. By only focusing on a static viewpoint for the assessment, the experience of a receptor, such as a walker along a PROW, or driver along a road is not fully considered. The experience and effects will be different depending on the route. As an example, users of public bridleway NT/North Clifton/BW10 will have a varying experience along the route, as well as varying views of the Development. This receptor will have closer range, and likely clearer views of the Development while passing through the southeastern section of the Site, however their visual experience is only captured and described in one static view at Viewpoint 9, which is much further from the built elements than at other locations, and subsequently may have been assessed as having a lesser effect. The visual assessment does not fully account for this, and if only relying on a static viewpoint and describing the existing view and change to that view, may underplay visual effects. Subsequently, it was agreed at the ISH the AAH identify any visual receptors where the assessed effect within the LVIA may be altered by considering this sequential visual effect. This will be further discussed with the Applicant and included within the statement of common ground issued at DL4 to ensure the position is clear.

- 14. Frequent sequential views would create a change to the experience of visual receptors as well as change the perception of character of an entire area these do not necessarily need to be clear open views. Repeated views and presence of large scale solar would undoubtably increase the susceptibility of receptors to changes in view through visual fatigue in which viewers experience a diminishing capacity to absorb or tolerate repeated or similar visual stimuli (solar development) along routes, eroding landscape character and increasing a broader perception of landscape industrialisation.
- 15. Cumulatively, with other solar schemes, as identified at the statutory consultation stage and within our ISH1 representation, LCC have concerns regarding cumulative visual effects which we judge will be an issue when experienced sequentially for visual receptors travelling through the wider landscape and experiencing several schemes across potentially several kilometres, albeit with gaps between the schemes.
- 16. GLVIA3 defines types of cumulative visual effect as either: Combined (in same view, and not identified for OESF) or Sequential (which is our concern, and we judge these have not been fully considered). Table 7.1 of GLVIA3, regarding Sequential Cumulative visual effects states: "Sequential: Occurs when the observer has to move to another viewpoint to see the same or different developments. Sequential effects may be assessed for travel along regularly used routes such as major roads or popular paths".
- 17. LCC's experts judge that the sequential effects would be felt throughout the area, with PROW users that are more visually susceptible to changes in their view, moving slowly and often engaging with the landscape attentively; travel along these PROW presents successive experience with solar infrastructure, creating a sequential visual effect.
- 18. PROW users traveling along several rights of way have been identified within the applicants LVIA as having significant adverse visual effects at year 15 including National Cycle Network Route 647, Public bridleways NT/Ragnall/BW3, NT/Darlton/BW1, NT/Thorney/BW19, and NT/North Clifton/BW10 and public footpath NT/Ragnall/FP2. If users of these routes had previously, or would subsequently, travel on rights of way with views of other schemes (as identified in the LVIAs associated with these projects) the implication is that users would likely experience sequential cumulative adverse visual effects across two or more schemes, even at Year 15 when mitigation should have matured. Combined with road corridors like the north to south A1133 and A156 route, along with nearby lanes, this can form a coherent visual narrative

of a rural area increasingly defined by clustered energy-infrastructure development. The A1133 and A156 north to south route passes close to the One Earth Solar Farm where visibility of the scheme and significant visual effects are identified. Further north along this route (along the A156), users also have Significant adverse residual views of Gate Burton, and potentially some views of Cottam, and West Burton solar projects.

- 19. Agenda Item 4 (iv) concerns the assessment of effects on residential receptors. The Applicants process of assessing the effects on residential receptors is becoming clearer and the Applicants have provided additional information at previous deadlines and through additional meetings and discussions which has assisted in answering some of our concerns, however information on specific assessment of residents is missing.
- 20. As was identified within the AAH LVIA review, included within the LIR's as an appendix, at chapter 6.8: "we would anticipate that some residents may experience Significant adverse visual effects from several properties, and while it is generally unlikely that properties will reach the RVAT through the Development of a solar farm, it is not possible to understand this process or any findings as they have not been presented. It would be beneficial for the applicant to clarify their position in regards to RVAA and why the initial residential visual amenity surveys have not been presented to aid transparency.". This was also discussed at ISH 1.
- 21. The Applicant has now provided additional information within Appendix F Residential Assessment and Design within the Written Summary of Applicant's Oral Submissions at ISH1 (REP1-077 & REP1-078) at DL1 to clarify this process and provide additional information. This includes 16 drawing sheets identifying the properties surveyed along with a summary assessment, including whether any properties were not visited. This is a useful update; the plans and information provide evidence of an iterative design process and consideration of residential amenity. Finally, paragraphs have been added to the LVIA at DL2: 11.3.35 to 11.3.38, clarifying that the author judges that no properties would reach the Residential Visual Amenity Threshold. The individual assessment of each of these properties is not available and so it has not been possible to check the applicants' findings i.e. which properties have significant effects and at what phases.
- 22. Also, the additional information provided in Appendix F of ISH1 summary text is not linked to or referenced to the LVIA revisions. It is somewhat hidden away and not particularly accessible unless signposted to this information. We will work with the applicant through the SoCG to enable us to identify and clarify the individual residential assessments.

- 23. Under Agenda Item 4 (v) extent of mitigation offered, and how this is secured within the dDCO, and whether IPs agree this provides a sustainable solution is raised. The Indicative layouts and associated landscape proposals provide the opportunity to establish areas of mitigation planting that will provide screening and integration of the scheme into the landscape but also provide for the creation of landscape assets and new habitats. However, the landscape mitigation strategy outlined in the OLEMP and Design Approach Document is high-level at this stage, to allow for flexibility in the detailed design stages, and LCC would expect at the detailed design stage the Applicant develop detailed planting plans clearly showing the location and types of planting (species), as well as number, density and specification, along with planting details and specifications. The scheme must also be managed appropriately for the duration of the project.
- 24. LCC's experts have reviewed the updated OLEMP [Rev 2 REP1-054] submitted at DL 1 and (Rev 3 REP2-056) submitted at DL 2 to review if our concerns identified previously had been appropriately addressed. In previous comments and review, LCC stated that the OLEMP must be explicit about the landscape mitigation scheme and maintenance post any approval and include provision of detailed planting proposals that must be approved by the relevant authority. A sentence has been added at 1.3.5 of the OLEM (Rev 3) that "The LEMP will detail the location and extent of proposed planting by inclusion of planting plans and species lists".
- 25. LCC want to ensure that maintenance of all planting and ecological features be for the life of the project; subsequently, the updated OLEMP includes the addition of paragraph 5.4.3, which clarifies that all existing and proposed habitats will be managed and maintained for the operational duration of the scheme. This is a key clarification: LCC expect that the planting and associated habitat be appropriately managed for the full duration of the scheme. The OLEMP has provision within the initial establishment period for plant replacements due to failure to thrive or establish, or due to plants dying. LCC request a statement be added for unforeseen circumstances such as extensive plant dieback, or failure to establish. LCC suggest the following, to be reviewed and included within the OLEMP:

"In the unlikely event of external factors causing significant losses to the mitigation planting during the lifetime of the Project such that the purpose of screening the development is no longer achieved as a result of gaps in the planting, replacement planting will be undertaken to infill gaps that may arise. This approach will ensure commitments are fulfilled in respect of providing screening of the scheme and enhancing biodiversity"

<u>Item 5 – Agriculture Land and Best Most Versatile Agricultural Land (BMV)</u>

- 26. LCC note from the application documents that 207 hectares of the One Earth Solar Farm is located within Lincolnshire of which 137.6 ha is BMV. LCC noted in its LIR their concern regarding the cumulative impact of NSIPs/TCPA applications on BMV and agricultural land. The response to LCC's LIR point at LIR 205 states 120 ha will be permanently removed from agricultural land use (for ecological enhancement areas) and 534.67 ha will be used temporarily (for solar PV infrastructure, BESS and substations) and will be returned to agricultural land use on decommissioning of the Proposed Development. What is unknown is the extent of the permanent loss within Lincolnshire, and its cumulative effect.
- 27. Considering the data provided in the alternatives chapter, it appears that the Midlands distribution network area was favoured due to irradiance and topography and that Lincolnshire and Nottinghamshire both have large areas of undeveloped land. This is by its designation as an NSIP, a national project, therefore why was a grid connection sought in the East Midlands without discounting potential grid connections in areas of lower value agricultural land elsewhere in England.

<u>Item 6 – Transport</u>

- 28. LCC is content that there will be no severe transport effects arising from the proposed development provided that the assumptions as to timing within the ES are achieved. Under agenda item 6 Lincolnshire County Council ("LCC") made the following specific points
- 29. Design and location of individual access points LCC advised that the submission details provided for access points was acceptable at this stage. These showed layout drawings with swept paths and visibility splays. Further construction details and technical approval could be submitted post DCO as part of the implementation of the CTMP.
- 30. The ExA asked if LCC had same Policy as Nottinghamshire County Council regarding access points and Road Safety Audits. LCC said not, Road Safety Audits were generally only required when S278 works were envisaged, not for simple vehicle access crossings, covered under S184 applications.
- 31. The ExA asked if LCC were concerned about equestrian use on the roads. LCC had no specific concerns.

Item 7- Hydrology, Flood Risk, Water Resource and the Sequential Test

- 32. The ExA asked the Applicant to explain the potential impacts of a flood event during the construction phase of the proposed development and whether an adequate assessment of the potential impacts of flooding on the construction elements of the scheme has been undertaken.
- 33. The EXA also asked for clarity from Lincolnshire and Nottinghamshire as the Lead Local Flood Authorities. LCC as LLFA have reviewed the relevant documents and conclude that the information submitted to date is acceptable for LCC as LLFA. Surface water flood risk has been considered in principle in accordance with NPPF and SUDs guidance. Detailed surface water assessment design and mitigation will be required at the detailed design stage of the submission.

Item 8 – Biodiversity and Ecology

- 34. LCC is of the opinion that the ecological information submitted by the Applicant is adequate to base a decision upon. However, LCC considers that due to the methodology used for breeding bird surveys, the presence of quail in the survey area may not have been detected. There were also access problems relating to great crested newt surveys and there are historical records of great crested newt in the area. These problems mean that there is a small risk of the presence of these protected species not being detected and harm occurring to them during site development if they are present.
- 35. LCC stated that it has discussed these concerns with the Applicant and has agreed that they could be addressed by ensuring that pre-commencement surveys are appropriately timed to detect the presence of quail and that precautionary working methods are adopted in relation to great crested newt.
- 36. The Applicant confirmed that relevant documents will be amended at Deadline 3 to address these issues.

Item 9 – Waste Management Planning and Resource Efficiency

37. LCC welcomed the applicant's updated documents and commitment to provide the annual maintenance and waste generation figures (Outline Construction Environmental Management Plan [REP2-051], Outline Operational Environmental Management Plan [REP1-049] and Outline Decommissioning Environmental Management Plan [REP1-052] which will help LCC to plan for future waste.

- 38. LCC as the Minerals and Waste Authority is required to prepare to plan for minerals and waste. The current Lincolnshire Minerals and Waste Local Plan with regard to waste provides a planning framework for determining applications related to waste management facilities and landfill sites, aiming to manage waste sustainably and protect the environment.
- 39. LCC is currently updating the Minerals and Waste Local Plan having had a Regulation 18 consultation in 2024. This however used a 2021 Waste Needs Assessment. LCC has commissioned an update to the Waste Needs Assessment to identify any capacity gaps and which will include information on potential waste arising from solar schemes. With regard to waste policies in the emerging plan, LCC is currently proposing criteria based policies to provide the flexibility to respond to changing markets.
- 40. LCC is planning for a 15 year plan period from adoption, in line with NPPF paragraph 22. Reviews at least every five years are a legal requirement for all local plans (Regulation 10A of the Town and Country Planning (Local Planning) (England) Regulations 2012) which is reflected in the current NPPF paragraph 34 which requires that 'Policies in local plans and spatial development strategies should be reviewed to assess whether they need updating at least once every five years, and should then be updated as necessary requiring a review after 5 years.'.
- 41. Regarding plan reviews, there are also opportunities for an early review of a local plan based on monitoring data arising from an updated Waste Needs Assessment or triggered via the authority monitoring report, which monitors the performance of local plan policies.
- 42. With regard to the ExAs question about LCC's concerns that there are not currently the facilities available for the recycling of panels and that these facilities may not be available at the point in time that they would be required. LCC can put in place the policy framework to provide sufficient and flexible opportunities to meet the identified needs of the area for the management of waste streams, but commercial waste recycling facilities are provided by private waste management companies. The Waste Needs Assessment can provide information for waste operators to see where there are gaps in the market and this may help stimulate relevant proposals being brought forwards.
- 43. The LCC concerns are not necessarily about decommissioning, as that is in the distant future, but the ongoing annual failure rates of solar panels cumulatively across the NSIPs that Lincolnshire is hosting and TCPA schemes which are operational, under construction or

approved. PV failure rates are provided in 4 DCO applications, and include 0.05%, 0.2% and 0.45% per annum. If these rates are considered against the number of solar panels where Lincolnshire is a host authority, this would mean annual failure rates of 7,800, 31,200 and 62,400 panels respectively. Although all applications seek to follow the waste hierarchy, what is unknown is this failures rate includes or excludes panels that will be mended and/or re-used or those simply sent for recycling. Please find the calculations below based on information provided in NSIP applications with regard to PV panel failures (rather than tonnage).

	DAIX/	Operational time	Max no of	PV Failure rate
	MW	period	panels	(%)
Beacon Fen	400	40	884,000*	0.20%
Fosse Green	240	60	575,000	0.05%
Heckington				
Fen	400	40	884,000*	0.20%
Tillbridge	500	60	1,105,000*	
Cottam	600	60	1,320,000	
West Burton	480	60	1,000,000	0.40%
Gate Burton	530	60	988,000*	
Mallard Pass	350	60	773,500*	
One Earth	740	60	1,600,000	
Meridian Solar				
Farm	750	40	1,657,500*	
Leoda	600	40	1,320,000*	
Springwell	800	40	1,500,000	
TCPA	910		2,011,100*	
ESTIMATE				
PANELS			15,618,100	

^{*}Please note not all NSIP applications provide information on PV panel numbers, therefore those indicated are an estimate of the number of panels based on an average of MW/no. of panels where the information is provided (2210 per MW).

		Potential
Total no	PV failure	no. of
of	rate	PV
panels	(%)	failures
13,607,000	0.05%	7,809
13,607,000	0.20%	31,236
13,607,000	0.40%	62,472

Item 10 - Cumulative Assessment and Timing of the Project

- 44. LCC confirmed that the Council is now content with the long list of projects provided within the cumulative assessment since the inclusion of Leoda and Meridian which were previously omitted.
- 45. LCC are concerned about the cumulative assessment in REP2-040 and the lack of progression to Stages 3 and 4 for a number of schemes given the cumulative impact on landscape and waste. It is noted that the list regarding cumulative impacts on transport are contained in the separate ES chapter on Transport and Access.
- 46. LCC would also like to bring to the attention of the ExA and the applicant the issue of construction dates. One of the issues noted in REP-040 is that for both Cottam and West Burton the commencement dates as shown have slipped significantly. Therefore where it was identified that there would be no impact due to construction timetables, in actuality due to the shift of the construction period, there will be a construction overlap and associated cumulative impacts.