Cottam Solar Project

The Applicant's Responses to Written Representations

and other submissions at Deadline 1

Part 2

Produced by: Lanpro Services
November 2023

PINS Reference: EN010133
Document Reference: EX2/C8.1.18
The Infrastructure Planning (Examination Procedure) Rules 2010
Rules 8(1)(c)

Cottam
SOLAR PROJECT

Contents

Issue Sheet

Report Prepared for: Cottam Solar Project Ltd.
Examination Deadline 2

The Applicant's Responses to Written Representations and Other Submissions at Deadline 1: Part 2

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1 Introduction and summary

1.1 Purpose of this document

1.1.1 This document provides Cottam Solar Project Limited (the 'Applicant's') response to the Written Representations (the 'WRs') and any other documents submitted for Deadline 1 which were submitted to the Planning Inspectorate (PINS) by 17 October 2023, relating to Examination Deadline 1 for the Development Consent Order Application (the 'Application') for Cottam Solar Project (the 'Scheme').

1.1.2 Local Impact Reports from the host local authorities have been responded to separately in C8.1.16 The Applicant's Response to Local Impact Reports [EN010133/EX2/C8.1.16].

1.1.3 A total of 124 WRs and other documents were submitted to the Examining Authority by Interested Parties in response to the Scheme. All WRs were published on 25 October 2023 to the Planning Inspectorate's website (PINs Reference: EN010133). A further 2 WRs were received late and accepted at the discretion of the Examining Authority.

1.2 Structure of the report

1.2.1 This document provides responses from the Applicant to the matters raised in the Written Representations and is structured as follows:

- Table 1.1 lists those WRs published by the resident group 7000 Acres. These WRs have been responded to in full through Section 2 of this document.
- WRs received by host local authorities, all other statutory consultees, international agencies, undertakers, elected representatives, community organisations, and those whose interests would be affected by the Order (as listed within C4.3_C Book of Reference Revision C [EN010133/EX2/C4.3_C]) have been responded to separately in the document C8.1.17 The Applicant's Response to Written Representations Part 1 [EN010133/EX2/C8.1.17].
- WRs received by members of the public (who are not identified as Affected Persons) have been responded to separately in the document C8.1.19 The Applicant's Response to Written Representations Part 3 [EN010133/EX2/C8.1.19].

1.2.2 References to the Application and Examination documentation, as submitted to the Planning Inspectorate, are provided in accordance with the referencing system as set out in the Planning Inspectorate's 'Cottam Solar Farm Examination Library'.

Table 1.1: List of organisations whose Written Representations and Other Submissions are responded to in Section 2.1.

PINS Reference	Acronym	Written Representation received
REP-104	7A-XX	7000 Acres (and 19 local parishes) – Joint Position
REP-105	7A-XX	7000 Acres – Agricultural Land Classification
REP-106	7A-XX	7000 Acres – Battery Energy Storage System Safety Concerns
REP-107	7A-XX	7000 Acres – Equality Impact Assessment
REP-108 REP-111	7A-XX	7000 Acres – Human Health
REP-109	7A-XX	7000 Acres – Food Security
REP-110	7A-XX	7000 Acres – Flooding Concerns
REP-112 REP-113	7A-XX	7000 Acres – Inaccuracies in the Book of Reference and Statement of Reasons
REP-114	7A-XX	7000 Acres – Land Productivity
REP-115	7A-XX	7000 Acres – Noise
REP-116	7A-XX	7000 Acres – Risk Management
REP-117	7A-XX	7000 Acres – The Role of Solar in Energy Provision and Decarbonisation
REP-118	7A-XX	7000 Acres – Socio-Economics and Land Use
REP-119	7A-XX	7000 Acres – Wildlife and Habitat
REP-120	7A-XX	7000 Acres – Landscape and Visual Impact
REP-121	7A-XX	7000 Acres – Glint and Glare Study
REP-122	7A-XX	7000 Acres – National Policy Statement and Application of Planning Requirements
REP-123	7A-XX	7000 Acres – Summary of oral submissions made at Open Floor Hearing 1
REP-124	7A-XX	7000 Acres – Decommissioning and Restoration
REP-125	7A-XX	7000 Acres – Summary of Representations

2 The Applicant's Responses to Written Representations and Other Submissions made by 7000 Acres

2.1 7000 Acres and Parishes Joint Position

7000 Acres – Joint Position [REP-104]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-001	Principle of the Development	Cumulative development	Our Parishes represent the overwhelming majority local villages effected, where there is growing concern over the cumulative adverse impact these schemes will have on the region. To our knowledge, no Parish is in favour of the proposed developments. Our position is that we agree that climate change calls for action to decarbonise our economy.	The Applicant notes this comment.
7A-002	Energy Need	Solar Efficiency	However, we are concerned that the benefits the schemes can bring are being overstated and oversimplified by developers, because the role solar can play in decarbonisation is very limited: • In the UK, solar panels produce on average between 9% and 11% of their rated output – and they produce most of that power on sunny, summer days when we least need it. When demand is at its highest, on winter evenings, they produce nothing at all.	A detailed assessment of the climate change impacts of the Scheme, including embodied carbon, has been completed as part of the Environmental Statement. This assessment shows that the emissions associated with the production of batteries and other equipment is outweighed by the positive effect of the energy savings of producing electricity by solar. Section 3.3 of document C7.11 Statement of Need [APP-350], specifically paragraphs 3.3.2, 3.3.5 and 3.3.11, describes the Government's view that large capacities of low-carbon generation will

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			• To keep the lights on, something else must produce power when solar is not producing, so for much of the year, that means relying on alternative sources, e.g. which may be low carbon (e.g. wind, hydro, nuclear), but may as easily be fossilbased (e.g. gas, oil, diesel) • The proposed solar projects make no material attempt to match when power is produced to when it is needed. They take up a huge amount of space for the limited contribution they can make to the electricity system, and therefore represent an extremely inefficient use of land. • To keep the lights on, something else must produce power when solar is not producing, so for much of the year, that means relying on alternative sources, e.g. which may be low carbon (e.g. wind, hydro, nuclear), but may as easily be fossilbased (e.g. gas, oil, diesel) In addition, the proposed battery schemes don't solve the problem: • Batteries help in a limited way, in that they can store a few hours of electricity; they are not capable of storing volumes of solar power from the summer to be used in the winter	be required to meet increased demand and replace output from retiring (fossil fuel) plants, and that "a secure, reliable, affordable, Net Zero consistent system in 2050 is likely to be composed predominantly of wind and solar". Section 6.2 of C7.5 Planning Statement [EX2/C7.5_B] sets out how the Scheme will meet the compelling need for renewable energy in accordance with relevant national planning policies. Table 7.1 of C7.11 Statement of Need [APP-350] shows the electricity generated per hectare by different low-carbon technologies. At the UK's average solar load factor (11%), solar generation produces much more energy per hectare than biogas, and generates a similar amount of energy as onshore wind. Furthermore, paragraph 7.6.8 of C7.11 Statement of Need [APP-350] states that: "Draft NPS EN-3 includes an anticipated range of 2 to 4 acres for each MW of output generally required for a solar farm along with its associated infrastructure." The Scheme as proposed delivers a large-scale solar generation asset which is consistent with this range, as is described through paragraphs 4.2.1 to 4.2.3 of C6.2.4 ES

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				Chapter 4_Scheme Description [APP-039]. This demonstrates that the proposed location is a suitable site which will provide for an asset which is consistent with government's view of best practice ratios of land take and installed capacity. Figure 8.2 of C7.11 Statement of Need [APP-350] shows how solar is expected to work alongside other renewable and low-carbon assets to meet demand throughout the year. The inclusion of batteries as part of the Scheme will allow the Scheme to store energy when it is in abundance and release it to the grid when it is needed.
7A-003	Soils & Agriculture	Food Security	We are also concerned that development on this scale will have serious adverse consequences, for the region and for the nation: • Food & Farming: Using arable land for solar will displace the production of existing crops, food, animal feed and energy crops. It makes no sense, from an environmental perspective or from a security of food supply perspective, to cease farming here and import more crops.	The key policy tests for the decision maker in respect of the Scheme's impact upon agricultural land are found in NPS EN-1, paragraph 5.10.8, and Revised Draft NPS EN-3, para. 3.10.15. In summary, this requires that applicants should seek to minimise impacts on BMV land, being ALC Grades 1, 2 and 3a), ensure impacts should be considered against the measures set out under paragraphs 2.10.66 – 2.10.83 and 2.10.98 – 2.10.110. Paragraph 5.10.15 then states that the Secretary of State should give little weight to loss of ALC grades 3b, 4 and 5 agricultural land, while Revised Draft NPS EN-3, para. 3.10.136 requires the Secretary of State to ensure mitigation

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				measures to minimise impacts on soils and soil resources are appropriately provided by the Applicant. This is addressed in C7.5_B Planning Statement, Appendix 3 page 62 and 63 [EN010133/EX1/C7.5_B]. The Applicant does not consider that the Scheme would result in food security impacts either alone or cumulatively. The UK annual balance of domestically produced food is sensitive to non-planning factors including weather and markets. The relevant assessment for policy purposes (and therefore decision-making purposes under the Planning Act 2008) is one that is based on the grade of the agricultural land, rather than its current use and the intensity of that use. In terms of key threats to UK food security, the Defra UK Food Security Report highlights that the main threat is climate change.
7A-004	Soils & Agriculture	Employment & Livelihoods	• Employment: Solar farms will destroy agricultural jobs, skills and livelihoods and create very few new skilled jobs or replace livelihoods. It is likely, there will be a net reduction in employment, in an area with relatively few opportunities. There will not be any economic	The Applicant directs to the previous response made at KPCL-12 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049], in response to near identical comments made by Kexby Parish Council for their Relevant Representation [RR-013].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			benefit to the already hard-pressed communities affected.	
7A-005	Ecology & Biodiversity	Ecological impacts	• Wildlife & Habitat: No matter what precautions and assurances, it will not be possible to deliver and install millions of solar panels, pour thousands of tonnes of concrete, as well as containers with batteries and switchgear, plus miles of fencing, without significant damage and disruption to habitat.	The Applicant directs to the previous response made at KPCL-13 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049], in response to near identical comments made by Kexby Parish Council for their Relevant Representation [RR-013].
7A-006	Landscape & Visual Impact	Size & Scale of development	• Visual: The cumulative scale of the development is unprecedented, and the impact of such a development would change the character and nature of the area for 50 years or more, such a change has the potential to have a significant detrimental impact on the general health and wellbeing of residents.	The Applicant directs to the previous response made at KPCL-16 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049], in response to near identical comments made by Kexby Parish Council for their Relevant Representation [RR-013].
7A-007	Transport & Access	Disturbance	• Disturbance during construction: The impact of traffic during construction and decommissioning phases, in terms of road safety, noise, disruption, damage to roads is of great concern to residents owing to the volume and potential size of material being moved, particularly on the local small, inadequate road infrastructure.	The Applicant directs to the previous response made at KPCL-18 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049], in response to near identical comments made by Kexby Parish Council for their Relevant Representation [RR-013].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-008	Climate Change	Alternatives	We acknowledge the challenge climate change poses, and we are in favour of good solar development: • Solar should be deployed where there is little else that can be done with the space – such as rooftops (in the UK only around 3% of households have solar panels) • To make that happen, planning should require solar on new-build commercial warehouses and domestic properties as an immediate priority, and a framework should be provided to support retrofitting of solar to existing buildings. • Where a solar development is considered at scale, it should be decided upon locally, not nationally – and any development must consider sustainability in its widest sense, including the impacts on sustainability of food production, sustainability of communities, impact on health and wellbeing.	Paragraph 7.6.3 of C7.11 Statement of Need [APP-350] analyses the potential contribution of "brownfield" solar sites to the national need for solar generation. Brownfield sites, including rooftop and other community energy systems, are likely to grow in the UK and will make a contribution to decarbonisation of the UK energy system. However, C7.11 Statement of Need [APP-350] concludes in Section 7.6, that on their own, brownfield developments are unlikely to be able to meet the national need for solar. Paragraph 8.5.10 and Section 8.5 more generally of C7.11 Statement of Need [APP-350] describe and express agreement with Government's view that decentralised and community energy systems are unlikely to lead to the significant replacement of large-scale infrastructure. The Applicant therefore supports Government's view that large scale solar must be deployed to meet the urgent national need for low-carbon electricity generation
7A-009	General Comments	Apposing the Development	To conclude, our position is clear, we are against the proposed large-scale solar developments, because of their limited contribution to decarbonisation and the adverse consequences arising from using farmland in this way.	Section 3.3 of document C7.11 Statement of Need [APP-350], specifically paragraphs 3.3.2, 3.3.5 and 3.3.11, describes the Government's view that large capacities of low-carbon generation will be required to meet increased demand and

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				replace output from retiring (fossil fuel) plants, and that "a secure, reliable, affordable, Net Zero consistent system in 2050 is likely to be composed predominantly of wind and solar". Section 6.2 of C7.5 Planning Statement [EX2/C7.5_B] sets out how the Scheme will meet the compelling need for renewable energy in accordance with relevant national planning policies.

2.2 Agricultural Land Classification

7000 Acres – Agricultural Land Classification [REP-105]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-010	Soils and Agriculture	Soil Analysis	The data provided by IGP is inconsistent in the Wetness and Droughtiness Assessment where for Slowly Permeable Layer (SPL) depth to 35cm it identifies 31 entries as ALC grade 3a and 550 as ALC 3b, and for SPL 40cm 46 entries as ALC 3a and 511 as ALC 3b. All other factors such as Gley, Reddish and Wetness Class are within identified ranges. Therefore if some entries are categorised as 3a then all similar entries should also be categorised as 3a and not 3b. This would significantly change the overall classification of land to be Best and Most Valuable for the majority of the site. In order to resolve this issue an independent soil analysis needs to be conducted by a BSSS approved surveyor to establish the accurate picture, with no inconsistencies in the interpretation of the results.	The assessment of soil wetness limitation to ALC grade is dependant upon a number of factors, and for a single site, the limitation will not be uniform for a given depth to a slowly permeable layer. The topsoil texture (clay content) has an important role in assessing ALC wetness limitation. The presence of naturally occurring calcium carbonate is also relevant. Natural England deadline 1 submission [REP-098] states "Natural England are satisfied that the detailed ALC survey undertaken across the order limits is appropriate." The Applicant's position is that its data is robust and there is no need for an additional ALC assessment of agricultural land in the Order Limits.
7A-011	Soils and Agriculture	Soil Analysis	IGP have stated that none of the topsoils or subsoils reacted to the in-field HCl test but the neutralizing value in the lab tests that IGP carried out for WB4 would suggest, in their own analysis, that they are calcareous soils. IGP's contention for	Information on lime application was obtained from the landowners. Farmers apply lime in response to crop requirement following soil analysis. Naturally calcareous soils will not require additional lime. There is no inconsistency

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			the Cottam sites and the other West Burton sites is that it is not considered that the neutralizing value represent a naturally calcareous soil as Mag Lime has been spread. Why is this a different analogy to the West Burton 4 results?	in the Applicant's approach to the presence of calcareous soils.
7A-012	Soils and Agriculture	Climate	The climatic data that has been used is based upon the Climatological Data for Agricultural Land Classification, Meteorological Office, 1989. As we all know there has been a significant change to the climate recently and as such using data that is 34 years old will not give the same results as using current data. As grading of the land is related to the climate then it would be extremely informative if IGP's consultants were to carry out a new analysis based upon current data and using their professional judgement comparing that to the official results before deciding the land classification.	The ALC Guidelines (MAFF October 1988) specify the use of the ALC Climatological data. No update to this climate data has been approved for use in the ALC assessment. The Applicant's position is that is ALC assessment is robust.
7A-013	Soils and Agriculture	Planning Policy	IGP have failed to take into account this guidance in NPPF Paragraphs 174 and 175 in preparing and submitting this project proposal.	ES Chapter 19 Soils and Agriculture (C6.2.19A [REP-010]) takes the guidance of the NPPF into account. Please see paragraphs 19.2.2 to 5.
7A-014	Soils and Agriculture	Soil Analysis	Within the AMET report of 12th July 2022 a number of anomalies and inconsistencies are evident. Namely on page 1 of Appendix 3a records 8, 9, 21 and 35 the data for Subsoil 3	Natural England deadline 1 submission [REP-098] states "Natural England are satisfied that the detailed ALC survey undertaken across the order limits is appropriate."

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			Mottles and Structure have been entered into the wrong columns. This makes one question whether this data has been actually analysed or just entered into this report as pictorial evidence because it is a requirement.	
7A-015	Soils and Agriculture	Soil Analysis	Survey result 1090 has been assessed as being Grad 3a, whiles 1121 has been assessed as being Grade 3b despite the survey results being exactly the same. This inconsistency in the analysis of the results needs to be explained.	Natural England deadline 1 submission [REP-098] states "Natural England are satisfied that the detailed ALC survey undertaken across the order limits is appropriate."
7A-016	Soils and Agriculture	Soil Analysis	Within the Land Research report of 19th September 2021 there are 6 occurrences where the grade has been assessed as 3a/3b. An experienced assessor would have understood the importance of making a judgement decision erring on the better grade as a result. It also questions the reported area shown in Table 1 Areas occupied by the different land grades when you add in all of the grade 2, 3a and 3a/3b observations and why did they omit grade 2 in their table.	Natural England deadline 1 submission [REP-098] states "Natural England are satisfied that the detailed ALC survey undertaken across the order limits is appropriate."
7A-017	Soils and Agriculture	Professionalism	We would question the professionalism of the parties involved in these reports. They have all failed to carry out their professional duties in this instance and therefore it puts into question all of	The Applicant strongly disagrees with this statement. The professional qualifications of the author of ES Chapter 19 Soils and Agriculture (C6.2.19A [REP-010]) are set out in C6.3.1.1 ES

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			the judgements that they have reported within these documents.	Appendix 1.1 Statement of Competence [APP-022].Natural England deadline 1 submission [REP-098] states "Natural England are satisfied that the detailed ALC survey undertaken across the order limits is appropriate."

2.3 Battery Energy Storage System Safety Concerns

7000 Acres – Battery Energy Storage System Safety Concerns [REP-106]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-018	Other Environmental Matters	Battery Energy Storage Safety	The Outline Battery Storage Safety Management Plan does not identify and mitigate all the hazards associated with a BESS thermal runaway. Instead it primarily refers to BESS fires, which is a different chemical process. The Applicant's Appendix 17.4 should be updated to include consideration of a BESS thermal runaway as the primary hazard and not a fire. The Applicant's emission modelling should take account of foreseeable scenarios, including thermal runaways in single and multiple containers.	The Applicant has revised both the Outline Battery Storage Safety Management Plan (OBSSMP) [submitted at Deadline 2] and ES Appendix 17.4 BESS Fire Technical note [APP-144], and these documents have been submitted at Deadline 2.. The revised OBSSMP will commit to the following comprehensive safety audits at the detailed design stage. These consider the lifecycle of the battery system from installation to decommissioning. Risk assessment tools will be utilised together with detailed consequence modelling to provide a comprehensive site operations and emergency response safety audit. As stipulated in the OBSSMP, the BESS system selected at the detailed design stage will include integrated fire and explosion protection systems. Following industry good practice (e.g., NFPA 855 2023) or based on 3rd party fire & explosion testing, gas venting systems will avoid build-up of explosive gases. A site-specific Emergency Response Plan will be developed for the BESS post consent based on national and international best practice measures.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				The battery system mitigation measures adopted in a final Battery Storage Safety Management Plan will reflect the latest BESS safety codes and standards applicable at that stage. Mitigation measures will be discussed and coordinated with LFRS. A Failure Modes and Effects Analysis (FMEA) of the BESS (BS EN IEC 60812) will be conducted to lay the foundation for predictive maintenance requirements and complement the fault indicator capabilities of the BMS data analytics system. Comprehensive Hazard Mitigation Analysis (HMA) will be conducted by a BESS specialist independent Fire Protection Engineer following NFPA 855 (2023) guidelines and recommendations. Additional risk assessments likely to be conducted at the detailed design stage are Fire Risk Analysis (FRA), Explosion Risk Analysis (ERA), Hazard and Operability Analysis (HAZOP). BESS 3rd Party risk analysis is sometimes automatically provided by Tier one BESS manufacturers and / or BESS integrators. If the BESS system supplied differs from the specification considered for risk assessments and consequence modelling, then a full safety audit

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				will be repeated for the new BESS system specification. These studies will be completed and signed off before construction commences. Preparation and approval of the final Battery Storage Safety Management Plan, substantially in accordance with the C7.9 Outline Battery Storage Safety Management Plan [submitted at Deadline 2], is secured through Requirement 6 in Schedule 2 to the draft DCO [EX2/C3.1_C].
7A-019	Other Environmental Matters	Battery Energy Storage Safety	The Outline Battery Storage Safety Management Plan and Appendix 17.4 do not identify the toxic emissions that would be released in the event of a thermal runaway.	The primary toxic gas emission from lithium-ion battery (LIB) chemistries is Hydrogen Fluoride (HF).This is referenced in both the OBSSMP [APP-348] and ES Appendix 17.4 [APP-144]. Lithium ferrophosphate (LFP) chemistry was selected as the worst-case example for explosion risk and toxic gas emissions due to the higher level of hydrogen produced by LFP cells compared to other LIB chemistries. At the detailed design stage, battery system specific consequence modelling will be provided to demonstrate that respondents will not be exposed to emission levels that exceed levels identified in ES Appendix 17.4.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-020	Other Environmental Matters	Battery Energy Storage Safety	The Applicant has failed to take account of the large volume of water required to contain a BESS thermal runaway. The on-site storage identified by the Applicant is insufficient for a major incident. The volume of water quoted is only sufficient to douse a thermal runaway in two Tesla car sized batteries. The Applicant should apply evidence from BESS thermal runaways to identify the large volume of cooling water required. The infrastructure, both storage and external sources, to supply the large volume of water required should be secured in the DCO. Means to retain and treat the large volume of water required to contain a thermal runaway should be secured in the DCO.	The revised OBSSMP submitted at Deadline 2 clarifies: : In order to determine the volume storage of external water supplies for firefighting, NFCC guidance will be used at the indicative design stage which states provisional firefighting supplies "should be capable of delivering no less than 1,900 litres per minute for at least 2 hours." LFRS will be able to view the selected BESS system fire test data and an independent Fire Protection Engineer will validate the final water supply requirements. A BESS design which may require direct FRS firefighting engagement tactics will not be selected for this facility. The actual site supply requirement will be decided at the detailed design stage. On top of this supply requirement of 20% to 30%, additional capacity should be allowed for storage in the water run-off retention facility (legislation requires 10%). The proposed additional capacity allows for potential increases to rainfall volume from climate change and reduces BESS fire water run-off pollution concerns from a fire. Site and BESS design principles and Emergency Response Plan (ERP) content will ensure that the FRS are expected to employ a defensive strategy

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				i.e., only boundary cooling should be employed for cooling of adjacent BESS or associated supporting equipment. Water storage tanks designed to be used for firefighting will be located at least 10m away from any BESS enclosure. They must be clearly marked with appropriate signage. They will be easily accessible to FRS vehicles and their siting should be considered as part of a risk assessed approach that considers potential fire development/impacts. Outlets and connections should be agreed with LFRS. Any outlets and hard suction points should be protected from mechanical damage (e.g., through use of bollards). The specific firefighting water runoff drainage and water capture design and locations will be finalised at the detailed design stage when the volume of water required is agreed with LFRS. The design will allow for easy pollution analysis and the firefighting water can be tankered off site if polluted. Trapped water may be reused as a potential source of firefighting water. This follows the management plan process as detailed in 'Protocol

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				for the disposal of contaminated water and associated wastes at incidents 2018'. A post event action plan will be drawn up that determines any immediate and follow up actions required to an event including an assessment in general accordance with Land Contamination: Risk Management (LCRM) and British Standard (BS) 10175:2011+A2:2017 (Investigation of potentially contaminated sites – Code of practice). Preparation and approval of the final Battery Storage Safety Management Plan, substantially in accordance with the C7.9 Outline Battery Storage Safety Management Plan [submitted at Deadline 2], is secured through Requirement 6 in Schedule 2 to the draft DCO [EX2/C3.1_C].
7A-021	Other Environmental Matters	Battery Energy Storage Safety	The National Fire Chiefs Council (NFCC) recommends a separation distance of 6m (National Fire Chiefs Council, 2022) between enclosures. ED Appendix 4.1 Engineering Drawings and Sections appear to show the battery containers closely packed. The spacing of the BESS enclosures is critical in preventing a chain reaction. The current design is unclear if it meets the NTCC recommendations.	The original Outline Battery Storage Safety Management Plan (OBSSMP)_ [C7.9 Outline Battery Storage Safety Management Plan (submitted at Deadline 2)] was published before the NFCC guidelines were released in April 2023. The updated OBSSMP now takes the NFCC guidelines into account. The NFCC guidance states: A standard minimum spacing between units of 6 metres is suggested unless suitable design features can be introduced

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			The spacing between BESS enclosures should comply with the 6m spacing (or larger if industry guidance is updated) . The distance of 6m, or larger if industry guidance is updated, should be secured in the DCO.	to reduce that spacing. If reducing distances a clear, evidence based, case for the reduction should be shown. It should be noted that this NFCC guideline was based on FM DS 5-33 (2017) which was superseded in 2023 and spacing guidelines are now less than NFPA 855 guidelines (3m). 6m exceeds the NFPA 855 (2023) guidelines of 3m, considered safe practice if sufficient UL 9540A testing and/or 3rd Party Fire and Explosion testing heat flux data has validated that closer spacing does not increase explosion risks or fire propagation risk. The current concept design allows for 3m spacing and the Applicant will provide sufficient UL 9540A testing and/or 3rd Party Fire and Explosion testing heat flux data to LFRS as part of the final safety management plan, or otherwise revert to the 6m spacing or the specific NFCC guideline at the time of detailed design stage. All test data to establish safe spacing will be validated by a BESS specialist independent Fire Protection Engineer and agreed with LFRS. The parameters and design principles for the Scheme, including the BESS, are set out in

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				C7.15_A Concept Design Parameters and Principles Revision A [REP-039], which is secured through Requirement 5 in Schedule 2 to the DCO [EX2/C3.1_C].
7A-022	Other Environmental Matters	Battery Energy Storage Safety	It is recommended the Applicant applies the Control of Major Accident Hazards (COMAH) Regulations to the design and operation of the BESS	The COMAH Regulations relate to the storage of 'dangerous substances' and the requirement to ensure that all necessary measures are taken to prevent major accidents involving dangerous substances, and to limit the consequences to people and the environment of any major accidents which do occur. The applicability of the COMAH Regulations is dependent on the substances being stored at the Sites (including the BESS Site) and in what quantities. It is unclear at this point whether the COMAH Regulations will apply to the design and operation of the BESS. Should it become clear that the COMAH Regulations do apply, then they will be complied with either before the commencement of construction or operation of the BESS, as is required. For example, if the COMAH Regulations do apply, then a notification of the dangerous substances stored at the site will be made to the competent authority (jointly the Health and Safety Executive and Environment Agency in this case) before construction commences, and a

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				major accident prevention policy will be prepared before construction or site operations commence.
7A-023	Other Environmental Matters	Battery Energy Storage Safety	The Energy Bill 3rd reading on 5 September 2023 confirmed that BESS will require an Industrial Installation Permit. The BESS design should reflect this requirement.	The proposed amendment to the Energy Bill that the Party is referring to was referred to in a House of Commons Amendment Paper dated 5 September 2023. However, this proposed amendment was not voted on and was therefore not implemented into the Energy Act (which received Royal Assent on 26 October 2023). As such, there is at present no requirement for an Industrial Installation Permit for the BESS.

2.4 Equality Impact Assessment

7000 Acres – Equality Impact Assessment [REP-107]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-024	Socio-Economics, Tourism and Recreation	Equality Impact Assessment	The Equality Impact Assessment January 2023 has failed to set out its purpose. It has not identified the real issues around how this and other schemes will affect health and wellbeing for the residents for the next 40 years during its operational cycle (our main concern).	The purpose of C7.12 Equality Impact Assessment [APP-351] is to identify and assess impacts on persons with protected characteristics as set out in Part 2, Chapter 1 paragraph 4 of the Equality Act 2010, to assist the Secretary of State in the discharge of their public sector equality duty under section 149.Health and wellbeing in the general population is therefore not a consideration of the EqIA. With regards to physical and mental wellbeing, please refer to response OEM-06 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-025	Socio-Economics, Tourism and Recreation	Equality Impact Assessment	The Equality Act (2010) is very clear that vulnerable groups are considered properly, and that reasonable adjustments are made, and that exception planning is in place. Concerns surrounding the assessment of the Equality effect within the document not fulfilling the requirements, with emphasis on a lack of understanding for rural issues leading to health inequality.	The Applicant has assessed impacts on socio-demographic receptors, including age and disability (as protected characteristics) in Section 18.7 of C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053]. No significant adverse impacts to these groups as a result of the Scheme, or as a result of the cumulative NSIPs assessed have been concluded, as set out in Table 5.1 of C7.12 Equality Impact Assessment [APP-351].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				An assessment of the effects of the Scheme on the general population and vulnerable groups can be found in C6.2.21 ES Chapter 21 Other Environmental Matters [APP-056].
7A-026	Socio-Economics, Tourism and Recreation	Equality Impact Assessment	Concern for the use of areas for consideration as justification. That the assessment does not negate the reference or identification, or lack thereof, for protected characteristics group. Concern that quantitative and qualitative data need to be obtained and analysed to fully understand scope of concern.	C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053] describes and identifies the environmental effects arising a result of the Scheme in relation to population, economic, business and tourism indicators. It has utilised qualitative and quantitative data to establish the baseline conditions in the Local Impact Area. This has taken age demographics into account based on 2021 Census data, and long-term disability statistics from 2011 and 2021 Census data, Office for Health Improvement and Disparities (OHID) data from 2020-21 (baseline data for JSNAs), Department of Work and Pension statistics, and 2019 Indices of Multiple Deprivation statistics to establish a suitable level of baseline data. The Applicant is confident that the baseline data collected for assessment, sources consulted, and the breadth of receptors assessed cover a broad enough range of health and wellbeing effects, including in regard to age and disability as

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				protected characteristics, to ensure the assessment has been suitably well-informed. Section 5 of C7.12 Equality Impact Assessment [APP-351] sets out the assessment of equality effects arising from the Scheme on groups with protected characteristics under the Equality Act 2010.
7A-027	Socio-Economics, Tourism and Recreation	Equality Impact Assessment	Furthering from the above, the question has been raised regarding only one Environmental Impact Assessment for each scheme being problematic, not one for all the schemes which would have necessitated a Health Impact Assessment. Identifying that the data around this is essential to mitigate if there are concerns. This is not the case in their Equality Impact assessment document. The impact of these schemes has the potential to widen health inequalities which is a concern.	C7.12 Equality Impact Assessment [APP-351] was written to assess the Cottam Solar Project DCO but draws on the assessment of effects in the Environmental Statement [APP-036 to APP-058]. As such, impacts from the Scheme in isolation, mitigation measures, as well as cumulative effects with other relevant NSIPs have been considered within the assessment.
7A-028	Socio-Economics, Tourism and Recreation	Equality Impact Assessment	A HEAT tool should have been requested (Health Equity Assessment Tool) to help identify these inequalities. This has the potential to impact on the NHS Core20plus5 programme within the NHS.	The Applicant notes this comment.
7A-029	Socio-Economics,	Equality Impact Assessment	A major driver of health inequality in rural areas is exclusion, marginalisation and lack of social connection. This can be felt by certain groups	The Applicant notes this comment.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
	Tourism and Recreation		such as LGBT, those divorced, single parents, or people living alone. Figures from a study on Gainsborough and surroundings referenced in the written representation paper, carried out by West Lincolnshire CCG (2017), showed that the number of pensioners living alone was high at 28.6%	
7A-030	Socio-Economics, Tourism and Recreation	Equality Impact Assessment	Concerns surrounding Gainsborough; two wards having significant deprivation, and this not being considered in the wider assessment when looking at deprivation for West Lindsey. Considering it an important contribution within the Equality Impact Assessment.	Although not identified explicitly, Gainsborough is an area within the Local Impact Area with very high rates of deprivation with regard to suitable income, access to employment, and education and skills attainment. The Applicant has therefore considered this and resultantly this has contributed to the determination that access to employment and access to education are high sensitivity receptors in the Local Impact Area. This is set out in Section 18.5 of C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053]. Socio-economic status is not in itself a protected characteristic as defined by the Equality Act 2010, although the Applicant is conscious of the correlation between disadvantaged areas and higher rates of disability. This has therefore been considered in the assessment of impacts from the Scheme in C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				The assessment outcome is that there is not anticipated to be any significant effects with regard to disability as a result of the Scheme. This has also been affirmed through the conclusions used in Section 5 of C7.12 Equality Impact Assessment [APP-351].
7A-031	Socio-Economics, Tourism and Recreation	Equality Impact Assessment	Reference to the Public Sector Equality duty, however no consideration has been paid to the impact on Human Rights. Article 8 of the Human Right Act states, there is a right of respect for private and family life. It is recognised that this right might be restricted under certain legitimate aims such as national security. This should be balanced by the legitimate protection of health and morals. The latter point is important as there is a feeling that financial greed has become the driver where investors are placing their claims over society and its right, especially rural communities, under the umbrella of climate change. It is stated that interference around this legitimacy must be necessary (not just reasonable), however, it should be "proportionate", that is, not more than is needed to achieve the aim desired.	The objective of the C7.12 Equality Impact Assessment [APP-351] is to assist the Secretary of State in their duty to have regard to the Public Sector Equality Duty under the Equality Act 2010 when making the decision to grant a DCO for the Scheme. Article 8 of the Human Rights Act 1998 protects private and family life, home and correspondence. Interference with this right can be justified if it is in accordance with law and is necessary in the interests of, among other things, national security, public safety or the economic wellbeing of the country. The C4.1 Statement of Reasons Revision A [AS-013] considers the interaction of the compulsory acquisition powers sought in the DCO, against the relevant articles in the Human Right Act 1998, including Article 8. In respect of Article 8, paragraph 9.1.9 of [AS-013] concludes that:

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			This would not meet the FREDA principles particularly around fairness and autonomy	*"In relation to Article 8, the Order limits do not include, and the Scheme does not require, the outright acquisition of any residential dwelling-houses. Consequently, as dwelling-houses will not be directly affected, it is not anticipated that the Convention rights protected by Article 8 will be infringed. In the event that such rights were to be infringed, such interference would be justifiable on the basis that it would be lawful and in the public interest."*
7A-032	Socio-Economics, Tourism and Recreation	Equality Impact Assessment	There is a real concern that these schemes will fragment and further marginalise our community, break down established networks, leaving a more vulnerable ageing population with real risk of increasing loneliness and social isolation. The PHE paper, "An evidence summary of health inequalities in older populations in coastal and rural areas", provides evidence which indicates that mental health is an issue in rural areas as well as neurological issues e.g. Multiple Sclerosis which is classified as one of the disabled conditions. It lists the main drivers of inequalities to include social exclusion and isolation. This needs to be	The Applicant has assessed the impacts of the Scheme on the visual impacts of the landscape and wider area in C6.2.8 ES Chapter 8 Landscape and Visual Impact Assessment [EN010133/EX2/C6.2.8_A]. The Applicant does not anticipate for the Scheme to have a direct impact on community connectivity, accessibility, access to community facilities or healthcare. No significant impacts on transport networks are assessed in C6.2.14 ES Chapter 14_Transport and Access [APP-049]. The Applicant is cognisant of the significance of the countryside for physical and mental wellbeing and as such, likely impacts on the desirability and use of recreational facilities in the countryside, such as public rights of way, have been assessed

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			understood more in the context of the document. Fuel poverty and financial difficulties are a real issue in rural communities. It is well recognised that green space benefits rural populations and the very reason people retire to rural areas, therefore there tends to be an increase of an ageing population in rural areas as a result.	in Section 18.7 of C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053]. The likely anticipated impacts on the recreational use of the River Trent during construction are short-term moderate-minor adverse (para. 18.7.64) and during operation are long-term minor adverse (para. 18.7.109). The impacts on the Trent Valley Way path are medium-term moderate-minor adverse during construction (Table 18.15), and long-term moderate-minor adverse during operation (Table 18.20). None of these effects are significant [APP-053]. That notwithstanding, the worst-case cumulative effect on the Trent Valley Way path during construction is a peak cumulative short to medium-term temporary moderate adverse effect (para. 18.10.31). This therefore would be a significant effect [APP-053]. The purpose of C7.12 Equality Impact Assessment [APP-351] is to identify where these effects would have a disproportionate or differential effect on groups of people on the grounds of their protected characteristics as defined by the Equality Act 2010. The EqIA concludes that the Scheme will not result in differentiated or disproportionate effects on groups with the protected characteristics of age or disability.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-033	Socio-Economics, Tourism and Recreation	Equality Impact Assessment	There is guidance around the protective characteristics as laid down in the Equality Act 2010 and these principles should be followed. Concern that this has not been demonstrated within this submission. Recognising these impacts would have improved the section on health and wellbeing and highlighted important issues that our communities would face for the next 40 years, namely mental health, social care issues and widening health inequalities.	The C7.12 Equality Impact Assessment [APP-351] assesses the effects of the Scheme on persons with protected characteristics as defined by the Equality Act 2010. The Applicant is confident that the assessment of health and wellbeing in C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053] provides sufficient information upon which the conclusions reached in C7.12 Equality Impact Assessment [APP-351] are made.
7A-034	Socio-Economics, Tourism and Recreation	Equality Impact Assessment	We feel this should be highlighted to the Secretary of State and that a full Health Impact Statement should be requested across all the schemes (cumulative affect).	C7.12 Equality Impact Assessment [APP-351] draws on the assessment of effects in the Environmental Statement [APP-036 to APP-058]. As such, cumulative effects from the Scheme and other relevant NSIPs have been considered within the assessment.

2.5 Human Health and Wellbeing

7000 Acres – Human Health and Wellbeing [REP-108] [REP-111]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-035	Other Environmental Matters	Human Health and Wellbeing	Human Health and wellbeing Health and wellbeing has been described more in terms of construction and decommissioning, with very little substance as to the forty-year gap, that being the operat ors cycle where potentially the biggest impact will be to the health and wellbeing of the people that live and work in Gainsborough and its surroundings (Local Impact Area). The definition of health and wellbeing is important to understand within the context of this written representation.	Human health and wellbeing impacts from the Scheme's operational lifetime on the Local Impact Area have been assessed primarily in C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053] at para. 18.7.69 to 18.7.113, with cumulative impacts assessed at para. 18.10.32 to 18.10.55. No significant effects to human health and wellbeing have been assessed for the operational lifetime of the Scheme in isolation, or when considered cumulatively. Direct human health impacts arising from the Scheme have been assessed throughout the ES. No significant effects during the operational lifetime of the Scheme have been identified, and therefore have not been included in the conclusions set out in Section 21.5 of C6.2.21 ES Chapter 21 Other Environmental Matters [APP-056].
7A-036	Socio-Economics, Tourism and Recreation	Equality Impact Assessment	Legislation and Policy: Much of the guidance is around urban development and not much is in place to guide the issues faced in rural development around health and wellbeing. The Equality Impact	The Applicant notes this comment. C7.12 Equality Impact Assessment [APP-351] signposts to Section 21.5 of C6.2.21 ES Chapter 21 Other Environmental Matters [APP-056] which identifies no significant adverse effects

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			Assessment for this scheme written for the applicant has not highlighted the potential health and wellbeing issues to be faced by this scheme and the others (cumulative) on the people of Gainsborough, and surroundings (Local Impact Area). The Health and Social Care Act of 2022, provides the foundations to improve health outcomes, which brings together the NHS, Public Health and Social Care at a local level with the hope that this will tackle health inequalities, which should have been highlighted by the Equality Impact Assessment. A Health Impact Assessment would have enabled the applicant to obtain better health related data which would highlight potential health and wellbeing issues as a consequence of this and the other schemes. There is potential to widen health inequalities?	from the Scheme, and only a peak cumulative moderate adverse effect during construction on Public Rights of Way and long-distance recreation routes (specifically the Trent Valley Way). The Applicant directs the commentors to Section 18.7 and 18.10 of C6.2.18 ES Chapter 18_Socio Economics Tourism and Recreation [APP-053] wherein respectively the human health and wellbeing impacts from the Scheme considered in isolation, and cumulatively, are assessed. This assessment covers physical health, mental health and wellbeing, deprivation, and access to recreational facilities. A separate Health Impact Assessment was not required at the EIA Scoping stage, and has not been requested up to this point by PINS, any host local authority, or any statutory body relating to public health.
7A-037	Socio-Economics, Tourism and Recreation	Equality Impact Assessment	Deprivation This DCO document fails to recognise Gainsborough town as the four LSOAs (Local Authorities and Lower Super Output Areas) within West Lindsey District which is in the top 10% most deprived LSOAs in England. This scheme is close to this town and is inextricably linked to it, and therefore this document is failing in its duty	Impacts on the local socio-demographic environment across the Scheme's construction, operation, and decommissioning have also been assessed in Section 18.7 of C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053]. This includes assessment of the existing resident demographic profile, access to primary healthcare, population health and wellbeing,

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			to understand how the scheme will directly impact on human health and wellbeing as part of its surroundings. This has the potential to widen health inequalities. This was highlighted in the Director of Public Health report 2022 as an urban industrial centre with high levels of economic inactivity and low social mobility. Two papers written for the energy sector state that these solar energy farms are more likely to be passed in areas of deprivation and where communities of lower social capital exist.	deprivation, and skills and qualifications. Subject to mitigation and enhancement measures as set out in Section 18.8 [APP-053], the Scheme is not anticipated to have any significant adverse impacts on the socio-demographic environment. The Scheme is however anticipated to have significant beneficial effects on access to employment (para. 18.8.12) and education (para. 18.8.13) as measures indices of deprivation during construction. Data at a settlement-level grain has been used to determine the sensitivity of receptors including indices of deprivation and access to primary healthcare. Although not identified explicitly, Gainsborough, for example, is an area within the Local Impact Area with very high rates of deprivation with regard to suitable income, access to employment, and education and skills attainment, which has contributed to the determination that access to employment and access to education are high sensitivity receptors. Whilst academically interesting, the Applicant does not consider that the conclusions in the research papers referred to can directly be attributed to the Scheme. The Applicant does however suggests that where the researchers

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				have highlighted existing energy-producing areas are likely to be of higher deprivation, at least some of the correlation may be as a result of these areas being located where grid capacity for NSIPs are more likely to be found. The Applicant however strongly refutes the implication made by 7000 Acres [REP-111] that there is a deliberate attempt to locate the Scheme in an area of higher deprivation to limit public engagement, action, or influence.
7A-038	Socio-Economics, Tourism and Recreation	Methodology	Qualitative data The only qualitative date provided was outdated ONS (Office of National Statistics) data from 2011. We argue that the only way to obtain this data is through a widened qualitative feedback survey following a well-informed process. This would highlight whether or not there are issues around the impact of health and wellbeing on how this scheme makes us feel emotionally, physically and mentally. Much of this is subjective and needs exploring	C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053] has utilised qualitative and quantitative data to build an overall picture of the baseline conditions present in the Local Impact Area. ONS data from the 2011 Census has been used where comparable data from the 2021 Census had not been published at the point of the ES being submitted. The Applicant is confident that the baseline data collected for assessment, sources consulted, and the breadth of receptors assessed cover a broad enough range of health and wellbeing effects to ensure the assessment has been suitably well-informed.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-039	Socio-Economics, Tourism and Recreation	Methodology	Physical, mental and social Rural communities on the whole tend to be healthier than urban. However, rural areas tend to have much older people with a higher life expectancy. There is natural outward migration of younger people from rural communities, and with schemes like this making it less attractive for young people to live and settle in, because of field industrialisation. Areas could be left with older people with no workforce attraction to prop up health and social care within these communities. This would compromise the vulnerable and has the effect of increasing loneliness and isolation. There is a failure in this document to use well established Quality and Outcomes Framework (QOF) data as well as the data from the Joint Strategic Needs Assessment (JSNA) to understand health in this area. For example, there is a higher modelled prevalence of respiratory disease in Gainsborough, in an area that has poor air quality compared to the rest of Lincolnshire. In many of the other disease profiles (e.g. stroke, coronary heart disease and cancer), these are higher than the National and Lincolnshire prevalence. The higher the deprivation, the great the multimorbidity. Mental health and the	The Applicant notes these comments. C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053] has utilised qualitative and quantitative data to build an overall picture of the baseline demography present in the Local Impact Area. This has taken age demographics into account based on 2021 Census data. The Applicant does not consider that QOF data would provide a useful addition to the baseline data already collected, due to its primary target use being for GP practices to measure their performance against national statistics. The Applicant has utilised 2011 and 2021 Census data, Office for Health Improvement and Disparities (OHID) data from 2020-21 (baseline data for JSNAs), Department of Work and Pension statistics, and 2019 Indices of Multiple Deprivation statistics to establish a suitable level of baseline data. Impacts on the local socio-demographic environment across the Scheme's construction, operation, and decommissioning have also been assessed in Section 18.7 [APP-053]. This includes assessment of the existing resident demographic profile, access to primary healthcare, population

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			environment are linked in health outcomes and wellbeing. Many people gain benefit for their mental health by living in the countryside. Depression in our communities is increasing and particularly in rural farming where this has been well recognised. The impact of these schemes has the potential to worsen mental health because they take away the very fabric of what rural life is about.	health and wellbeing, deprivation, and skills and qualifications. Subject to mitigation and enhancement measures as set out in Section 18.8 [APP-053], the Scheme is not anticipated to have any significant adverse impacts on the socio-demographic environment. The Scheme is however anticipated to have significant beneficial effects on access to employment (para. 18.8.12) and education (para. 18.8.13) as measured indices of deprivation during construction. The Applicant is cognisant of the significance of the countryside for physical and mental wellbeing and as such, likely impacts on the desirability and use of recreational facilities in the countryside, such as public rights of way, have been assessed in Section 18.7 [APP-053]. The greatest level of effect to access, desirability and use of recreational facilities is moderate-minor adverse and is anticipated during construction (para. 18.7.60 to 18.7.67) and decommissioning (para. 18.7.143 to 18.7.153). These effects are not anticipated to be significant. This is re-iterated in Section 21.5 of C6.2.21 ES Chapter 21 Other Environmental Matters [APP-056].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				The Applicant is confident that the baseline data collected for assessment, sources consulted, and the breadth of receptors assessed cover a broad enough range of health and wellbeing effects to ensure the assessment has been suitably well-informed.
7A-040	Other Environmental Matters	Human Health and Wellbeing	Rural vs Urban There is a real concern, that as cities and towns heat up with climate change "heat islands", that the rural environment should be preserved to provide areas for people from urban areas to come out into rural areas to cool down. By developing forests and woodlands, this would enable rural shade, carbon sinks as well as providing nature-based therapy. People in urban areas seek out the natural environment to connect with nature as a means of helping them cope with life.	The Applicant notes this comment. The PV array will be installed over arable land which is to remain under a perennial green cover during operation – see paragraphs 19.9.12 and 19.9.13 of C6.2.19 ES Chapter 19 Soils and Agriculture [APP-054]. It is considered that the green cover will offset any microclimate impacts arising from the installation of PV panels. In addition, the extensive development-free ecological buffers to be imposed around valued features such as all hedgerows, ditches, watercourses, ponds, woodland and trees – which measure between 5 and 50m – will ensure that any shading, thermal or airflow impacts of the PV array will be avoided. The Applicant is cognisant of the significance of the countryside for physical and mental wellbeing and, as such, likely impacts on the desirability and use of recreational facilities in the countryside, such as public rights of way, have been assessed

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				in Section 18.7 of C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053].
7A-041	Other Environmental Matters Noise and Vibration	Light Pollution Noise Pollution	Noise and light pollution Rural communities on the whole have little exposure to traffic noise. In rural communities, there is very little light pollution. This scheme has the potential to increase noise generated from transformers, inverters and battery cooling fans. Perimeter fence lights have the potential to increase light pollution. This is an issue to those residents who border the scheme. Both noise and light pollution could potentiate sleep deprivation, worsening mental health, and eventually poor physical health.	Assessment of the environmental impacts of light pollution from the Scheme has been undertaken in Chapter 8 of the Environmental Statement Landscape and Visual Impact Assessment [EN010133/APP/C6.2.8]. There will be no lighting on perimeter fencing. As stated within paragraph 2.6.1 of C7.1_A Outline Construction Environmental Management Plan [REP-037],lighting (during construction) will be required for safety reasons but will be temporary in nature and predominately limited to the core working hours. Provision of a detailed CEMP has been secured by Requirement 13 of Schedule 2 of C3.1_C Draft Development Consent Order Revision C [EN010133/EX2/C3.1_C]. Paragraph 2.5.1 of C7.16 Outline Operational Environmental Management Plan [APP-353], which is secured by Requirement 14 of Schedule 2 of C3.1_C Draft Development Consent Order Revision C [EN010133/EX2/C3.1_C], notes that no part of the Scheme will be continuously lit and that the use of motion detection security lighting will avoid permanent lighting. Lighting is not required within the solar arrays. Lighting will be

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				provided within substations and within the Energy Storage site to be used only in the event of it being required for maintenance and security purposes. Down lighting would be used on lighting columns of a maximum height of 3m. A detailed assessment of noise impacts is contained in Chapter 15 of the Environmental Statement Noise and Vibration [EN010133/APP/C6.2.15].

2.6 Food Security

7000 Acres –Food Security [REP-109]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-042	Soils & Agriculture	Food Security	If the world becomes short of electricity then we will adapt to some other form of energy. If the world becomes short of food then we will starve and die. Farmland must be used for food production not energy generation.	Please refer to response BLPC-03 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-043	Alternatives & Design Evolution	Food Security	We have huge competing demands for the use of land in this country. We've got to consider new homes, growing food, space for nature, and generating the energy we all use in our daily lives. Putting solar panels on the millions of roofs across the country means that we don't need to use as much extra land to meet our energy needs. This saves land from industrialisation, and paves the way for regenerative agriculture that will produce food and provide a much-needed home for declining wildlife species. Placing solar panels on urban rooftops protects the beauty of our landscapes. We are not against solar energy and propose for solar panels to be mandatory on all new build developments whether that be residential, commercial or agricultural and believe that there	Please refer to response FPM-22 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			is room for larger scale PV arrays to be situated on some suitable brownfield sites.	
7A-044			We also believe that we should protect our best and most versatile agricultural land to promote food security, help the rural economy and encourage agricultural practises to promote sustainable methods to tackle climate change.	Please refer to response BLPC-02 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-045	Soils & Agriculture	Food Security	The UK Government Food Strategy underlines the crucial role domestic food producers play in national resilience. The land proposed to be developed for the Cottam Solar Project is productive arable land, as is the land associated with the three other large solar developments in the region. The impact of the Cottam Solar Project, and the cumulative impact of the 4 schemes on Food Security has not been considered, particularly in light of the circumstances of war, pandemic, crop disease and global warming (e.g. rising sea levels) on national and global supply chains. Why does Island Green Power believe that Energy Security is more important than Food Security? What is their explanation for this project apart from commercial gain?	Concerns relating to food security and land use have been responded to in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			Next time you see pictures of adults and children suffering from starvation I hope that your conscience is clear that you made the right decision that food is more important than electricity	

2.7 Flooding Concerns

7000 Acres – Flooding Concerns [REP-110]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-046		Surface water	The surface water runoff under storm conditions from impervious areas of this magnitude will be spectacular. The developer's Flood Risk Assessment states: *'7.2.2 The proposed strategy aims to mimic the natural drainage conditions of the site as much as possible. The proposed solar PV panels will be held above ground individually on narrow diameter piled legs. This prevents sealing the ground with an impermeable surface beneath solar panels allowing rainfall/runoff to infiltrate to ground throughout the Scheme. As a result, it is considered that the Scheme's impermeable area will remain consistent to its pre-development state.'* NB The developer may have intended to use the word 'permeable' instead of 'impermeable', but either way the assertion is entirely incorrect for the following reasons: The kinetic energy of the sheet flow from the panels is far greater than that of the rainfall over the same area and will alter the volume, velocity, and discharge characteristic of storm water	Section 4.0 'Soil Management' and paragraphs 5.3.1 to 5.3.5 of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report [APP-090] considers and addresses the concerns raised within this point. There is no UK environmental managing guidance with regards to runoff from solar panel installations. However, research undertaken in the United States (US) by Cook and McCuen considers the points raised in this comment and states within their conclusions that; *'The addition of solar panels over a grassy field does not have much of an effect on the volume of runoff, the peak discharge, nor the time to peak. With each analysis, the runoff volume increased slightly but not enough to require storm-water management facilities'*, and continue to recommend that the vegetation cover beneath the panels is well maintained or that a buffer strip be placed after the most down gradient row of panels. Point 3 of paragraph 10.8.1 within C6.2.10 ES Chapter 10_Hydrology, Flood Risk and

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			runoff, increasing the soil erosion along the drip line of the panels. The flow of rainwater falling on the panels is concentrated at the drip line and the degree of infiltration will depend on the soil permeability immediately below. If land drains are sited immediately below the drip line, the flow of water from the site into drainage ditches are likely to be much greater than at present. The articulated panels are 4.5 metres high, inclined at variable angles between 20 and 50 degrees depending on the season and operated to track the sun. Rainwater falling onto the inclined panels will run to the lowest point on each array and fall to the ground at the drip line. On level ground, the areas beneath the panels are not available for infiltration, since they lie in the rain shadow and beyond the panel drip line. The flow of water along the ground is governed by the hydrology, which relies on rate of rainfall, the localised permeability of the soil at the drip line, the slope of the ground and the degree of compaction of the access roadways between the arrays by	Drainage [APP-039] Includes provision for suitable planting (such as a wildflower or grass mix) to ensure that the underlying ground cover is strengthened and is therefore unlikely to generate surface water runoff rates beyond the baseline scenario.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			maintenance traffic. Considering the above, it is highly unlikely that the 4.5-metre-high panels will allow rainfall/runoff to infiltrate the permeable area beneath and therefore will not remain consistent to its predevelopment state. Currently rainwater precipitation and mitigation are evenly distributed across the sites allowing gradual entry into the land drainage systems before delivery into the drainage dykes. However, rainwater falling on the panels will gravitate towards the lowest corner of each panel, where it will fall to the ground to form rivulets and channels flowing down the rain shadows of the rows sited below, without using the whole area for infiltration as the developers claim.	
		Construction impacts	Additionally, much of the existing field drainage system beneath the panels will remain underutilised and subject to damage and disturbance by the panel mountings during construction. This will increase the rate and quantity of surface water runoff from the sites, with spectacular flooding during periods of prolonged torrential rain.	The C7.1_B Outline Construction Environmental Management Plan [EX2/C7.1_B] has been amended to include provision for the avoidance, rerouting and, if necessary, reinstatement of land drains in the event of damage. Protective provisions for the benefit of the IDB are included in part 8 to Schedule 16 of the draft DCO [AS-012] which require that the IDB be consulted and approve any "specified works"

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				within 9m of any of the IDB's drains or watercourses. Protective provisions for the benefit of the Environment Agency are included in part 9 to Schedule 16 of the draft DCO [AS-012] which require that the IDB be consulted and approve any "specified works" within 8m of any of the IDB's drains or watercourses.
		SuDS	The developer's Flood Risk Assessment also states: '7.2.4 The Scheme will provide minimal alterations to the existing topography and ground conditions on-site. Any excess peak surface water runoff generated within the site boundary will be attenuated on-site before it is infiltrated to ground. Attenuation will be provided in the form of swales and infiltration basins. These features will be strategically located based on existing overland flow routes to capture runoff. Check dams will be placed strategically within swales to optimise their potential on steeper slopes. Where the attenuation lies within the solar field, the legs of the solar panel will be extended so that the solar panel lies above the potential flooding.'	The applicant notes this comment however, following the inclusion of suitable planting (such as a wildflower or grass mix) to ensure that the underlying ground cover is strengthened and is unlikely to generate surface water runoff rates beyond the baseline scenario as detailed within C6.2.10 ES Chapter 10_Hydrology, Flood Risk and Drainage [APP-039]. The quotation is taken from the Flood Risk Assessment submitted for the Gate Burton Energy Park [EN010131/APP-142].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			If one uses the Defra SuDS mitigation requirement of one cubic metre of storage capacity for 50 square metres of impermeable surface area, the estimated 4.5 million square metres of solar panels in Cottam 1 would require 90,000 cubic metres of storage. Retaining this quantity of storm water by 0.6 metre deep 'swales' would require a total mitigation area of 37 acres distributed at the lowest points in each section of solar arrays, far exceeding any outline proposals for mitigation in the developer's FRA and could hardly be regarded as maintaining the existing topography	
		Infiltration	The developer's FRA further states: *'7.2.6 The proposed surface water drainage network has been designed to accommodate runoff from all storms up to and including the 1% AER +40% for climate change. For an extreme storm event, any exceedance flows that cannot be retained by the proposed attenuation flow overland, following the existing topography, where ultimately, they will be contained within the SuDS features.'* The proposed surface water drainage is based solely on the infiltration of the land in its current condition, with an even distribution of rainfall and	The proposed drainage strategy is detailed within Section 5.0 of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report [APP-090]. It is considered that the panelled areas will not alter the existing surface water run-off regime and will therefore not be formally drained. Areas of increased hardstanding such as smaller areas of hardstanding formed as footings for electrical infrastructure will utilise sustainable drainage (SuDS) principles and attempt to mimic the existing surface water run-off regime as existing.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			an uncovered exposed area of permeability, but again no consideration has been given to the sheltered areas beneath the panels, which reduces the area of direct infiltration by an estimated 50%. The runoff from the panels is concentrated at the drip line, will flow to the lowest point under gravity and will not be distributed over the total area.	Section 4.0 'Soil Management' and paragraphs 5.3.1 to 5.3.5 of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report [APP-090] considers and addresses the concerns raised within this point. There is no UK environmental managing guidance with regards to runoff from solar panel installations. Research undertaken in the United States (US) by Cook and McCuen states within their conclusions that; 'The addition of solar panels over a grassy field does not have much of an effect on the volume of runoff, the peak discharge, nor the time to peak. With each analysis, the runoff volume increased slightly but not enough to require storm-water management facilities', and continue to recommend that the vegetation cover beneath the panels is well maintained or that a buffer strip be placed after the most down gradient row of panels. Point 3 of paragraph 10.8.1 within C6.2.10 ES Chapter 10_Hydrology, Flood Risk and Drainage [APP-039] Includes provision for suitable planting (such as a wildflower or grass mix) to ensure that the underlying ground cover is strengthened and is therefore unlikely to generate surface water runoff rates beyond the baseline scenario.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				The energy storage (BESS) area within the Scheme is considered within an area specific drainage strategy included within Section 3.0 of C6.3.10.4 ES Appendix 10.1 Annex D 10.1.3 Cottam 1 West [APP-093]. The drainage strategy and detailed drainage design will be developed during the detailed design process. As secured by Requirement 11 in Schedule 2 of the C3.1_B Draft Development Consent Order Revision B [EN010133/EX1/C3.1_B] "No part of the authorised development may commence until written details of the surface water drainage scheme and (if any) foul water drainage system for that part have been submitted to and approved by the relevant planning authority." The quotation is taken from the Flood Risk Assessment submitted for the Gate Burton Energy Park [EN010131/APP-142].
7A-050	Hydrology, Flood Risk & Drainage	Cumulative effects	In addition to the surface water from the proposed area of Cottam 1, the River Till also receives land drainage from the proposed developments at Gate Burton EP, West Burton EP and Tillbridge Solar, which in total amount to around 10,000 acres of land sited in the catchment area.	The Applicant notes this statement.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			The River Till is pumped up into the Fossdyke Navigation Canal by pumps controlled by the Upper Witham Drainage Board at Odder and flows into the Brayford Pool in the centre of Lincoln city which links to the river Witham. Under storm conditions when the water level in the river Witham is high, the Upper Witham Drainage Board, at the request of the Environment Agency, routinely turn off the transfer pumps from the river Till into the Fossdyke Canal to prevent flooding around the Brayford Pool in the centre of Lincoln, causing the river Till to overflow its flood banks and inundate the surrounding farmland. Thousands of acres of farmland and several vital access roads were affected around the villages of Stow, Sturton by Stow, Bransby and Broxholm in November 2019, which is not an isolated incident. The flooding in 2019 also resulted in the evacuation of horses from the Brasby Horse Rescue Centre and the inundated land being unsuitable for grazing for over 12 months.	
7A-051			Cottam 1 is sited in flood classification zones 2 & 3 (areas with a moderate to high level of flooding) and anecdotal evidence provided by the local	The proposed solar schemes will not contribute to an exacerbation of flooding in the area.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			farming community suggest that the inundation of farmland is relatively frequent and sufficiently prolonged to have a negative impact on agricultural practices, resulting in the land being unsuitable for arable farming and converting to pasture and hay crop. This raises serious concerns about the restriction of access by emergency services to remote communities due to the increased flood risk arising from all four solar projects sited on the catchment area of the river Till, which will inevitably exacerbate an already existing flooding problem.	The embedded mitigation detailed in section 10.7 of C6.2.10 ES Chapter 10_Hydrology, Flood Risk and Drainage [APP-039] will ensure there is no loss of flood storage as a result of the development and that the existing surface water run-off regime will mimic the existing baseline The proposed drainage strategy is detailed within Section 5.0 of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report [APP-090]. Section 5.0 'Drainage Strategy' of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report [APP-090] assesses that the panelled areas will not alter the existing surface water run-off regime and will therefore not be formally drained. Areas of increased hardstanding such as smaller areas of hardstanding formed as footings for electrical infrastructure will utilise SuDS principles and attempt to mimic the existing surface water run-off regime as existing. The BESS area within the Scheme is considered within an area specific drainage strategy included within Section 3.0 of C6.3.10.4 ES Appendix 10.1 Annex D 10.1.3 Cottam 1 West [APP-093].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				The drainage strategy and detailed drainage design will be developed during the detailed design process. As secured by Requirement 11 in Schedule 2 of the C3.1_B Draft Development Consent Order Revision C [EN010133/EX2/C3.1_C] "No part of the authorised development may commence until written details of the surface water drainage scheme and (if any) foul water drainage system for that part have been submitted to and approved by the relevant planning authority."
7A-052	Hydrology, Flood Risk & Drainage	Flood Risk	It is therefore impossible to consider the effects of flooding arising from Cottam1 in isolation from the other 3 Solar Projects currently going through the planning process and the effects each will have jointly and severally on the inundation of farmland and roadways to villages downstream of the river Till due to drains backing up and water overflowing its flood banks. High water levels in the river Till also exacerbate flooding problems experienced over 10 miles away, due to the reduction in the hydraulic gradient resulting from rising water levels in the drainage dykes and its tributaries.	The proposed solar schemes will not contribute to an exacerbation of flooding in the area. This is also the case for the other stated schemes. The embedded mitigation detailed in section 10.7 of C6.2.10 ES Chapter 10_Hydrology, Flood Risk and Drainage [APP-039] will ensure there is no loss of flood storage as a result of the development and that the existing surface water run-off regime will be mimicked. The proposed drainage strategy is detailed within Section 5.0 of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report [APP-090].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				Section 5.0 'Drainage Strategy' of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report assesses that the panelled areas will not alter the existing surface water run-off regime and will therefore not be formally drained. Areas of increased hardstanding such as smaller areas of hardstanding formed as footings for electrical infrastructure will utilise SuDS principles and attempt to mimic the existing surface water run-off regime as existing. The BESS area within the Scheme is considered within an area specific drainage strategy included within Section 3.0 of C6.3.10.4 ES Appendix 10.1 Annex D 10.1.3 Cottam 1 West [APP-093]. The drainage strategy and detailed drainage design will be developed during the detailed design process. As secured by Requirement 11 in Schedule 2 of the C3.1_B Draft Development Consent Order Revision C [EN010133/EX2/C3.1_C] "No part of the authorised development may commence until written details of the surface water drainage scheme and (if any) foul water drainage system for that part have been submitted to and approved by the relevant planning authority."

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-053	Hydrology, Flood Risk & Drainage	Flood Risk	When one considers the storm water runoff from an estimated 8 square miles of impermeable glass panels from all 4 projects delivering onto the catchment area of the river Till, the flooding will be 'spectacular' and no amount of 'mitigation' will equal that already provided by the soil itself and the existing drainage systems, which have stood the test of time.	The applicant notes this comment; however, the panels do not cover the ground in 'impermeable glass panels' and research undertaken in the United States (US) by Cook and McCuen (Hydrologic Response of Solar Farms, (Cook and McCuen and 2013) has found that *'The addition of solar panels over a grassy field does not have much of an effect on the volume of runoff, the peak discharge, nor the time to peak'*. The Cook and McEuan research forms the basis of Section 4.0 'Soil Management' as detailed in paragraphs 5.3.1 to 5.3.5 of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report [APP-090].
7A-054	Hydrology, Flood Risk & Drainage	Soil & Flooding	Most of the soil on the proposed development areas has a high clay content, which despite its ability to hold water in times of drought to produce high crop yields, becomes saturated during prolonged periods of heavy rain, resulting in excess water to shed off directly over the surface into the dykes. Also, during periods of drought, clay soil becomes hard and initially impervious to rainwater until it is softened enough to allow infiltration. Under drought conditions, its hard impervious nature of clay soil results in rainwater from a	The underlying geology is considered within Section 5.0 of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report [APP-090] and its appendices [APP-091 to APP-097]. The existing geology partly determines the existing surface water run-off regime and this will not be altered by the development. Section 5.0 'Drainage Strategy' of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report assesses that the panelled areas will not alter the existing surface

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			sudden storm running off faster than it can be absorbed. The residence time, for rainwater falling over an area of the soil surface is currently much longer than would be the case when covered by 4.5-metre-high impervious solar panels, which concentrate the runoff at the drip line. *'7.2.3 It is considered that rainfall will mostly permeate into the ground where it falls, and that any runoff generated within arable fields collects in low spots where it infiltrates to ground or enters a water course as appropriate where the site drainage interacts with one.'* The developer appears to have misunderstood the hydrology of a concentrated flow of rainwater running from the inclined 4.5 metre high solar panels onto the confined area of the drip line falling onto the edge of the compacted panel maintenance lanes between the solar array and the inaccessibility of the area in the sheltered rain shadow beneath the panels, resulting in at least half the area of the development being unavailable for infiltration than is currently the case.	water run-off regime and will therefore not be formally drained. Areas of increased hardstanding such as smaller areas of hardstanding formed as footings for electrical infrastructure will utilise sustainable drainage (SuDS) principles and attempt to mimic the existing surface water run-off regime as existing. Section 4.0 'Soil Management' and paragraphs 5.3.1 to 5.3.5 of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report [APP-090] considers and addresses the concerns raised within this point. There is no UK environmental managing guidance with regards to runoff from solar panel installations. Research undertaken in the United States by Cook and McCuen (Hydrologic Response of Solar Farms, (Cook and McCuen and 2013) states within their conclusions that; 'The addition of solar panels over a grassy field does not have much of an effect on the volume of runoff, the peak discharge, nor the time to peak. With each analysis, the runoff volume increased slightly but not enough to require storm-water management facilities', the research recommends that the vegetation cover beneath the panels is well maintained or that a buffer strip be placed after the most down gradient row of panels.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				Point 3 of paragraph 10.8.1 within C6.2.10 ES Chapter 10_Hydrology, Flood Risk and Drainage [APP-039] Includes provision for suitable planting (such as a wildflower or grass mix) to ensure that the underlying ground cover is strengthened and is therefore unlikely to generate surface water runoff rates beyond the baseline scenario. The energy storage (BESS) area within the Scheme is considered within an area specific drainage strategy included within Section 3.0 of C6.3.10.4 ES Appendix 10.1 Annex D 10.1.3 Cottam 1 West [APP-093]. The drainage strategy and detailed drainage design will be developed during the detailed design process. As secured by Requirement 11 in Schedule 2 of the C3.1_B Draft Development Consent Order Revision C [EN010133/EX2/C3.1_C] "No part of the authorised development may commence until written details of the surface water drainage scheme and (if any) foul water drainage system for that part have been submitted to and approved by the relevant planning authority." The quotation of 7.2.3 in the Written Representation is taken from the Flood Risk

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				Assessment submitted for the Gate Burton Energy Park [EN010131/APP-142].
7A-055	Hydrology, Flood Risk & Drainage	River Till	Also, the impingement and sheer force of the fast-moving channel of water along the panel driplines to erode the soil and mobilise clay, fine particles together with natural vegetation to enter the water courses and negatively impact aquatic invertebrates and the general ecology of the dykes, drains including the river Till.	The Applicant notes this comment however, following the inclusion of suitable planting (such as a wildflower or grass mix) to ensure that the underlying ground cover is strengthened and is unlikely to generate surface water runoff rates beyond the baseline scenario as detailed within C6.2.10 ES Chapter 10_Hydrology, Flood Risk and Drainage [APP-039]. It is also considered that the change in use from heavily worked agricultural land to semi-improved grassland will contribute to a net improvement in water quality of local watercourses.
7A-056	Hydrology, Flood Risk & Drainage	Flood Risk	It remains a matter of serious concern that the Environment Agency and the Upper Witham Drainage Board have not also raised concerns regarding the flooding risk, which is patently obvious.	The Applicant notes this statement. Statements of common ground have been prepared with both the Environment Agency (Deadline 1 Submission - C8.3.8 Environment Agency Statement of Common Ground (Draft) [REP-069]) and Upper Witham Drainage Board (Deadline 1 Submission - C8.3.7 Upper Witham Internal Drainage Board Statement of Common Ground [REP-068])

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-057	Hydrology, Flood Risk & Drainage	Flood Risk	Cottam Solar Project's Flood Risk Assessment in its Environmental Statement makes scant reference to the effect the development will have on the River Till and its tributaries and appears to concentrate mainly on the flood risk to the solar arrays and equipment within the development itself.	Please refer to response RR-154 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049]. The Scheme is not expected to increase surface water runoff and is therefore not expected to affect the River Till and its tributories.
7A-058	Hydrology, Flood Risk & Drainage	Flood Risk	Nowhere in the developer's Flood Risk Assessment is there an estimate of the maximum quantity of surface water running from approximately 6 million square metres of solar panels.	An assessment has been made utilising the latest policy, available guidance and research, and the assessment has concluded that there will be no detrimental impact to surface water run-off from the scheme. Section 5.0 'Drainage Strategy' of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report assesses that the panelled areas will not alter the existing surface water run-off regime. The BESS area within the Scheme is considered within an area specific drainage strategy included within Section 3.0 of C6.3.10.4 ES Appendix 10.1 Annex D 10.1.3 Cottam 1 West [APP-093]. The BESS scheme includes existing and proposed discharge rates and volumes in sections 3.2 and 3.3 and supporting calculations and drawings are included as Annex I, J, K, L and M.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				The drainage strategy and detailed drainage design will be developed during the detailed design process. As secured by Requirement 11 in Schedule 2 of the C3.1_B Draft Development Consent Order Revision C [EN010133/EX2/C3.1_C] "No part of the authorised development may commence until written details of the surface water drainage scheme and (if any) foul water drainage system for that part have been submitted to and approved by the relevant planning authority."
7A-059	Hydrology, Flood Risk & Drainage	Flood Risk	Periods of heavy rain exceeding 50mm in a 24-hour period are not unknown in Lincolnshire which would produce 0.32 million cubic metres of surface water, much of which would not be absorbed along the panel drip line when the soil becomes saturated. This quantity of water could not possibly be contained on the site even if Defra's SuDS formula were to be applied to provide 90,000 cubic metres of storage for Cottam 1 alone.	This calculation assumes that the panelled area effectively acts as hardstanding where no infiltration can occur and that the surface water generated by it, needs to be attenuated. This is not the case as detailed by Cook and McCuen (Hydrologic Response of Solar Farms, (Cook and McCuen and 2013) . As set out in C6.2.10 ES Chapter 10_Hydrology, Flood Risk and Drainage [APP-045], the increase in permanent impermeable area on the Site will be negligible,
7A-060	Hydrology, Flood Risk & Drainage	Flood Risk	The flood risk from Cottam 1 cannot be considered in isolation and the flooding risks arising from Gate Burton EP, West Burton EP and	The proposed solar schemes will not contribute to an exacerbation of flooding in the area. This is also the case for the other stated schemes.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			Tillbridge Solar must also be jointly considered since they all are situated on the catchment area of the river Till and comprise approximately 10,000 acres of land in total.	The embedded mitigation detailed in section 10.7 of C6.2.10 ES Chapter 10_Hydrology, Flood Risk and Drainage [APP-039] will ensure there is no loss of flood storage as a result of the development and that the existing surface water run-off regime will mimic the existing baseline. The proposed drainage strategy is detailed within Section 5.0 of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report [APP-090]. Section 5.0 'Drainage Strategy' of C6.3.10.1 ES Appendix 10.1 Flood Risk Assessment and Drainage Strategy Report assesses that the panelled areas will not alter the existing surface water run-off regime and will therefore not be formally drained. Areas of increased hardstanding such as smaller areas of hardstanding formed as footings for electrical infrastructure will utilise SuDS principles and attempt to mimic the existing surface water run-off regime as existing. The BESS area within the Scheme is considered within an area specific drainage strategy included within Section 3.0 of C6.3.10.4 ES Appendix 10.1 Annex D 10.1.3 Cottam 1 West [APP-093].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				The drainage strategy and detailed drainage design will be developed during the detailed design process. As secured by Requirement 11 in Schedule 2 of the C3.1_B Draft Development Consent Order Revision C [EN010133/EX2/C3.1_C] "No part of the authorised development may commence until written details of the surface water drainage scheme and (if any) foul water drainage system for that part have been submitted to and approved by the relevant planning authority."
7A-061	Hydrology, Flood Risk & Drainage	Flood Risk	Photographs of the flooding of the area around the proposed site of Cottam 1 which occurred in November 2019 are hereby attached.	The Applicant notes this statement.

2.8 Inaccuracies in the Book of Reference and Statement of Reasons

7000 Acres –Inaccuracies in the Book of Reference and Inaccuracies in the Statement of Reasons [REP-112] [REP-113]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-062		Inaccuracies in the Book of Reference and Inaccuracies in the Statement of Reasons	Tillside Limited. The Statement of Reasons quotes that an Option Agreement in respect of Cottam 1 was entered into on 19 February 2021 covering plots: 06-153 07-155 07-156 07-157 07-158 07-159 08-166 08-167 08-169 08-170 08-171 08-172 08-177 08-178 08-179 08-180 08-181 09-190 10-202 10-203 10-204 10-205 10-210 10-225 10-226 10-227 10-231 10-239 10-240 10-241 10-243 10-244 11-261 11-266 12-273 12-274 12-276 12-279 12-280 13-283 14-289 However TILLSIDE LIMITED was only incorporated under the Companies Act 2006 as a private company, that the company is limited by shares, and the situation of its registered office is in England and Wales Given at Companies House, Cardiff, on 8th March 2022. Therefore the Option Agreement dated 19th February 2021 is not valid as Tillside did not exist on that date.	The Applicant refers to response 7A3-01 in its Responses to Procedural Deadline A and Additional Submissions [REP-056]. With regards to the points raised in relation to plot 08-172 and 10-241a, these will be addressed within the next version of the Statement of Reasons.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			The 43 references to this Option Agreement should be removed and a new Option Agreement entered into. Also within the Statement of Reasons the following errors are noted: Entry 08-172 is incorrectly assigned within the Statement of Reasons under Tillside. Entry 10-241a has been added to the Book of Reference but has not been added to the Statement of Reasons.	
7A-063		Inaccuracies in the Book of Reference and Inaccuracies in the Statement of Reasons	In section 8.2.2 it states that The Land Referencing limits were set to include all land and rights necessary to construct and operate the Scheme. A professional land referencing firm was employed to undertake diligent inquiry to identify these land interests. The following processes were undertaken as part of the methodology to identify and consult with those with an interest in affected land. 8.2.3 Land Registry data was received in the form of a digital shape file (a GIS layer) and digital copies of the Official Copy Registers and Title Plans. All relevant freehold, leasehold, mortgagee, beneficiary, other charges and restrictive covenant information was extracted and stored in a land referencing	The Applicant refers to response 7A3-01 in its Responses to Procedural Deadline A and Additional Submissions [REP-056].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			database. 8.2.4 An update to the land registry information was carried out prior to the preparation of the Book of Reference [EN010133/APP/C4.3_A] as part of the DCO application documentation. However sampling of the Land Registry has identified that for plot 10-241 the ownership is recorded in the Statement of Reasons and Book of Reference as being Tillside Limited whilst the Land Registry shows ownership as being Kevin Simon Webster, James Charles Stewart Reynolds Milligan-Manby and John Anthony Shepherdson as trustees of the C Nicholson No1 Settlement. This inconsistency questions the validity of the data published within the Statement of Reasons and Book of Reference and both documents need to be carefully reviewed, corrected and resubmitted. This inconsistency questions the validity of the data published within the Book of Reference for the other 82 entries of Tillside and this document needs to be carefully reviewed, corrected and resubmitted	

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-064			Entry 11-263 Is incorrectly identified in the Book of Reference. (as beneficiary of an Option Agreement dated 19th February 2021) Entry 11-265 Is incorrectly identified in the Book of Reference. (as beneficiary of an Option Agreement dated 19th February 2021)	The Applicant refers to response 7A3-01 in its Responses to Procedural Deadline A and Additional Submissions [REP-056].

2.9 Land Productivity

7000 Acres –Land Productivity [REP-114]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-065		Land Productivity	Within EN010133-000238-C6.2.18 ES Chapter 18_Socio Economics Tourism and Recreation there is no mention of the existing crop production that will be lost if the acreage is covered in solar panels.	Impacts on agricultural productivity were not scoped into the EIA, and no request has been received by any statutory consultee for this to be included for assessment during the EIA Scoping stage, during ongoing consultation with local authorities, or during Section 42 statutory consultation.
7A-066		Land Productivity	There is also no mention of the associated businesses that will be impacted by this loss of crop production. However within section 18.7.48 it states that the Scheme is estimated to displace approximately 17 agricultural sector jobs in the Local Impact Area, this is estimated to have an economic impact of £800,000, based on a GVA per worker of £49,074 (Ref 18.60). This impact will reduce the value of the local agricultural economy (£265 million) by approximately 0.3%. It also states that the Scheme is likely to bring a direct benefit to local landowners through payment of annual ground rent which is anticipated to be in the region of £2.4 million per annum which demonstrates the	The assessed worst-case loss of 17 FTE agricultural jobs as a result of the Scheme is equivalent to 0.4% of the agricultural employment in the Local Impact Area, as set out in para. 18.7.15 of C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053]. Potential for continuation of non-arable agricultural practices on the Scheme, and the ongoing continuation of arable agricultural in the surrounding areas demonstrates that it is unlikely that there will be any more than a low level of impact on agricultural supply chains, and therefore are not anticipated to experience significant effects, even when considered cumulatively with other NSIPs in the Till Valley area of West Lindsey. As a result, these have not been assessed.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			greed of the landowners at the expense of the local employees.	The land included in the Scheme covers 4 farm businesses, all of which are owner occupiers of the land within the Sites as set in Section 7 of C6.3.19.1 ES Appendix 19.1 Agricultural Land Quality Soil Resources and Farming Circumstances [APP-145]. As such, no agricultural employment beyond those already employed on the owner-occupied businesses are assessed to be directly affected.
7A-067		Land Productivity	It further states within section 18.10.22 that the anticipated cumulative effect of the other identified local projects on the agricultural economy is a peak loss of approximately £2.0 million per annum by 2026.	As outlined in para. 18.10.22 of C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053] this amount is equivalent to 0.7% of the grouped ABDE sector economy in the Local Impact Area. Therefore the cumulative effect is minor adverse, which is not a significant effect.
7A-068		Land Productivity	The developer, Island Green Power, should provide an assessment of this topic of Land Productivity with quantifiable data covering: a) What crops have been produced in the past? b) What quantity and grade of crops have been produced? c) What percentage of UK production is this?	Impacts on agricultural productivity were not scoped into the EIA, and no request has been received by any statutory consultee for this to be included for assessment during the EIA Scoping stage, during ongoing consultation with local authorities, or during Section 42 statutory consultation. As such, it is the Applicant's continued position that this form of assessment is not required to

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			d) Where else are these crops produced that can replace the lost production?	determine the merits versus impacts of this Scheme.
7A-069		Land Productivity	Recognising land use pressure as a cross-cutting national challenge, the Geospatial Commission initiated the National Land Data Programme (NLDP) which has explored key land use challenges and demonstrated where innovative data analysis and evidence can support better land use decisions. The impacts of land use changes at a systems level are not always well understood. For example, if we convert agricultural land to use for energy production we would need to consider whether this would necessitate increased food imports to meet our supply needs and therefore if it would relocate rather than resolve negative environmental impacts.	Please refer to response BLCP-03 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-070		Land Productivity	IGP should also explain how they have integrated the concept of "agrivoltaics" i.e. systems in which farmland is effectively combined with solar power.	It is noted within paragraph 19.9.17 of C6.2.19 ES Chapter 19_Soils and Agriculture [REP-010] that the management of grass below and between the solar panels can include the grazing of livestock where appropriate and as such, the majority of land within the Sites can continue in agricultural production during the operational period.

2.10 Noise

7000 Acres –Noise [REP-115]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-071	Noise & Vibration	Potential Impact throughout operator lifecycle	Noise is relevant to the planning of this development, and again should be seen within the context of the cumulative impact of the other proposed schemes. For the purpose of this report, we are focusing on the potential impact throughout the operator's life cycle. We are convinced, that given that this project is close to human inhabitants, there needs to be further evaluation carried out, to ensure that people in this area will not be impacted with resultant effects on health and wellbeing. It is a recognised fact that noise can have a huge effect on human health and wellbeing. Rurality is normally peaceful and quiet, particularly so at night, especially if distant from major roads, so this must be taken into consideration when evaluating this applicant's scheme. The Government Guidelines advise identification of the overall effect of the noise exposure. This is easy to quantify for the construction and decommissioning phase, but more difficult for the operation phase. One cannot convincingly work out the projected noise from transformers,	Introduction The comments presented by 7000 Acres cover a varied array of topics and points. The topic areas have been summarised in the list below and to each of these topic areas has been responded to in turn. • Assessment of the effect on health and wellbeing on a variety of sensitive receptors some with complex medical needs. • Tranquillity • Source Sound Level Levels & Technical Acoustic Questions Assessment of Noise Impacts on Health & Wellbeing 7,000 Acres have raised a number of points relating to the assessment of health and wellbeing on local residents in the vicinity of the Scheme. 7,000 Acres state that the assessment presented in the Noise and Vibration Environmental Statement (ES) chapter [APP-050] does not differentiate between sensitivity of receptors. The

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			inverters and cooling fans, given that it is only a guess, as in quiet environments we know that sound travels and is subjective. 15.7.63 confirms that transformer and invertor noise manufacturer's data does not contain octave-band data (i.e., frequency sound data), so this needs clarification. This scheme and the others are located on flatland, a ridge to the East with little adequate greenery such as woodland which may absorb the sound. What would be the worst-case sound scenario that would be generated? Is there a difference in sound produced for external as opposed to internal sited transformers, and if so, how will they impact on the overall noise produced? Sound produced for equipment cooling is important (internal sited transformers) and will any generators be used in this process, or will the cooling fans be driven electrically? The more you load the transformer, the more sound is generated. So, this information is required when considering the overall noise generated from this scheme. There is no mention within the document of the low frequency hum that will be generated from the solar panels, and this needs to be factored in. Given that these panels are 4.5metres high, does this need to be considered as the sound will travel from an increased height	assessment undertaken has been carried out in accordance with the requirements of Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, (the EIA Regulations) the Noise Policy Statement for England (NPSE), National Planning Policy Framework (NPPF) and Local Planning policies. The EIA Regulations requires that the EIA must identify, describe and assess, in an appropriate manner the direct and indirect significant effects of the proposed development on population and human health (see paragraph 4 of Schedule 4 of the EIA Regulations Part of the EIA scope). The EIA has assessed the impacts to human health and populations as a result of noise and vibration during the construction and operational phases of the Scheme. Environmental Statement Chapter 15: Noise and Vibration [APP-050] presents the assessment of direct indirect significant effects from noise and vibration on human health. As stated in Environmental Statement Chapter 23: Summary of Significant Effects [APP-058], no significant residual effects resulting from noise are predicted during construction, operation and decommissioning of the Scheme. *Construction Phase*

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			as compared to the 2 or2.5 metre raised panel. These schemes tend to emit mainly low frequency sounds (tonal frequencies). Low frequency can be difficult to predict and similarly hard to identify and resolve. This is worrying as low frequency sound has the ability to travel further than high frequency sounds. This was not referenced in Chapter 15 point 15.7.65. How satisfied that the operational noise impacts will not be affected by different weather conditions, including changing wind direction which enables sound to carry further? The Government guidance on noise states that the sound level effects cannot be seen as a single value, and that it needs to be referenced in a combination of more than one factor as noise exposure, as well as the number of occurrences of the various noises produced in each given period, the duration of the noise and the time of day that noise occurs. As noise is subjective, this makes quantifying the impact even more difficult. None of this is subjective data i.e., how each person interprets their level of background noise (human hearing vs recorded sound measurements). In fact, no reference is made within the document to significant observed	Impacts resulting from construction noise and vibration on human receptors have been assessed as part of Environmental Statement Chapter 15 Noise and Vibration [APP-050]. The construction phase regarded as a short-term direct impact and impact is assessed using the guidance in British Standard 5228-1:2009+A1:2014 - *Code of practice for noise and vibration control on construction and open sites – Part 1: Noise*. Significant impacts are assessed on changes in noise level against the baseline using the ABC method or by setting a fixed absolute limit for all construction work at receptors. The limit is set based on the nature of the receptor setting. The two fixed limits are as follows; 1. 75dB $L_{Aeq,10hr}$ in urban areas near main roads and in heavy industrial areas 2. 70dB $L_{Aeq,10hr}$ in rural, suburban and urban areas away from main road traffic and industrial noise C6.2.15 ES Chapter 15 Noise and Vibration [APP-050] has considered construction noise using the guidance above, and the conclusion is that the noise effects are not considered to be

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			adverse effect level, lowest observed adverse effect level, or the "no" observed effect level during the operator's cycle, as was identified in the applicants document Chapter 15 Table 15.2 which is worrying as this identifies the adverse effects on health and potential quality of life. We do not see a noise exposure hierarchy table within this document. This should be completed around the operator's cycle. They have chosen to use BS 4142:2014 as their guidance. The technical note points 15.4.37 on BS4142 is worrying especially when the background and rating levels are low and that absolute levels might suggest a more acceptable outcome. Is this the right guidance for a rural environment (query whether this is better placed in an urban environment where sound is louder). Also, we should take into account that background noise is subjective. Clearly, there is a need to tabulate their results from Cottam1/2/3a/3b into a hierarchy table which would give a better indication as to whether or not quality of life will be affected. Statements such as minor or negligible are meaningless because noise is subjective and perceived differently by different people. The greatest adverse effect is at night, because during the day there is always increased background	significant, when the implementation of mitigation is accounted for. Measures to ensure that construction noise levels are appropriately managed are set out in Table 3.6 of the Construction Environmental Management Plan (CEMP) (see also paragraph 2.5). Provision of a detailed CEMP post-consent is secured by Requirement 13 of Schedule 2 of C3.1_C Draft Development Consent Order Revision C [EX2/C3.1_C] that will manage and minimise the environmental impact of the works, not just for noise and vibration, but for all impacts during the construction phase. Based on the assessment carried out there are expected to be no significant adverse effects during the construction phase. *Operational Phase* The assessment process and methodology identifies, describes and assesses the impact and makes a determination of significance. The determination of adverse significant impact corresponds to a Significant Observed Adverse Effect Level (SOAEL) in the NPSE terms, whilst impacts that are not considered significant are either at the Lowest Observed Adverse Effect Level (LOAEL) or No Observed Adverse Effect

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			noise which will dampen the extraneous sound. This makes humans more sensitive to sounds that can potentiate sleep disorders, with adverse effects on mental and physical health. How this noise relates to existing noise, whether continuous, the frequency and the pattern occurrence is particularly important and is not fully referenced. They have not used Cadna as a prediction, a statement of requirement around tonality, impulsivity and intermittency. Again, Cadna would not quantify the actual impact this will have when operational on those who live near the scheme. By mitigating against this, someone else will be affected. Consideration should be taken when electricity demand varies and the system works to accommodate this. Powering up the system could potentiate more noise through noticeable impulsive/intermittent characteristics from plant noise emissions. Please reassure? We would argue that rural landscape should be protected for its tranquillity and much of this is characterised by birdsong, the very reason most of us have chosen to live in such a peaceful environment and to be at one with nature. Have tranquil areas been identified, if not why not?	Level (NAOEL) or No Observed Effect Level (NOEL) in NPSE terms. The methodology for determining the SOAEL, LOAEL and NOEL thresholds is based on the guidance in British Standard 4142:2014+A1:2019 - Methods for rating and assessing industrial and commercial sound. This method presents the following assessment categories and the Applicant has included its application of NPSE SOAEL, LOAEL and NOAEL/NOEL levels to this: 1. SOAEL - a difference in the Rating Level ($L_{Ar,T}$ dB) and background sound level ($L_{A90,T}$) of +10dB has the potential to have a significant adverse impact, depending on context. 2. LOAEL - a difference in the Rating Level ($L_{Ar,T}$ dB) and background sound level ($L_{A90,T}$) of +5dB has the potential to have an adverse impact, depending on context. 3. NOAEL or NOEL - The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			How does this noise affect biodiversity, especially repeated or chronic noise? This is incredibly relevant when it comes to overall assessing schemes like this, and the cost to biodiversity. What impact will inverters have on horses? In the overall context, this application should demonstrate that they have taken into consideration the impact it would have on the vulnerable and elderly, and how the noise might affect physical and mental health conditions in the general population. This area has a higher proportion of elderly, some of these are more vulnerable than others (e. g. those living in nursing, residential homes or have care at home, as well as those who are already vulnerable because of loneliness and isolation). In the study area, there are potential people with learning disabilities. We note that there is no reference to this group of people who might be affected by noise. Acoustic louvres will be placed at certain sites. Are these noise impact protections in place for the entire lifetime of the scheme, and if deemed as needed then it was considered that noise from the site is such that it will impact on quality of life.	exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context. Additional context in this case is added in such that the background sound levels are very low, and the impact is likely to be more acute at night when people are asleep. To add additional context to the assessment, a noise intrusion assessment was carried out and applied the internal sound level criteria in World Health Organisation (1999) *Guidelines for Community Noise* and British Standard 8233 – *Guidance on sound insulation and noise reduction for buildings* This guidance document sets out internal levels to be achieved in living room and bedroom spaces in the daytime and night-time period. These levels are as follows; 1. Daytime (07:00-23:00) in Living Rooms and bedrooms 35-40dB $L_{Aeq,16hr}$ 2. Night-time (23:00-07:00) in bedrooms 30-35dB $L_{Aeq,8hr}$ and 45dB L_{AFmax} Based on the above the following SOAEL, LOAEL and NOAEL/NOEL bands have been applied: 1. SOAEL a. Living Rooms >40dB $L_{Aeq,16hr}$

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			From a medical point of view, some people suffer from a condition called hyperacusis. These people have acute hearing, the sound is heard in a loud way, sometimes uncomfortable or even painful, which becomes intrusive to their lives. In some people, this creates anxiety and depression, and in severe cases these people become withdrawn from daily activities, because of the sound. It is estimated that this affects about 2% of the adult population. Given the cumulative effect of all the schemes covering a population of approximately 30000 people, that would equate to 600 possible patients with this condition. Obviously, most people can deal with this, however we do not know how many within this study area are affected, and to what degree. There is also a concern around the causes of tinnitus and whether a prolonged exposure to this type of continuous noise, e.g., the low hum or higher frequency noises could potentiate this condition. We do know that stress, anxiety and depression can cause tinnitus. Does the scheme take into account "background creep" where operational noise emissions from nearby developments are designed to achieve operational noise limits that do not contribute to	b. Bedrooms >35dB $L_{Aeq,8hr}$ and >45dB L_{AFmax} 2. LOAEL a. Living Rooms 35-40dB $L_{Aeq,16hr}$ and b. Bedrooms 30-35dB $L_{Aeq,8hr}$ and >45dB L_{AFmax} 3. NOAEL/NOEL a. Living Room <35dB $L_{Aeq,16hr}$ b. Bedrooms <30dB $L_{Aeq,8hr}$ and <45dB L_{AFmax} Utilising the above criteria to determine significance of effect, computer modelling has been used to predict sound levels, using worst case assumptions (these are dealt with in the section below) to enable the assessment to be carried out. The policies, guidance and methodologies involved do not allow for differentiation for different demographics and for people with varying medical needs. The assessment has considered the policy advice and judged the scheme in accordance with those parameters. It is not feasible to assess for differences in

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			additional noise in the area? How do we know these thresholds are not breached where the noise will exceed and effect human health and wellbeing? We argue the very point because the entire 4 now 5 schemes should have been seen as one. Hence a Health Impact Assessment, a good Equality Impact Assessment where for example, the blind are identified in the Local Impact Area could be affected as they have acute hearing to compensate. Finally, in setting out the limits, subjective baseline thresholds should not be exceeded where quality of life could be affected, that is no effect of change in behaviour, attitude or other physiological response should be observed. Otherwise there will be consequences on human health and well-being, something that has been expressed in the open forum where mental health impact was mentioned frequently.	receptors sensitivity and the policy of the day does not require that this be the case. The assessment presented offers fair, well thought out and objective assessment of the impacts judged against the relevant planning polices and guidance documents. The assessment has concluded that there are no significant adverse impact from noise during the operational phase of the Scheme. Table 3.6 of the Outline Operational Environmental Management Plan, as secured through Requirement 14 IN Schedule2 to the C3.1_C Draft Development Consent Order Revision C [EX2/C3.1_C] secures measures that will control noise throughout the operational lifetime of the Scheme. Furthermore, provision of an operational noise assessment is secured by Requirement 16 of Schedule 2 of C3.1_C Draft Development Consent Order Revision C [EX2/C3.1_C] which requires that "*No part of Work Nos. 1, 2, 3, or 4 may commence until an operational noise assessment containing details of how the design of that numbered work has incorporated the operational mitigation measures set out in Section 15.6 of Chapter 15 of the environmental statement*

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				for that part has been submitted to and approved by the relevant planning authority". Tranquillity For the Scheme an appraisal of land has been undertaken to assess its potential for recreational and amenity value and viewed this against tranquillity. The land itself has a limited public footpaths and is generally private land used for agricultural grazing or arable crops. The main footpath running from the West of Ingham joins onto Ingham Road at Stowe Pastures. This route is approximately 5km in length, mainly along farm access roads and single traffic roads which will be subject to noise from traffic accessing the farms along the route, with the amenity value of this walk being limited. It is considered that the tranquillity of open access land including footpaths and bridleways that are located nearby will not be affected by noise from the site. Noise from the plant is likely to be inaudible during daytime hours when people are using these amenities. Technical Acoustic Clarifications A number of technical points have been raised relating to source sound levels and acoustic

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				modelling have been raised. I have They are dealt with on a point-by-point basis below; 1. The effect of woodland and vegetation is raised and the point that there is little greenery and woodland to absorb the sound. Vegetation and woodland do not absorb or attenuate sound very efficiently. The effect of woodland and vegetation would be negligible and is not a consideration when prediction of sound levels is carried out. 2. The worst-case scenario, which forms the basis on which the noise and vibration assessment has been undertaken, assumes that all transformers, inverters, and cooling plant is 100% operational during both daytime and night-time periods. It is expected that this would happen very rarely during the day and never at night. In accordance with the EIA Regulations, the Applicant considers that the effects presented Chapter 15 [APP-050] present a worst case scenario of potential noise effects. As stated in Environmental Statement Chapter 23: Summary of Significant Effects [APP-

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				058], no significant residual effects resulting from noise are predicted during construction, operation and decommissioning of the Scheme. . 3. The noise level is anticipated to vary throughout the day when different loads from demand are placed from the National Grid and due to the varying intensity of sunlight.. These changes in demand happen gradually and any increase or decrease in noise will be gradual. However, the assessment has assumed an absolute worst-case of all plant operating at 100% capacity. 4. The candidate plant has been analysed and no low frequency tones or hums were identified in the spectral dataset. The noise arising usually occurs from the cooling fans and this sound is normally very broadband in nature. 5. The solar panels will emit no sound. The only sound to be emitted will be associated with the inverters, transformers, and cooling plant on the battery energy storage units.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				6. Plant items situated internally will benefit from attenuation from the building itself. A normal brick-built building will reduce sound by 40-45dB overall. When plant is placed internally the sound level can increase due to a reverberant field being created, however this increase is off set by the additional attenuation offered by the building. The source sound levels used in the modelling are based on candidate transformers, inverters, and cooling HVAC equipment for battery energy storage. The source sound levels are based on manufacturers tested sound levels measurements and are considered robust. As stated above, provision of an operational noise assessment is secured by Requirement 16 of Schedule 2 of C3.1_C Draft Development Consent Order Revision C [EX2/C3.1_C] which requires that "*No part of Work Nos. 1, 2, 3, or 4 may commence until an operational noise assessment containing details of how the design of that numbered work has incorporated the operational mitigation measures set out in Section 15.6 of Chapter 15 of the environmental statement for that part has been submitted to and approved by the relevant planning authority*".

2.11 Risk Management

7000 Acres –Risk Management [REP-116]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-072		Risk Management	Can Island Green Power (IGP) confirm if they have carried out Quantitative and Qualitative Risk Analysis for the Cottam Solar Project (CSP)? If they have, can they please share the procedure that they have applied and the resultant Risk Register that they have created, including proposed mitigations and expected results.	The Applicant notes this comment. The DCO Application documentation contains a number of assessments focusing on potential risks relating to the Scheme, including C6.3.10.1 Flood Risk Assessment and Drainage Strategy Report [APP-090] and the Geo-Environmental Risk Assessments [APP-098 to APP-108]. The risk from aspects such as Climate Change, or the impacts of construction traffic on local roads including the risk of accidents are contained within the relevant Chapters of the Environmental Statement. C6.5 Environmental Statement Non-Technical Summary [APP-336] provides details of where the impacts of the Scheme, including risks to it or created by it, have been found to be significant. The Environmental Statement also considers both embedded and additional mitigation measures. Mitigation measures area are managed during the construction, operation and decommissioning of the Scheme through the various management plans which are secured in Schedule 2 to C3.1 Draft Development Consent Order [REP-006].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				These management plans require further risk assessments to be undertaken prior to construction. For example, see the C7.9 Outline Battery Storage Safety Management Plan (submitted at Deadline 2) and the C7.1_A Outline Construction Environmental Management Plan (submitted at Deadline 2). Detailed risk analysis documentation is likely to contain commercially sensitive information which is not relevant to the decision-making criteria set out in National Policy Statements EN-1 and EN-5 or revised Draft National Policy Statements EN-1, EN-3 and EN-5. The Applicant therefore does not intend to submit any Risk Register into Examination, and would refer the IP to the Environmental Statement for detailed assessment of the effects associated with the Scheme..
7A-073		Risk Management	It is necessary to be aware of the objectives of both internal and external stakeholders and to understand their concerns and perceptions of risk. Stakeholder analysis is a key input into the identification of risk. In terms of external stakeholder risk, was a demographic survey carried out, as you need to understand the population to assess their risks?	The Applicant has undertaken extensive consultation with stakeholders in the local area, in order to fully understand the concerns and perceptions of people living in the area. The Applicant identified a list of seldom heard groups in order to ensure that all areas of the community were made aware of the Scheme and had an opportunity to make comments, whether on risk or otherwise. As confirmed in Table 7.3 of C5.1

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				Consultation Report [APP-021], the Applicant undertook dialogue and communication with the identified seldom heard groups and welcomed other groups to provide feedback through the free-to-use communication channels as publicised. The seldom heard groups listed in the SoCC were treated as Section 42 consultees, and therefore received a covering letter, accompanied by a copy of the Section 48 notice and site location plan, on or before the start of the 42-day consultation period. The free-to-use Scheme communications channels included email, Freephone, and Freepost. The Applicant is confident that stakeholders in the community have had been adequately consulted and been able to share any concerns and perceptions about the Scheme with the Applicant. C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053] assesses impacts on socio-demographic and health receptors both for Cottam Solar Project in isolation (Section 18.7), and cumulatively (Section

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				18.10). The full list of effects from the Scheme set out in Table 18.29 [APP-053] demonstrates no significant adverse effects to socio-demographic and human health indicators. The Applicant has also undertaken an Equalities Impact Assessment [APP-351]. The Applicant does not consider that there are any grounds or justification to undertake a demographic survey. The EIA has been undertaken based on publicly available ONS data and the consultation carried out by the Applicant.

2.12 The Role of Solar in Energy Provision and Decarbonisation

7000 Acres – The role of Solar in Energy Provision and Decarbonisation [REP-117]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-074			We recognise the need to decarbonise and that solar has a role to play, however, the energy benefits it delivers are limited, owing to: • The low load-factor of solar in the UK, between 9-11%, because the UK is one of the lowest areas of solar gain, globally. • The mismatch between when solar produces the bulk of its power (summer days) and when it is needed. • Periods with excess solar energy, leading to significant curtailment (wastage) from having insufficient capability to store solar energy from the summer for use in the winter. • The resultant need for the full capacity of solar to be covered by other forms of generation to meet peak winter demand. In terms of those benefits, the developer has persisted in providing over simplistic and misleading information as part of its application, regarding the role solar power can play in the future of electricity supply, for instance by stating that the UK has high areas of solar gain,	Please refer to response 1.3.5 in ExA questions [**EX2/C8.1.15]**

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			providing the impression that the Cottam scheme can power 180,000 homes, and overstating the role solar can play in security of supply. It is crucial that the limitations to benefits are fully understood, particularly when weighing up the harms arising from ground mounted solar development at such a scale. This harm stems from the fact that solar has an extremely low power density, which means that a solar scheme of the capacity proposed by the Cottam Solar Project uses a colossal amount of space. Using so much land has a tremendous, concentrated impact on the immediate area and its people, but consuming such huge areas of land also puts a wider pressure on land use which may serve to impede decarbonisation by competing for land needed for direct decarbonisation. The UK Climate Change Committee asserts we will need to lose some of this land to plant trees (6CB calls for between 30-70kha of tree planting per year) and develop peatland to sequester carbon. Land will also be needed for energy crops, there are fears that climate change will change the yields of UK farmland and rising sea levels have the potential	

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			to further impact farmland. All of which is before any further expansion of urban development is considered. Quite simply, over committing agricultural land to such inefficient land use as ground mounted solar could very quickly become a cause for regret. With regard to energy policy, the landscape with regard to solar is evolving. While solar is not part of the UK Government's Ten Point Plan for Decarbonisation, the ambition for solar has grown considerably between 2022 and 2023, now seeking to achieving 70GW of installed capacity by 2035. Similarly, the National Policy Statements for energy are in transition. The existing NPS suite makes little reference to solar other than pointing out the difficulty associated with intermittent generation. Even the revised draft NPS suite from 2023 does not foresee large-scale ground mounted solar of the size proposed for Cottam Solar Project. The NPS EN-1 advocates "good design", including the importance of the functionality of the development. This WR will describe the constraints around the functional contribution solar can make to energy and decarbonisation,	

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			which are limited to the point where the benefits do not outweigh the harms arising from ground mounted solar installation at such a large scale. What is strongly consistent, however throughout all Government energy policy and strategy announcements, as well as the existing and draft NPS suite, is the important principle of efficient land use, something that is increasingly recognised as being vital as UK land faces tremendous pressures from all quarters. The "Skidmore Review" also echoes this with a call for a "Mission for Rooftop Solar", recognising the increasing importance of managing land use as a part of decarbonisation, and the need for a clear plan on how we manage competing demands on land. Therefore, there is no explicit policy case for such large-scale ground mounted solar development in the UK. Quite apart from this, there is growing evidence that the UK can meet its 70GW solar capacity ambition from sufficient available rooftop solar capacity on suitable commercial and domestic buildings, with none of the same adverse consequences of ground mounted solar, and fewer implications on National Grid infrastructure requirements.	

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			Developers have claimed that the installation of large-scale ground mounted solar is the only way to install solar capacity at the rate the climate emergency demands, however more solar could be installed on new-build house rooftops, more quickly than the development of a project at the physical scale of Cottam, with all the associated impacts and environmental considerations that are required. All of this renders large-scale ground mounted solar development unnecessary. This means that should the CSP not be approved, the UK can still easily meet its ambition to install 70GW of solar capacity.	

2.13 Socio-Economics and Land Use

7000 Acres – Socio-Economics and Land Use [REP-118]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-075	Socio-Economics and Land Use	Environmental Statement - Methodology	Within the Environmental Statement (ES), the Applicant has, through careful selection of the Study Area and ranges of impact, sought to create an impression of limited impacts of the scheme on the area. • The Study Area used by the Applicant to reference baseline conditions has been chosen very widely, across Bassetlaw and West Lindsey, thereby avoiding having to highlight the specific socio-economic difficulties of Gainsborough, the nearest town to much of the Cottam Solar Project (CSP) • The same breadth of area has been used by the Applicant as reference area for considering employment and economic activity, which has an averaging effect on the assessment, and therefore also fails to highlight the specific socio-economic difficulties of Gainsborough.	The Applicant disagrees with this comment. As set out in ES Chapter 18 Socio Economics Tourism and Recreation [APP-035], at paragraph 18.4.1, the Local Impact Area (LIA) was selected on the basis of principles of best practice and experience, defining the LIA by the area likely to be impacted by socio-economic, tourism and recreation impacts. The combined areas of Bassetlaw District and West Lindsey District were chosen as the LIA, as set out in paragraph 18.4.1, due to the geographic expanse and scale of the Scheme. Finer-grain impacts have been assessed where appropriate, such as for recreational facilities and key tourism attractions. The selection of a Local Impact Area defines by administrative boundaries has the additional benefit of benefitting from a wider range of comparable up-to-date baseline information. The Applicant also notes the inclusion of a joint district area assessment in the form of the Local Impact Area was welcomed by Bassetlaw District Council (see Table 18.1).

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			To summarise the applicant has therefore failed to consider the immediate impacts on communities closest to the proposed scheme.	The Applicant does not accept that it has failed to consider the impact of the Scheme on the communities closest to it.
7A-076	Socio-Economics and Land Use	Environmental Statement - Deprivation	To carry out a of socio-economic review of the area around the CSP and not acknowledge or address the deprivation issues of the main population centre is either misleading, partial, or superficial, and should further serve to render the assessment inadequate. • The ES is misleading in its description of the region, in terms of economic activity, and education, concluding these to be consistent with regional and national rates. Considering the area with a greater level of resolution shows the significant scale of deprivation issues facing the community of Gainsborough. • The ES tries to equate the improved wealth of a few landowners through uplifted ground rent to a wider GVA benefit per worker across the LIA, where no such benefit will be felt.	The Applicant disagrees with this comment. The Applicant recognises the LIA (Bassetlaw and West Lindsey Districts) as being more likely to be deprived of employment, education and skills, and suitable incomes (see para. 18.5.30 in C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053]). The Scheme, through the measures set out in Section 5 of C7.10 Skills Supply Chain and Employment Plan [APP-349], seeks to improve local access to employment, and improve local education and skills attainment across the lifetime of the Scheme. These measures are anticipated to bring significant beneficial effects during construction, as assessed in para. 18.8.11-13 in C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053]. The Applicant confirms that a Skills, Supply Chain and Employment Plan is secured by Requirement 20 of Schedule 2 to C3.1_B Draft Development Consent Order Revision B [REP-006; REP-007]. Where applicable and practicable, fine-grain data at the individual District level, or District Ward level, has been used to determine the sensitivity

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				of receptors including indices of deprivation and access to primary healthcare (see paragraph 18.4.1 and 18.4.2 of C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053]). Although not identified explicitly, Gainsborough is included within the LIA. It is an area with very high rates of deprivation with regard to suitable income, access to employment, and education and skills attainment, which has contributed to the determination that access to employment and access to education are high sensitivity receptors. Whilst it is recognised that ground rent uplift will only directly benefit those landowners, there is anticipated to be an indirect and induced benefit to the wider economy in the Local Impact Area as a result of increased spending, such as, for example, in the retail and services industries, and investment by these landowners into local enterprises. Resultantly, the assessment has considered the change to the economic Gross Value Added as a result of the Scheme is an additional £2,200,000 to the overall economy in the LIA.
7A-077	Socio-Economics and Land Use	Environmental Statement - Employment	The ES understates the likely impact of employment loss arising from the loss of agricultural land and lacks transparency in its	C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053] states that the Scheme is anticipated to lead to a maximum loss of approximately 17 full-time equivalent (FTE)

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			assessment of any jobs lost, or the nature of any jobs created. • Limited interpretation of likely roles would suggest that any job creation locally will be in lower skilled, lower paid roles, and be unlikely to sustain livelihoods in the same way that jobs lost from agriculture. • There is little or no community benefit through employment from the development, in an area that is in desperate need of jobs and prospects. The loss of farming livelihoods therefore can only be seen as an erosion of opportunity. • The Applicant refers to the loss of 17 agricultural jobs is being detailed in ES Chapter 19: Soils and Agriculture (in 18.7.15 of ES Chapter 18). The author was not able to find any analysis of jobs / employment loss in this chapter, therefore the basis upon which the number of agricultural jobs lost has been calculated cannot be scrutinised.	agriculture jobs (see para. 18.7.15), whilst the Scheme is estimated to employ 10 full-time equivalent employees from the local area during operation (Table 18.16 [APP-053]). The net changes to employment, and to economic Gross Value Added (GVA) in the local area (defined as West Lindsey and Bassetlaw districts) are: For construction: +661 FTE jobs (para. 18.7.23 [APP-053]); +£30.9 million per year (para. 18.7.52 [APP-053]); For operation: -2 FTE jobs (para. 18.7.79 [APP-053]); +£2.2million per year (para. 18.7.97 [APP-053]); For decommissioning: +509 FTE jobs (para. 18.7.125 [APP-053]); minor beneficial impact to GVA (para. 18.7.135 [APP-053]). To support this, Sections 5.3 and 5.4 of C7.10 Skills Supply Chain and Employment Plan [APP-349] outline the measures the Scheme is taking with regard to maximising opportunities for sourcing local employment, recruitment and supply chains. These measures are secured by Requirement 20 of Schedule 2 to C3.1_C Draft

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				Development Consent Order Revision C [EN010133/EX2/C3.1_C]. As a result of these measures, C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053] assesses that the Scheme is anticipated to have significant beneficial effects on access to employment (para. 18.8.12) and education (para. 18.8.13) as measured indices of deprivation during construction. During operation, these are anticipated to have a long-term minor and moderate-minor beneficial effect respectively (para. 18.8.18-19). The Applicant clarifies that C6.3.19.1 ES Appendix 19.1 Agricultural Land Quality Soil Resources and Farming Circumstances [APP-145], at Section 7, details agricultural employment rates at each of the farm business who occupy the Order Limits. Farm Business A has no staff or machinery of its own. Farm Business B has 7 full time employees, plus occasional seasonal work. Farm Business C has 4 full time employees. Farm Business D has 5 full time and 2 part time employees. The assessed worst-case loss of 17 FTE agricultural jobs as a result of the Scheme is equivalent to 0.4% of the agricultural employment in the Local Impact Area, as set out in para. 18.7.15 of C6.2.18 ES Chapter

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				18 Socio Economics Tourism and Recreation [APP-053].
7A-078	Socio-Economics and Land Use	Environmental Statement - Land Use	The ES omits any consideration of efficiency of land use, nor does the ES consider the additional demands on agricultural land for planting trees, establishing peatlands and growing energy crops for biofuels, as identified by the UK Climate Change Committee in its 6th Carbon Budget. By omitting such important considerations, the sensitivity impacts of loss of land are understated	Paragraph 7.6.8 of C7.11 Statement of Need [APP-350] states that: "Draft NPS EN-3 includes an anticipated range of 2 to 4 acres for each MW of output generally required for a solar farm along with its associated infrastructure." The Scheme as proposed delivers a large-scale solar generation asset which is consistent with this range, as is described through paragraphs 4.2.1 to 4.2.3 of C6.2.4 ES Chapter 4_Scheme Description [APP-039]. Table 7.1 of C7.11 Statement of Need [APP-350] shows the electricity generated per hectare by different low-carbon technologies. At the UK's average solar load factor (11%), solar generation produces much more energy per hectare than biogas, and generates a similar amount of energy as onshore wind. Solar generation is therefore an efficient use of land.
7A-079	Socio-Economics and Land Use	Environmental Statement – Amenity	The Applicant acknowledges the proportion of people within the LIA who regard themselves as having "bad" or "very bad" health is already above the national average. By adversely affecting local amenity, the scheme would therefore exacerbate	The Applicant is cognisant of the significance of the countryside for physical and mental wellbeing, and so this has been assessed as part of the assessment of human health impacts, primarily in C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			the existing health and wellbeing issues faced by the region. The Consent Order should ensure that the potential for properties and communities to be affected by blight are properly considered and potential remedies are available.	The greatest level of effect on wellbeing is a moderate-minor adverse effect to access, desirability and use of recreational facilities in the countryside, anticipated during construction (see para. 18.7.60 to 18.7.67) and decommissioning (see para. 18.7.143 to 18.7.153). These effects are not anticipated to be significant. The Applicant understands in this instance that blight is in reference to perceived depreciation in value of property. Consideration of the impact of the construction, operation and decommissioning of the Scheme on accommodation stock in C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053] identifies beneficial significant impacts to accommodation stock (housing). There is no strong evidence to show solar farms negatively affect nearby property value, and it is more likely that other factors are more significant to changes in property value. Furthermore, the Applicant is committed to providing a Community Benefit Fund (see paragraph 4.8.1 of C7.5 Planning Statement [EX2/C7.5_B]). This fund will be available for community-based benefits such as (but not limited to) promoting the use of public rights of way and installing information boards to explain biodiversity enhancement measures within the

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				Scheme. The provision of the Community Benefit Fund itself does not form a part of the DCO Application, and therefore will be agreed separately between the Applicant and the fund's beneficiaries.
7A-080	Socio-Economics and Land Use	Environmental Statement – Local Plans	A significant amount of work has been carried out in the region to develop plans for the future of the region. This work has been extremely conscious of climate change and actions to decarbonise the economy, however neither makes any proposals for the development of large-scale ground mounted solar as a contribution to the development of the region. • The industrialisation of an area of Lincolnshire through extensive deployment of large-scale ground mounted solar would serve to undermine the Agrifood ambitions of the Lincolnshire Industrial Strategy as well as the appeal for visitors and the ambition to improve areas of deprivation through the stimulation of the Visitor Economy. • The Central Lincolnshire Plan sets out objectives for Land Use (protecting the resources of the county) as well as for Climate Change and Energy. Where solar	The Applicant considers that the Scheme is consistent with the strategic intentions of national and local planning policy, as set out in C7.11 Statement of Need [APP-350] and C7.5_A Planning Statement [EX2/C7.5_B]. A specific policy accordance review has been undertaken to show that the Scheme is compliant with local planning policy, as set out in Appendix 4: Local Planning Policy Accordance Tables to C7.5_A Planning Statement [EX2/C7.5_B]. This has assessed the Scheme against both the previous Central Lincolnshire Plan (adopted at the time of the DCO Application's submission), and the new Central Lincolnshire Plan adopted in April 2023. The Applicant reiterates here that great weight should be given to recognising the benefit of the Scheme towards achieving the local and national targets for net zero energy production through renewable energy installations.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			does feature, it is primarily in relation to retrofit to buildings or incorporation into building design. • The CLP sets out policies for Renewable Energy as well as the protection of landscapes. The criteria to be met for a renewable scheme to be acceptable are clear, including considerations of scale, impacts on landscape character, visual amenity amongst other issues. What is also clear is that meeting these criteria would be impossible for a scheme at the scale of CSP.	
7A-081	Socio-Economics and Land Use	Environmental Statement	Within the ES, having followed its own carefully crafted methodology, the Applicant concludes that the scheme will have only minor adverse or beneficial effects, and completely fails to appreciate the significant impact development at this scale, primarily by using a Local Impact Area that is extremely broad, when many of the impacts will fall on a concentrated area within West Lindsey. When considering the "in combination" impacts of other NSIP scale solar developments within the same immediate area, conclusions are drawn in a similar way.	The Applicant is confident that the methodology used for the assessment in C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053] is robust, is appropriate for the scale of the project, and is compliant with the agreed scope of assessment set out by the Planning Inspectorate in the Scoping Opinion [APP-064], the local authorities, and other relevant statutory bodies. Table 18.29 [APP-053] provides a full list of the anticipated post-mitigation effects from the Scheme, and the anticipated peak cumulative effects from the developments identified in

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			The ES generally concludes that impacts across the Local Impact Area for population health & wellbeing, disability & long-term health conditions, economic activity and employment are adverse. The assessment fails to consider that these negative impacts will be most severely felt in the concentrated area around the CSP and other NSIP-scale developments. The ES fails to take a sufficiently holistic view in almost every respect, and it would seem to be fundamentally incredulous for development at this scale, or for multiple schemes within the same area, to have minor or negligible consequential impacts. CSP is inconsistent with local plans and ambitions for the future development of the region.	Tables 18.25, 18.26, and 18.27 [APP-053]. These range from major-moderate beneficial to moderate adverse effects. The assessment has recognised that a number of impacts will be more prominently felt in the local area immediately surrounding the Scheme, such as deprivation, access to healthcare, and use of recreational facilities. Accordingly, these impacts have been designated greater sensitivity as demonstrated throughout Section 18.5 [APP-053]. These receptors have been given consistent sensitivity designations across both the assessment of the Scheme in isolation, and in the cumulative assessment.

2.14 Wildlife and Habitat

7000 Acres – Wildlife and Habitat [REP-119]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-082	Ecology & Biodiversity	Ecological Improvements	There is little evidence in support of ecological improvements made by large scale solar developments on temperate agricultural land. Developments of this scale have historically been located in countries such as India, China, Egypt and Australia. With higher solar gains and greater land mass than the UK, often in barren or semi desert landscapes, away from habitation. This land is usually deemed of little value or specific purpose. Ecological impact on these far-flung landscapes would have little in common with the effects of giant solar developments on the UK's important farmland.	Please refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference 7A-16 on this matter.
7A-083	Ecology & Biodiversity	Land Use	The UKs agricultural land is under constant competition for projects that cannot be realised elsewhere. Land must be given over to these such developments. Solar does not require to be land mounted and is commonly a rooftop installation giving the roof an important secondary function.	Paragraph 7.6.3 of C7.11 Statement of Need [APP-350] analyses the potential contribution of "brownfield" solar sites to the national need for solar generation. Brownfield sites, including rooftop and other community energy systems, are likely to grow in the UK and will make a contribution to decarbonisation of the UK energy system. However, C7.11 Statement of Need [APP-350] concludes in Section 7.6, that on their own, brownfield developments are unlikely to be

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				able to meet the national need for solar. Paragraph 8.5.10 and Section 8.5 more generally of C7.11 Statement of Need [APP-350] describe and express agreement with Government's view that decentralised and community energy systems are unlikely to lead to the significant replacement of large-scale infrastructure. The Applicant therefore supports Government's view that large scale solar must be deployed to meet the urgent national need for low-carbon electricity generation
7A-084	Ecology & Biodiversity	Habitat & Biodiversity Loss	With 4 giant solar developments proposed together in one concentrated area of Lincolnshire. Wildlife will inevitably suffer.	Cumulative impacts on ecology are discussed within Section 9.9 of C6.2.9 ES Chapter 9_Ecology and Biodiversity. Please also refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference 7A-03.
7A-085	Ecology & Biodiversity	Habitat & Biodiversity Loss	The considerable construction period of these massive solar developments with the impact caused spanning many years, would be an intolerable disturbance to all wildlife. With thousands of transient workers and the transportation of millions of solar panel etc... Plus heavy machinery operating 12 hrs a day, all year	Please refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference 7A-16 on this matter.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			round, would decimate fragile breeding habitats and destroy soil balance and structure.	
7A-086			Removing hedgerows would be catastrophic. Habitat and ecosystems cannot be created overnight with token planting schemes.	Please refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference LCC-27 on this matter.
7A-087	Ecology & Biodiversity	Habitat & Biodiversity Loss	Imposing and non-wildlife friendly security fencing is now a requirement at new solar power sites. The many miles of steel fencing required would exclude important mammal species from thousands of acres of their normal habitat, channelling deer, hare and rabbits to existing and newly planted hedgerows, which would be destroyed or seriously damaged in a very short period of time. Biodiversity net gain targets would disturbingly never be achieved.	Please refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference ECO-14/RR-197 on this matter.
7A-088	Ecology & Biodiversity	Mitigation	Mitigation measures fall woefully short, expecting farmland birds to move to isolated fields when they have been maintaining healthy strongholds, naturally selecting their breeding sites from choice. The Developers inexperience of large scale solar deployment in the UK and their naivety of the natural world is clearly demonstrated.	The potential effects on breeding birds have been assessed within Section 9.7 of C6.2.9 ES Chapter 9_Ecology and Biodiversity [APP-044]. The applicant acknowledges that there will be an adverse residual effect on skylark and yellow wagtail, significant at a Local scale. Mitigation measures will ensure that all identified impacts are minimised as far as possible, as set

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				out in theC7.19 Outline Ecological Protection and Mitigation Strategy [APP-356] (secured by Requirement 8 of Schedule 2 of C3.1_B Draft Development Consent Order Revision B [EN010133/EX1/C3.1_B]) and C7.3_A Outline Landscape and Ecological Management Plan [EN010133/EX1/C7.3_A] (as secured by Requirement 7).
7A-089	Ecology & Biodiversity	Habitat & Biodiversity Loss	The thousands of acres of manmade structures deployed in the countryside by solar farms has been shown to impact bat numbers significantly and must be considered a real and avoidable threat to rare and protected species.	The potential effects on bats have been assessed within Section 9.7 of C6.2.9 ES Chapter 9_Ecology and Biodiversity. Please also refer to REP-049: The Applicant's Responses to Relevant Representations, issue reference LWT-10 on this matter.
7A-090	Ecology & Biodiversity	Glint & Glare	Glint and Glare from these vast solar schemes are a concern for its effect on birds as well as humans, bird collisions have regularly been reported. With vast swathes of important open countryside lost to solar installations, this could easily have a negative impact on the numbers of protected raptor species in the area.	The Applicant is not aware of any glint and glare issues affecting local wildlife and captive animals. Solar reflections generating from solar panels will be similar to those generated by a body of water (see section 4.1 of C6.3.16.1 ES Appendix 16.1 Solar Photovoltaic Glint and Glare Study [APP-

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				140]). Therefore, effects upon animals are likely to be similar.
7A-091	Ecology & Biodiversity	Habitat & Biodiversity Loss	Loss of vital insects due to panel attraction, is also well documented. With literally a sea of solar panels in one area. The attraction to this false water would bring a huge ecological unbalance to the area.	Please refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference ECO-03/RR057 on this matter.
7A-092	Ecology & Biodiversity	Soil health	Artificial microclimate formations around the arrays and in the locality alter ambient temperatures by several degrees, combined with constant shading of much of the soil below is real concern especially on long term soil health, invertebrate habitat and the increased risk of wildfires.	Please refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference ECO-01/RR-180 and CC-04/RR-393 on this matter.
7A-093	Ecology & Biodiversity	Habitat & Biodiversity Loss	There is no evidence of wildlife benefit from large ground mounted solar schemes in the UK. The only possible improvements would be on the most barren and intensively farmed areas. This proposal is anything but that. With much of the farmland appearing to have been cared for extremely well, demonstrated by its beauty and the abundant flora and fauna.	Please refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference ECO-04 on this matter.
7A-094	Ecology & Biodiversity	Habitat & Biodiversity Loss	Any wildlife remaining would be excluded from human enjoyment by this ugly and unnatural landscape. To lose on such an immense scale	The Applicant respectfully disagrees that wildlife will be excluded from the Scheme. The enhancements for a wide variety of mobile

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			could be catastrophic not just for impacts on wildlife, but for the pride and ownership of the communities involved and their continued quality of life.	species can be reasonably expected to increase abundance and diversity of groups such as farmland birds, small mammals, reptiles, amphibians and invertebrates and so too the overall abundance locally. Please refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference ECO-04 for further background on this matter.
7A-095	Ecology & Biodiversity	Habitat & Biodiversity Loss	The issues highlighted in this report with a worst-case scenario of 10,000 acres of development over 4 projects, means the level of disturbance and impact would be compounded to a level never seen before. With an outcome no one can be sure of.	Please refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference PD-04 which address an identical question.

2.15 Landscape and Visual Impact Assessment

7000 Acres –Landscape and Visual Impact Assessment [REP-120]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-096	Landscape & Visual Impact	Local Impact Reports	4.1 – Under Section 105 of PA 2008, the Local Impact Reports described in subsection (2)(a) take precedence over matters described in (2)(b) and (c).	Subsection 105(2) of PA 2008 does not assign weight to the matters which the Secretary of State must have regard to.
7A-097	Landscape & Visual Impact	Local Plan	4.4 and 4.5 - The Central Lincolnshire Local Plan 2023 – 2043 should be afforded significant weight and Neighbourhood Plans should be considered.	Relevant local planning policies are assessed within C7.5_A Planning Statement Revision A [EX2/C7.5_B], which considers how the Scheme has demonstrated compliance with these local policies
7A-098	Landscape & Visual Impact	Order Limits	5.1 – The dDCO includes provision for the removal of all hedgerows within the Order Limits. The LVIA says that trees and hedgerows will be retained an enhanced. This is contradictory.	The Applicant disagrees that the dDCO and LVIA are contradictory and refers the Party to its C8.1.5 Written Summary of the Applicant's Oral Submissions & Responses at the Issue Specific Hearing 1 and Responses to Action Points [REP-051], specifically agenda item 5s and the response to action point 7. The powers set out in Articles 38 and 39 of the draft DCO [EX2/C3.1_C] are deliberately broad as the detailed design for the Scheme is not known at this stage. Whilst the Applicant has applied for the power to remove any part of the hedgerows within the

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				Order Limits and listed in Schedule 13, this power is controlled and limited by the management plans secured by the Requirements. The Applicant has amended Article 38 to make it clear that the powers must be exercised in accordance with the Landscape and Environmental Management Plan approved pursuant to Requirement 7. In addition, Schedule 13 has been amended to make it clear that it is only "part of" the hedgerow (and not the whole of it) that is to be removed. In response to comments made by the ExA and by Interested Parties at both ISH1 and OFH1, the Applicant has produced Hedgerow Removal Plans [EN010133/EX1/C8.2.3] providing indicative details of the hedgerows that are currently proposed to be removed temporarily to facilitate the construction of the Scheme and those that are currently proposed to be removed during the occupational life of the Scheme. This is appended to the Outline Landscape and Ecological Management Plan [EX2/C7.3_B]. The final Landscape and Ecological Management Plan that is secured through requirement 7 of the DCO will need to set out the final details for hedgerow

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				removal and will be approved by the relevant planning authority.
7A-099	Landscape & Visual Impact	Lack of Clarity	5.3 - Difficulties in navigating and understanding the information contained within the e LVIA and associated appendices is a barrier to full engagement by residents.	The Applicant notes this comment. The LVIA provides sufficient detail to enable the consenting authorities to make full and clear judgements on likely landscape and visual effects of the Scheme. The approach to Chapter 8: Landscape and Visual Amenity (LVIA) [EN010133/EX2/C6.2.8_A] of the Environmental Statement had regard to comments made at the Scoping and PEIR Stages of the Scheme and in workshops between the Applicant and the local authorities, which included Lincolnshire County Council (LCC). At these workshops, the Applicant explained how they would approach the LVIA and LCC responded to this matter as follows: *"The approach to the assessment being a succinct chapter text backed up with detailed technical appendices is acceptable. The volume of the information in the appendices (rather than the chapter) is in part due to the fragmented nature of the Scheme and cable routes over a wide area,*

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				creating additional elements to consider beyond a simple singular red line boundary". This consultation with LCC has been undertaken at a number of workshops as set out in the consultation chapter of the LVIA within Appendix 8.4 [APP-076]. The consultation enabled a consensus to be reached on the approach to the assessment and the methodologies to be adopted and the LCC response to this is as follows: *"A lot of supporting information is provided within associated appendices which provided very detailed information relating to the assessment".* The LVIA includes an assessment of landscape effects at a range of scales, including a finer grain landscape assessment that includes the Sites, Cable Routes and Substations, their immediate area and the wider landscape setting. This finer grained assessment considers individual contributors under the topics of land use, topography, communications and infrastructure, settlement, industry, commerce and leisure, public rights of way and access, Scheduled Monuments, Listed Buildings, Conservation Areas and Registered Parks and Gardens and Ancient

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				Woodlands and natural designations. The assessment and evaluation of the potential impacts and effects of these individual contributors is set out within Appendix 8.2 [REP-020] and Appendix 8.3 [EN010133/EX2/C6.3.8.2_A] of the LVIA. The Applicant has submitted a summary and narrative of effects as set out in C8.2.1 Supplementary Landscape Effects Tables [REP-060] and C8.2.2 Supplementary Visual Effects Tables [EN010133/EX2/C8.1.13_A].
7A-100	Ecology & Biodiversity	Order Limits	6.1 – Objection to the possibility of all trees and hedgerows within the Order Limits and beyond to be removed.	The applicant notes this comment and refers 7,000 Acres to the response to comment 5.1 above.
7A-101	Ecology & Biodiversity	Visualizations	6.2 – Visualisations show retention of trees and hedgerows so do not show a 'worst case'	The Applicant notes this comment. Please see response to comment 5.1 above.
7A-102	Landscape & Visual Impact	Cumulative Impact	6.4 – The LVIA findings that the cumulative impact on the landscape will be negligible or beneficial is contradicted by paragraph 18.7.112 of the Socio-economics chapter, which states that there will	The conclusion reached in para. 18.7.112 of C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053] is based on the overall impact on desirability to landscape

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			be an adverse impact on some tourism and recreation receptors that rely on landscape context for their value.	and heritage tourism receptors in the Local Impact Area during the operational lifetime of the Scheme. The earlier paragraphs 18.7.100-104 [APP-053] have identified targeted peak worst-case impacts, but the overall conclusion is formed by professional judgement based on the overall outcomes of C6.2.8 ES Chapter 8: Landscape and Visual [EN010133/EX2/C6.2.8_A], and C6.2.13 ES Chapter 13: Cultural Heritage [APP-048]. The importance of the landscape context to the recreational use of the land, as is acknowledged in paragraph 18.5.69 of chapter 18, has helped to define the sensitivity of recreation receptors such as public rights of way, waterways, and recreational facilities.
7A-103	Landscape & Visual Impact	Study Area	7.1 – Disagrees that a 2km Study Area is appropriate for effects on local landscape character of infrastructure and equipment	The Applicant notes this comment. The approach to Chapter 8: Landscape and Visual Amenity (LVIA) [EN010133/EX2/C6.2.6_A] of the Environmental Statement has been undertaken having regard to comments made at the Scoping and PEIR Stages of the Scheme and in workshops between the Applicant and the local authorities, which included Lincolnshire County Council (LCC).

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				At these workshops, the Applicant explained how they would approach the LVIA. This consultation with LCC has been undertaken at a number of workshops as set out in the consultation chapter of the LVIA within Appendix 8.4 [APP-076]. The consultation enabled a consensus to be reached on the approach to the assessment and the methodologies to be adopted and the LCC. The assessment has been undertaken in accordance with C6.3.8.1 ES Appendix 8.1 LVIA Methodology [APP-068] which was agreed with LCC by email on 4th October 2022.
7A-104	Landscape & Visual Impact	Study Area	7.2 - 5km Study Area is flawed. It is justified by the existing 'strong framework of hedgerows and tree cover'. The worst-case removal of all trees and hedgerows will mean visibility will extend beyond this to sensitive receptors, including Landscape Character Areas and Lincoln Cathedral and Castle.	The Applicant notes this comment. Please see the response to comment 5.1 above. C6.2.8 ES Chapter 8 Landscape and Visual Impact Assessment [EN010133/EX2/C6.2.8_A] (the 'LVIA') takes account of the intervisibility between the Scheme and Lincoln Castle and Lincoln Cathedral. Additional views suggested by Lincolnshire County Council and Nottinghamshire County Council have been taken into account within the LVIA at Section 8.2 and this includes viewpoints that capture the Lincoln 'Cliff' as well as distant

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				intervisibility with Lincoln Castle and Lincoln Cathedral. These viewpoints include Lincolnshire County Council viewpoints LCC-C-A, LCC-C-B and LCC-C-C that are located to the east and southeast of the settlements of Stow and Sturton by Stow. With viewpoint LCC-C-B, this is scoped out of the assessment and this has been agreed with LCC. With viewpoints LCC-C-A and LCC-C-C, there will be No Significant effects. With views towards Lincoln Castle and Lincoln Cathedral, there are potential long distance views, except that these assets are located at a distance of approximately 10.97km (Cathedral) and 10.83km (Castle) from the Cottam Site/s and even though their elevated position at approximately 65m AOD for Lincoln Cathedral and 67m AOD for Lincoln Castle may reveal some intervisibility, the distance between the Scheme and these assets will likely to give rise a barely perceptible magnitude of change. No additional viewpoints (above the NCC and LCC recommendations), have therefore been assessed as being necessary. The LVIA takes this intervisibility into consideration within the baseline to form the judgements on viewpoints (paras. 8.4.11, 8.5.96, 8.5.99, 8.5.104, 8.5.133,

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				8.10.22, 8.10.24, 8.11.11). For example, the LVIA sets out with Viewpoint VP01 Tillbridge Lane (Table 8.11) that this is a "*Specific location, well-used vantage point. Gateway from the south and one of the first opportunities to experience views over the agricultural landscape to NW of Lincoln. To the wider SE of Cottam 1.*" Detailed overlap and consultation with the Heritage topic areas has also been undertaken when developing the landscape and visual baseline and in identifying landscape and visual effects for the LVIA in the context of heritage receptors, and this is set out within C6.3.8.4.3 ES Appendix 8.4 Consultation responses [APP-076]. The Applicant has submitted additional cross sections at DL2 [C8.2.5 Cross Sections of Lincoln Castle and C8.2.6 Cross Sections of Lincoln Cathedral] which demonstrate the intervisibility between Lincoln Castle and Cathedral and the Site/s. The cross sections illustrate illustrates a bare earth scenario with landform shown and therefore without the benefit of the effects of existing trees and vegetation, built form and infrastructure (telegraph poles etc). These

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				sections show that due to the relatively low nature of the solar arrays and associated infrastructure, visibility across a distance of 10.97km (Cathedral) and 10.83km (Castle) will have a very limited influence and shallow field of view on landscape or visual receptors. Once the effects of existing vegetation, built form and infrastructure are considered there will be either no effects or effects will be barely perceptible at these distances.
7A-105	Landscape & Visual Impact	Visibility	7.3 – 16km extend of the Scheme will mean that the reach of visibility will be extensive,	The Applicant notes this comment. Please see the response to comment 7.2 above.
7A-106	Landscape & Visual Impact	Methodology	7.4 - ZTV methodology is based on existing woodland and hedgerows. The modelling is potentially baseless if all trees and hedgerows are removed.	The Applicant notes this comment. The ZTV Methodology has been undertaken in accordance with C6.3.8.1 ES Appendix 8.1 LVIA Methodology [APP-068] that was agreed with LCC at the series of workshops as set out in C6.3.8.4 ES Appendix 8.4 Consultation [APP-076] and also by email on 4th October 2022.
7A-107	Landscape & Visual Impact	Lack of Clarity	8.2 - Due to the multiple sites which make up the Cottam Solar Project, the large amount of information prevents an understanding of the overall landscape character of the study area. Again, barriers to information occur as the process of cross-referring the many tables and pages means a clear picture isn't presented.	The Applicant notes this comment. Please see the response to 5.3 above.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-108	Landscape & Visual Impact	Baseline findings	8.3 – Requests explanation of the finding that the landscape baseline identified no character areas or contributors that were of high sensitivity or susceptibility to effects	The Applicant notes this comment. The assessment of the landscape sensitivity and susceptibility of effects has been undertaken in accordance with C6.3.8.1 ES Appendix 8.1 LVIA Methodology [APP-068] that was agreed with LCC at the series of workshops as set out in C6.3.8.4 ES Appendix 8.4 Consultation [APP-076] and also by email on 4th October 2022.
7A-109	Landscape & Visual Impact	High Sensitivity receptors	8.4 - Lincoln Cliff and Gainsborough Areas of Great Landscape Value, which are high sensitivity receptors, will be negatively affected by the Scheme.	The Applicant notes this comment. C6.2.8 ES Chapter 8 Landscape and Visual Impact Assessment [EN010133/EX2/C6.2.8_A] (the 'LVIA') takes account of the Areas of Great Landscape Value (AGLV) and individual landscape receptor sheets for Nationally and Locally Designated Landscapes can be found at C6.3.8.2 ES Appendix 8.2 Assessment of Potential Landscape Effects [REP-020].
7A-110	Landscape & Visual Impact	Local Impact Report	8.5 – Agrees with the finding of the Lincolnshire County Council Local Impact Report (4.10) that there is no 'appropriate justification for assessing significant beneficial landscape effects on both landscape character areas, or individual	The Applicant respectfully disagrees. The justification for the finding that there are beneficial landscape effects is set out in C6.3.8.2

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			contributors to landscape character by the construction and operation of a large solar development'.	ES Appendix 8.2 Assessment of Potential Landscape Effects [REP-020].
7A-111	Landscape & Visual Impact	Tree Planting	8.7 – The Scheme will impact on the Lincolnshire County Council tree planting programme, especially as the Scheme might remove all trees and hedgerows.	The Applicant notes this comment and refers 7,000 Acres to the response to comment 5.1 above.
7A-112	Landscape & Visual Impact	Lack of Credibility	8.9 – The assessment that there will be beneficial landscape effects in Year 1 is not credible due to the difficulty of establishing landscaping in the area.	The Applicant notes this comment. Year 1 is an acceptable year of assessment for setting the standard for mitigation measures and for predicting the findings of the assessment within the LVIA process. This is set out in recognised guidance' Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3) by the Landscape Institute and Institute of Environmental Management & Assessment. This guidance states at paragraph 4.31 that: *"Where planting is intended to provide a visual screen for the development it may be appropriate to assess the effects for different seasons and periods of time (for example, at year 0, representing the start of the operational stage, year 5 and year 15) in order to demonstrate the contribution to reducing the adverse effects of the scheme at different stages.*

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				In such projections the assumptions made about growth rates of planting should be clearly stated."
7A-113	Landscape & Visual Impact	Size and Scale of Development	8.10 – The mass and scale of the proposed development would in our opinion have a significant adverse effect on landscape character.	The Applicant notes this comment. The Landscape and Visual Impact Assessment (LVIA) contained within C6.2.8 ES Chapter 8 Landscape and Visual Impact Assessment [EN010133/EX2/C6.2.8_A] takes into account the effects on the landscape character in detail, from the national scale, through regional, county district and local scales to the landscape character areas within the 5km Study Area. For further information, please refer to C6.3.8.2 ES Appendix 8.2 Assessment of Potential Landscape Effects includes 8.2.1-8.2.12 [REP-020]. These associated appendices provide a detailed assessment of landscape effects on each landscape receptor including the changes to its agricultural use and character. Mitigation, including offsets and planting, has been proposed to address and minimise adverse effects on the character of the landscape. This is in line with the agreed methodology and the hierarchy of approach advocated by the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition and was agreed with LCC

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				at the series of workshops, as set out in C6.3.8.4 ES Appendix 8.4 Consultation [APP-076]. The LVIA identifies the Scheme as causing a significant change to high and medium sensitivity receptors and several close-range views have been assessed as beneficial for example, within the Cottam 3 Site, the PRoW footpath (Pilh/20/1) connects at the junction with Bonsdale Lane. This is set out in C6.3.8.3 ES Appendix 8.3 Assessment of Potential Visual Effects [EN010133/EX2/C6.3.8.2_A] on sheet [EN010133/APP/C6.3.8.2.3.25] Viewpoint VP58 – Junction of Pilh/20/1 and Bonsdale Lane. In this instance [page 3] at Operation (Year 15) the view will have become more enclosed since the proposed new hedgerows will have established to create a strong field structure and screen views of the panels. The visual benefits are identified, alongside the effects within the detailed receptor sheets. The mitigation associated with the landscape receptors for the Scheme is set out in C7.3_B Outline Landscape and Ecological Management Plan Revision B [EX2/C7.3_B], C6.4.8.16.1 to C6.4.8.16.10 Landscape and Ecology Mitigation and Enhancement Plans

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				(Figures 8.16.1 to 8.16.10) [APP-305 to APP-315] and secured by Requirement 7 of Schedule 2 of C3.1_CB Draft Development Consent Order Revision C [EN010133/EX2/C3.1_C]. The LVIA considers the delivery of landscape mitigation to landscape character by addressing biodiversity net gain through the enhancement of existing habitats and green infrastructure. The Outline LEMP also prescribes how the landscape and ecology mitigation measures identified and proposed will be implemented and managed to ensure the effectiveness and certainty in achieving the objectives.
7A-114	Landscape & Visual Impact	Lack of Credibility	8.11 – The many anomalies and dubious findings of the LVIA mean that it is not fit for purpose.	We assume the comment on inconsistencies in the LVIA is referring to Paragraphs 4.9 and 5.9 of the Appendix B of the Lincolnshire Couty Council Local Impact Report. The Applicant has submitted an update at Deadline 2 as set out in C8.2.2_A Supplementary Visual Effects Tables [EN010133/EX2/C8.2.2_A] and Appendix 8.3 Assessment of Potential Visual Effects [EN010133/EX2/C6.2.8.2_A] (Updated Sheets).

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-115	Landscape & Visual Impact	Methodology	8.12 – The landscape mitigation proposed for the Scheme relies on vegetation planning. An overriding landscape characteristic of the area is the wide and open landform. The use of landscape planting to obscure views of solar equipment will mean that the landscape and views become enclosed and narrow and planting becomes a defining detrimental characteristic. The proposed development cannot be readily assimilated into the landscape. The Scheme's landscape approach is not understood, especially if all trees and hedgerows are to be removed.	The Applicant notes this comment. The LVIA assessment provides a comprehensive understanding of the potential impacts of the Scheme, including any changes to landscape character. This takes into account the effects on the landscape character in detail, from the national scale, through regional, county district and local scales to the landscape character areas within the 5km Study Area. The proposed planting has been carefully designed to be in keeping with the landscape character and to avoid key views across the landscape. Please refer to the individual receptor sheets at C6.3.8.2 ES Appendix 8.2 Assessment of Potential Landscape Effects [REP-020]. With regard to the potential effects on existing vegetation, including trees and hedgerows, please refer to the response to comment 5.1 above.
7A-116	Landscape & Visual Impact	Views	8.17 – Views from the Lincoln Cliff Edge down the Trent Plain and into Nottinghamshire are open and extensive.	The Applicant notes this comment. With regard to potential effects on views from the Lincoln Cliff Edge across the Till Vale, please refer to comment 7.2 above.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-117	Landscape & Visual Impact	Buffer Zones	8.18 – Mitigation for residential properties in the form of buffer zones were previously agreed by the Applicant but have now been withdrawn.	The Applicant refutes this comment. Mitigation in the form of buffer zones has not been agreed by the Applicant for residential properties. C6.3.8.2 ES Appendix 8.2 Assessment of Potential Landscape Effects [REP-020] (the 'LVIA') considers the impacts and effects on residential receptors as part of the assessment process. Mitigation, including offsets and planting, has been proposed to address and minimise adverse effects on the residential receptors. This is in line with the agreed methodology and the hierarchy of approach advocated by the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition and matters agreed with LCC at the series of workshops set out in C6.3.8.4 ES Appendix 8.4 Consultation [APP-076]. For example, the assessment has taken account of the 50m off set from residential properties to ensure the best possible fit with their setting. The photography and photomontage information at ES Figures 8.14.1 [APP-199] to 8.14.90 [APP-288] shows how the proposed landscape mitigation will play a key role in making sure the panels are comfortably accommodated. For example, ES

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				Figure 8.14.49 [APP-247] shows the fencing and panels set back from the approach to the residential property and also from the existing hedgerows to allow for their proposed thickening and growth. The photomontage also shows how the planting mitigation has been designed to enhance the approach to the property with new native tree and shrub planting, improvements to existing hedgerows and new hedgerows.
7A-118	Landscape & Visual Impact	Resident Enjoyment	8.20 - The 7000 Acres group argue that the negative impact on visual receptors amounts to being highly significant. Residents and other users enjoyment of the landscape will be severely affected.	The Applicant notes this comment. C6.2.8 ES Chapter 8 Landscape and Visual Impact Assessment [EN010133/EX2/C6.2.8_A] (the 'LVIA') considers the visual effects of the Scheme and the assessment includes a suite of viewpoints that cover a wide range of visual receptors, including public locations such as transport routes, PRoW and residential properties. The visual effects are set out in C6.3.8.3 ES Appendix 8.3 Assessment of Potential Visual Effects [EN010133/EX2/C6.3.8.2_A], which shows that some adverse effects on visual receptors will be significant at construction and year 1 of operation, but with mitigation this is reduced

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				across the majority of the landscape receptors to not significant at year 15 of operation.
7A-119	Landscape & Visual Impact	Cumulative Impact	Cumulative Landscape and Visual Effects 8.21 – The Scheme will compound the effects of the other nearby schemes in changing the landscape character of the locality and the region. No justification is given for the finding that there will be beneficial effects.	The Applicant notes this comment. Please refer to the response to comment 8.10 above. Effects on some landscape receptors will be significant adverse at construction and year 1 of operation. This is relating to land use, topography, communications and infrastructure, but with the implementation of mitigation, this is reduced across the majority of the landscape receptors to not significant at year 15 of operation. Residual significant beneficial effects are predicted for some landscape receptors at year 15 of operation due to the mitigation proposed. This mitigation includes the new and augmented hedgerows and new shelterbelt, scattered tree planting that will provide a series of good quality field boundaries. This will help in both strengthening the historic field pattern and in creating a multi-layered landscape. This is set out in more detail at C6.3.8.3 ES Appendix 8.3 Assessment of Potential Visual Effects [EN010133/EX2/C6.3.8.2_A].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-120	Landscape & Visual Impact	Conflict	8.22 – The Gate Burton scheme assessment found there to be cumulative moderate adverse impact. This is in conflict with the Cottam finding.	The Environmental Impact Assessments for the Scheme and the Gate Burton Project have been undertaken independently, and different impact assessments can reach different conclusions. The Joint Report on Interrelationships between Nationally Significant Infrastructure Projects [REP-054] includes a review of cumulative impacts at Appendix E, based on expert specific methodologies which reach conclusions that are unique to each topic.
7A-121	Landscape & Visual Impact	Landscape Degradation	8.24 - The landscape in the region could drastically change from a rural, agricultural landscape to a solar landscape. The subsequent degree of long term harm is not measurable.	The Applicant notes this comment, and respectfully disagrees Although the Scheme comprises a series of independent areas of land or Sites, they are set within an extensive agricultural landscape. With large areas of land between each of the Sites, each is set apart by their associated features such as robust hedgerows, woodland and tree cover, intervening settlements and the road and rail infrastructure. The Scheme is also offset from all key receptors such as settlement edges, individual residential properties, PRoW and transport routes which further assist with its integration and dispersion across the landscape. The discrete areas of land in the Scheme are

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				placed so far apart that the Scheme will not be perceived in its entirety and the solar panels are distributed 'in and amongst' the landscape features to assimilate them into the landscape..
7A-122	Landscape & Visual Impact	Mitigation	Mitigation 9.1 - If changes are made to the Scheme then the LVIA and subsequent measures such as mitigation will be affected. Therefore, mitigation measures will need to be re-assessed and re-examined.	The Applicant notes this comment. The Applicant respectfully disagrees with this statement. The Scheme has been assessed in the Environmental Statement taking a Rochdale Envelope approach, This involves assessing the maximum (and where relevant, the minimum) parameters for the Scheme where flexibility needs to be retained, whilst ensuring all potentially significant effects (positive or adverse) are considered. The maximum design scenarios are then secured in the C7.15_A Concept Design Parameters and Principles Revision A [REP-039], which is secured through Requirement 5 in Schedule 2 to the DCO [EX2/C3.1_C], the means by which the Secretary of State can be satisfied that the Scheme will be built out as assessed and in accordance with the parameters that were set in the Environmental Statement.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-123	Landscape & Visual Impact	Mitigation	If all trees and hedgerows are to be removed as stated in the Draft DCO then mitigation measures are obsolete.	Please refer to the response to comment 5.1 above.
7A-124	Landscape & Visual Impact	Habitat Loss	9.4 - The establishment of planting will be severally impacted by grazing deer, brown hare and rabbit populations. With the displacement of birds of prey and foxes due to the proposed development, the population numbers of rabbits will increase exponentially in the immediate locality, therefore, the loss of newly planted vegetation will be significant.	In our experience of monitoring over 100 active solar arrays, we find that new hedgerow planting is able to successfully establish within solar arrays. The C7.3_A Outline Landscape and Ecological Management Plan [EN010133/EX1/C7.3_A] sets out measures to protect new planting and a schedule of monitoring of newly created habitats with replacement planting proposed for any failures. During ecological monitoring of operational solar arrays we have found that foxes, brown hare and badgers are highly active on solar arrays owing to the improved foraging habitat within them. Birds of prey, including owls, are one species group likely to benefit from the provision of large areas of optimal habitat for small mammals such as field voles which require tussocky and dense grassland which will be created within buffered field boundaries. We have not found that rabbit populations significantly impact new planting.
7A-125	Ecology & Biodiversity	Habitat Loss	9.5 - The establishment of planting will be severally impacted by grazing deer, brown hare	Please refer to the response to comment 9.4 above.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			and rabbit populations. With the displacement of birds of prey and foxes due to the proposed development, the population numbers of rabbits will increase exponentially in the immediate locality, therefore, the loss of newly planted vegetation will be significant.	
7A-126	Hydrology, Flood Risk, and Drainage	Panel Height	9.6 – The proposed screening will not be effective. Panel heights will be 4.5m, 5.5m in flood zones. There will be extensive security fencing, lighting, CCTV, BESS, substations, warehousing and storage buildings varying in heights above 5m. Hedgerows will be maintained at 5m and will have no leaf cover for approximately 6 months of the year.	The panels will not be 5.5m in flood zones. The maximum hight of the panels is secured at 4.5m in the C7.15_A Concept Design Parameters and Principles Revision A [REP-039], which is secured through Requirement 5 in Schedule 2 to the DCO [EX2/C3.1_C], C6.2.8 ES Chapter 8 Landscape and Visual Impact Assessment [EN010133/EX2/C6.2.8_A] (the 'LVIA') considers the visual effects of the Scheme and the assessment includes a suite of viewpoints that cover a wide range of visual receptors, including public locations such as transport routes, PRoW and residential properties. The visual effects are set out in C6.3.8.3 ES Appendix 8.3 Assessment of Potential Visual Effects [EN010133/EX2/C6.3.8.2_A], which shows that some effects on visual receptors will be significant adverse at construction and year 1 of

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				operation, but with mitigation this is reduced across the majority of the landscape receptors to not significant at year 15 of operation.
7A-127	Landscape & Visual Impact	Habitat Loss	9.7 – It is not possible to assess the extent of removal of trees and hedgerows as the information in the LVIA and plans conflicts with the dDCO.	The Applicant respectfully disagrees with this statement and refers 7,000 Acres to the response to comment 5.1 above.
	Landscape & Visual Impact	Management Plan	9.8 - The Management Plan depends on the successful management and maintenance of the new planting, as well as protection of exiting trees and hedgerows. It only covers a period of 5 years, not the extended lifespan of the Scheme of 40 years. However, the LVIA is based on effects at 15 years.	The Applicant respectfully disagrees that that the C7.3 Outline Landscape and Ecological Management Plan (LEMP) [EX2/C7.3_B] only covers a period of 5 years. The landscape measures within the LEMP [EX2/C7.3_B] are also shown on C6.4.8.16.1_A – C6.4.8.16.10_A Landscape and Ecology Mitigation and Enhancement Plans (Figures 8.16.1 to 8.16.10) [REP-024 to REP-034]. The LEMP prescribes how the landscape and ecology mitigation measures identified and proposed on these plans will be implemented and managed throughout the construction and operational lifetime of the Scheme, to ensure the effectiveness and certainty in achieving the objectives through the life cycle of the Scheme. The Applicant and its LVIA consultants at Lanpro have worked closely with the ecology consultant throughout the application process to inform the LVIA and

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				associated mitigation plans. The mitigation proposals allow for flexibility, but they can also be fixed, where appropriate and applicable.
7A-129	Socio-Economics, Tourism and Recreation	Public Rights of Way	9.9 – Many Public Rights of Way have existing open aspects with short and long distance views. The proposed mitigation of 5m high hedging will cause the loss of enjoyment of the landscape.	The Applicant notes this comment. C6.2.8 ES Chapter 8 Landscape and Visual Impact Assessment [EN010133/EX2/C6.2.8_A] (the 'LVIA') looks to provide landscape mitigation that enhances the public right of way (PRoW) network as a community benefit, which is aimed to benefit the community as a whole. With regard to views and enjoyment of the landscape and new planting of hedgerow management takes into account the nature of the landscape and where applicable tree planting will be scoped out to preserve the open character of the view.
7A-130	Landscape & Visual Impact	Mitigation	9.10 - Planting mitigation measures will not be effective as suggested in the LVIA and will harm the character of the landscape. If all trees and hedgerows are removed in relation to the Cottam Solar Project as stated in the Draft DCO, the negative effects on the environment, regional and local landscape character will be immeasurable.	The Applicant refers 7,000 Acres to its response to comment 5.1 above.
7A-131	Ecology & Biodiversity	Habitat Loss	Biodiversity and Biodiversity Net Gain	In certain locations where existing accesses do not exist, some very minor hedgerow removal is necessary to accommodate the access road

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			10.3 – The removal of existing and mature trees and hedgerows will cause immediate and extensive habitat loss.	between fields, land parcels and solar panel areas. Hedgerows to be removed are set out in the Hedgerow Removal Plans in Appendix C of Outline Landscape and Ecological Management Plan Revision B [EX2/C7.3_B]. This removal will involve only very short sections of hedgerow to accommodate internal access roads and will not involve loss of trees, in particular trees protected under any Tree Preservation Orders (TPOs). Where these minor areas of hedgerow removal are required, it is to enable access for the construction phase only. These areas are not required as operational accesses, so vegetation will be reinstated as secured by Requirement 13 of Schedule 2 of C3.1_B Draft Development Consent Order Revision B [EN010133/EX1/C3.1_B] once construction is complete (see table 3.3 of C7.1_A Outline Construction Environmental Management Plan [EN010133/EX1/C7.1_A]).
7A-132	Ecology & Biodiversity	Planting	10.4 - The subsequent planting of new and immature vegetation does not equate in biodiversity terms to the removed existing and mature vegetation. There will be a biodiversity net loss.	Please refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference ECO-07 on this matter.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-133	Ecology & Biodiversity	Habitat Loss	10.5 - Localised browsing of newly planted vegetation will affect biodiversity gains.	Please refer to the response to comment 9.4 above.
7A-134	Ecology & Biodiversity	Habitat Loss	10.6 – The Scheme will cause fragmentation and destruction of existing habitats. The OLEMP lacks detail.	Please refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference ECO-19 on this matter.
7A-135	Ecology & Biodiversity	Habitat Loss	10.7 - The extensive groundworks for the cable route will also have a negative impact on biodiversity.	Please refer to document REP-049: The Applicant's Responses to Relevant Representations, issue reference ECO-10 on this matter.
7A-136	Ecology & Biodiversity	Timing unclear	The coordination of the timing of the construction of the shared cable route is not clear. The timeframes stated for Gate Burton and Cottam are not consistent.	The 18 month construction programme was chosen within the ES Chapter 9 assessment to be in keeping with that of the ES overall (see C6.2.4. ES Chapter 4 Scheme Description Revision A). This was chosen as the most appropriate timespan should the scheme be assessed in isolation from the other development. A five year duration was factored into the cumulative assessment of the shared cable corridor as the maximum duration of the sequential cable construction programme.
7A-137	Ecology & Biodiversity	Funding	10.8 – The baseline has not considered funding opportunities for improving biodiversity.	It is not clear from the representation which funding opportunities were being referred to here.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-138	Ecology & Biodiversity	Biodiversity Net Gain		Natural England's advice is that users of previous versions of the Biodiversity Metric should continue to use that metric for the duration of the project it is being used for (in this case Metric v3.1)
7A-139	Soils & Agriculture	Soils	Soils 11.3 – BMV land within the cable corridor is expected to be over 50%.	The cable route corridor will be subject to a detailed ALC and soil resource assessment for the Soil Management Plan (SMP), a requirement of the DCO (C3.1B [REP-006]). The SMP will ensure that the works in the cable route corridor will not result in loss of or degradation to agricultural land including best and most versatile land.
7A-140	Soils & Agriculture	Land Use	11.4 - The Applicant has not explained the use of Best and Most Versatile land for the proposed development.	ES Chapter 19 Soils and Agriculture (C6.2.19A [REP-010]) provides information on the presence of best and most versatile land within the Sites, and the potential impact of development on this land resource. Given the minimal disturbance of soil, the ability to maintain agricultural use and the ease of decommissioning, the ES concludes that there will be no significant adverse effect on agricultural land including the best and most versatile agricultural land – please see Table 19.11.
7A-141	Soils & Agriculture	Land Use	11.5 – In this area, land classed as 3b by the Applicant makes a special contribution to the	Grade 3b land limited by soil wetness and workability limitation is common across England.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			environment, local economy and nation, as it enables arable crops to be viable during hot and dry summers.	The soils of this County are not unique in this regard. Such soils can have a low drought limitation but are limited to ALC grade 3b by soil wetness and workability, restricting farmers access to land at critical times for arable land management without causing persistent structural damage to wet and clayey soils.
7A-142	Soils & Agriculture	Loss of Land	11.6 – The loss of farmland for 40 years will have a negative impact on the farming industry in the region, in particular when considered cumulatively with other nearby projects.	The farming industry is continually responding to changes in policy, environment and markets. Agricultural land within the Scheme (and those considered cumulatively) is not lost and remains available for continued agricultural production through grazing sheep.
7A-143	Soils & Agriculture	Soils	11.7 – During construction, soil structure can be damaged by construction traffic. This damage can be significant if work is carried out when soils are wet.	Soil quality will be protected through the duration of construction, operation and decommissioning through measures set out in a Soil Management Plan. Outline measures are set out within the Outline Soil Management Plan [EX2/ C6.3.19.2/A], as secured by Requirement 19 of Schedule 2 of C3.1_C Draft Development Consent Order Revision C [EN010133/EX1/C3.1_C].
7A-144	Soils & Agriculture	Food Security	11.8 – Land here produces high yields and good quality crops regardless of land grade.	The ALC system assesses agricultural land quality and versatility by reference to specific physical

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				characteristics of the land, and not by yield and cropping which is influenced by many other significant factors not tied to that land. See paragraph 19.6.5 of ES Chapter 19 (C6.2.19A [APP-010]). Grade 3b land limited by soil wetness and workability is common across England.
7A-145	Soils & Agriculture	Soils	11.9 - The Applicant has not assessed implications of the proposed scheme for all soil life.	The extended fallow period will enable a recovery of soil organic matter benefitting soil flora and fauna diversity. Use of pesticide will also be significantly curtailed in comparison to arable land management benefiting invertebrates and soil fungi. Paragraph 19.8.3 of Chapter 19 Soils and Agriculture (C6.2.19A [APP-010])
7A-146	Socio-Economics, Tourism and Recreation	Mental Health and Wellbeing	Mental Health and Wellbeing 10.4 - Access and enjoyment of green space, either active or passive have a positive effect on mental health and wellbeing. There is a lack of access to quality green space in the nearby town of Gainsborough. The contribution of the surrounding local rural landscape to health is important.	C6.2.8 ES Chapter 8 Landscape and Visual Impact Assessment [EN010133/EX2/C6.2.8_A] (the 'LVIA') looks to enhance the footpath network associated with the Sites, where appropriate. The Scheme is also offset from all key receptors such as settlement edges, individual residential properties, PRoW and transport routes. The LVIA looks to provide landscape mitigation that enhances the public right of way (PRoW) network

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				as a community benefit, which is aimed to benefit the community as a whole. The LVIA considers both the landscape and visual effects of the Scheme independently to ensure both the impacts and effects on the fabric of the landscape are taken into account as well as the views and visibility. The assessment includes a suite of viewpoints that cover a wide range of visual receptors, including public locations such as PRoW, transport routes and residential properties. This suite of viewpoints have been discussed and agreed with Lincolnshire County Council. Please also see the response to comment 10.5 below.
7A-147	Socio-Economics, Tourism and Recreation	Public Rights of Way	10.5 – The Scheme proposes that several Public Right of Way (PRoW) routes that will be temporarily stopped and/or diverted. The term 'temporary' is open ended and so residents and users of the PRoW's will have their enjoyment of their usual walks negatively impacted potentially for a lengthy and undefined period of time.	The Scheme features measures to protect existing Public Rights of Way through C6.3.14.3_A ES Appendix 14.3 Public Rights of Way Management Plan [EN010133/EX1/C6.3.14.3_B], as secured through Requirement 18 of Schedule 2 of C3.1_B Draft Development Consent Order Revision C [EN010133/EX2/C3.1_C]. The Scheme also seeks to enhance the existing network through the provision of a new permissive path defined as Work No. 11 in Schedule 1 of C3.1_B Draft Development Consent Order Revision C

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				[EN010133/EX2/C3.1_C]. A policy assessment of the measures regarding existing Public Rights of Way and the proposed permissive path can be found in paragraphs 6.13.27 to 6.13.29, 6.15.18, 6.16.11 and in Appendix 4 of C7.5_A Planning Statement [**EX2/C7.5_B**]. The assessed moderate-minor benefit to recreational use of Public Rights of Way as a result of the proposed permissive path is set out in paragraph 18.7.108 of C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053].
7A-148	Socio-Economics, Tourism and Recreation	Public Rights of Way	10.6 - This infringement on the health and social benefits people gain from the recreational value and use of PRoW's, coupled with any cumulative effect from potential development of the Gate Burton, West Burton and Tillbridge Schemes, means that people's mental and health and wellbeing will suffer.	The Applicant notes this comment. With regard to the potential landscape and visual effects on PRoW, please refer to the responses to comments 10.4 and 10.5 above. The Applicant is cognisant of the significance of the countryside for physical and mental wellbeing and, as such, likely impacts on the desirability and use of recreational facilities in the countryside, such as public rights of way, have been assessed in Section 18.7 of C6.2.18 ES Chapter 18 Socio Economics Tourism and Recreation [APP-053]. The greatest level of effect to access, desirability and use of recreational facilities is moderate-minor adverse and is anticipated during construction (see para. 18.7.60-67) and

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				decommissioning (see para. 18.7.143-153). These effects are not anticipated to be significant. This is re-iterated in Section 21.5 of C6.2.21 ES Chapter 21 Other Environmental Matters [APP-056].
7A-149	Socio-Economics, Tourism and Recreation	Mental Health and Wellbeing	10.11 - Some members of the 7000 Acres Group have shared with us that they already feel anxious and worried about the prospect of these proposed solar developments and that their mental health and wellbeing has been harmed as a consequence. If the proposed development goes ahead, the likelihood is that these harms or negative effects will be worsened.	The Applicant notes this comment. With regard to the landscape and visual matters associated with health and well-being, please refer to the responses to comments 10.4, 10.5 and 10.6 above.
7A-150	Socio-Economics, Tourism and Recreation	Tranquillity	Tranquillity 11.2 - Several residents have stated that the landscape and green space affords them a degree of peace. This in turn we equate to mean tranquillity. 11.4 - It is clear, from the conversations the group has had with residents from the neighbouring villages to the Cottam Solar Project, they value the peace and quiet of the landscape setting and that the proposed negative impacts of the transport noise, construction and industrial	C6.2.8 ES Chapter 8 Landscape and Visual Impact Assessment [EN010133/EX2/C6.2.8_A] (the 'LVIA') considers the visual effects of the Scheme and the assessment includes a suite of viewpoints that cover a wide range of visual receptors, including public locations such as transport routes, PRoW and residential properties. This includes the rural aspects and that they are a key part of the landscape heritage of agriculture. The findings also note this is a predominantly rural and sparsely settled area with small villages and dispersed farms and

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			development will significantly harm that degree of peace and/or tranquillity	residential dwellings linked by long roads and a network of minor tracks. The effects on the countryside, rural amenity and natural beauty, including the degree of peace and tranquillity have also been taken into consideration in the assessment.
7A-151	Landscape & Visual Impact	Harm outweighs benefit	Conclusion 12.7 - The landscape as a whole is much loved and enjoyed by users and local communities. The members of our group regularly convey their dismay and disbelief that such a vast solar scheme is being considered to cover the landscape in our region. It is clear to our members that the harms significantly outweigh any perceived benefits and as such we continue to argue our case before the Examining Authority.	The Applicant notes this comment. With regard to the landscape and visual matters associated with health and well-being, please refer to comment 10.4 above. With regard to the landscape and visual matters associated with the rural character of the area, please refer to comments 11.2 and 11.3 above. The mitigation proposals associated with the landscape and visual receptors for the Scheme are included in C7.3_A Outline Landscape and Ecological Management Plan [EX2/C7.3_B], and within C6.4.8.16.1_A -C6.4.8.16.10_A Landscape and Ecology Mitigation and Enhancement Plans (Figures 8.16.1 to 8.16.10) [REP-024 to REP-034], as secured through Requirement 7 of the DCO.This mitigation takes into account the findings of the cumulative assessment, and

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				therefore the proposed mitigation will deal with the cumulative effects identified. This mitigation is also aimed at benefitting the community as a whole as well as tourists, visiting walkers, local residents, ornithologists and cyclists. The landscape mitigation measures seek to provide new planting, which will include new native hedgerows and tree cover, and this will also include their management and maintenance.

2.16 Glint and Glare

7000 Acres – Glint and Glare [REP-121]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-152	Glint & Glare	Observer Heights	The Applicant has not taken account of actual observer heights, such as the upstairs window of a residence, so underestimating the impact of glint and glare.	Visibility from top floors including residential properties has been taken into consideration. Impacts upon observers located on the ground floor, which is typically the main living space, have a greater significance with respect to residential amenity (see section 7.1 of C6.3.16.1 ES Appendix 16.1 Solar Photovoltaic Glint and Glare Study [APP-140]).
7A-153	Glint & Glare	Cumulative Effects	The Applicant has not taken full account of the cumulative effect of glint and glare, in accordance with Advice Notice Seventeen.	The cumulative assessment shows that no significant cumulative impacts are predicted. This is either because concurrent visibility is not possible or because the separation distance is significant enough to reduce the impact to low (see section 8 of C6.3.16.1 ES Appendix 16.1 Solar Photovoltaic Glint and Glare Study [APP-140]).
7A-154	Glint & Glare	Impact methodology	The Applicant has used qualitative criteria, under the guise of "professional judgement", to minimise the impact of glare on local residents and road users. Quantitative criteria can be applied, as in one of the references they cite (FAA, 2015).	No process for determining and contextualising the effects of glint and glare is provided for assessing the impact of solar reflections upon surrounding roads and dwellings. Therefore, the approach used in the ES Appendix 16.1 Solar Photovoltaic Glint and Glare Study [APP-140] determined whether a reflection from the proposed solar development is geometrically

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				possible and then compared the results against the most relevant guidance/studies to determine whether the reflection is significant (see Appendix A of C6.3.16.1 ES Appendix 16.1 Solar Photovoltaic Glint and Glare Study [APP-140]). The methodology for a glint and glare assessments is as follows: • Identify receptors in the area surrounding the solar development; • Consider direct solar reflections from the solar development towards the identified receptors by undertaking geometric calculations; • Consider the visibility of the panels from the receptor's location. If the panels are not visible from the receptor then no reflection can occur; • Based on the results of the geometric calculations, determine whether a reflection can occur, and if so, at what time it will occur; • Consider both the solar reflection from the solar development and the location of the direct sunlight with respect to the receptor's position; • Consider the solar reflection with respect to the published studies and guidance;

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				• Determine whether a significant detrimental impact is expected in line with the process presented in Appendix D of C6.3.16.1 ES Appendix 16.1 Solar Photovoltaic Glint and Glare Study [APP-140]. The quantitative FAA criteria is used to solely assess aviation activity and there is no quantitative criteria established for assessing the other identified receptors. The Pager Power methodology has been produced in line with industry best practice and stakeholder consultation, e.g. with Network Rail and Nationall Highways.
7A-155	Glint & Glare	Mitigation	The Applicant has used vegetation and "opaque fencing" as the sole means of mitigation. No account has been taken of the time required for vegetation to grow. No detail of "opaque fencing" has been supplied or is considered elsewhere in the EIS.	Vegetational screening is proposed. Whilst this screening is maturing, opaque fecning will be implemented in the interim to instantly remove significant effects. See section 7 of C6.3.16.1 ES Appendix 16.1 Solar Photovoltaic Glint and Glare Study [APP-140]). .
7A-156	Glint & Glare	Eyesight Health	The Applicant has not taken account of receptors with common eyesight conditions.	The Applicant is not aware of any evidence that the impacts of glint or glare have are higher for those observers with common eyesight conditions.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-157	Glint & Glare	Impact methodology		Google Earth images used in C6.3.16.1 ES Appendix 16.1 Solar Photovoltaic Glint and Glare Study [APP-140]) are dated December 2021. C6.3.16.1 ES Appendix 16.1 Solar Photovoltaic Glint and Glare Study [APP-140]) is a desk-based assessment and no site survey has been carried out. However, this assessment was likely carried out as part of the landscape assessment. The desk-based determination of screening level is conservative, meaning where it cannot be reliably determined that sufficient screening is present, it is assumed to be insuffcient.
7A-158	Glint & Glare	Equestrian & Livestock	The Applicant takes no account of the impact on livestock and equestrian activities, which are a feature of this area.	The Applicant is not aware of any evidence that glint and glare can affect livestock and equestrian activities.
7A-159	Glint & Glare	Loss of Amenity	The Applicant dismisses the loss of amenity caused by glare.	Residential amenity has been assessed within Section 7.1 of C6.3.16.1 ES Appendix 16.1 Solar Photovoltaic Glint and Glare Study [APP-140]). No significant impacts have been identified after analysis. Mitigation is proposed and interim screening will be implemented before planting is established where necessary. .

2.17 National Policy Statements and Application of Planning Requirements

7000 Acres – National Policy Statements and Application of Planning Requirements [REP-122]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-160	Planning Policy & Process	NPPF	There are no National Policy Statements that support a solar industrial complex of this size. We recommend that the ExA give considerable weight to the National Planning Policy Framework and the Skidmore Review, especially the elements concerning local health and wellbeing. These explicitly address the need for local consultation and welfare to be central to the planning process.	No technology specific NPS has currently effect so the Scheme will be determined in accordance with Section 105 of the PA 2008, as acknowledged in paragraph 1.3.5 of C7.5_B Planning Statement Revision A [EX2/C7.5_B]. The NPPF does not contain specific policies related to NSIPs. However, it does contain guidance on requiring good design; promoting sustainable transport; healthier communities; conserving and enhancing the natural and historic environment; and meeting the challenges of climate change. It sets out particular issues to take into account in determining planning applications and is considered to be an important and relevant matter in the determination of the application. It is considered to have less weight than the relevant NPSs and draft NPSs (see Applicant's response to ExA First Written Question 1.2.15 [C8.1.15]. The Applicant undertook two phases of community consultation where it shared information about the Scheme and invited feedback at different stages of the Scheme

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				development. The consultation process is described in Chapter 2 of C5.1 Consultation Report [APP-021]. The applicant has undertaken extensive consultation with stakeholders in the local area, in order to fully understand the concerns and perceptions of people living in the area. The Applicant identified a list of seldom heard groups in order to ensure that all areas of the community were made aware of the Scheme and had an opportunity to make comments, whether on risk or otherwise. As confirmed in Table 7.3 of C5.1 Consultation Report [APP-021], the Applicant undertook dialogue and communication with the identified seldom heard groups and welcomed other groups to provide feedback through the free-to-use communication channels as publicised. The seldom heard groups listed in the SoCC were treated as Section 42 consultees, and therefore received a covering letter, accompanied by a copy of the Section 48 notice and site location plan, on or before the start of the 42-day consultation period.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-161	Planning Policy & Process	Cumulative Impact	Cumulative impact. The Applicant has failed to take due account of the cumulative impact of the four NSIPs in the region.	The cumulative impacts of the four NSIPs Cottam, Gate Burton, West Burton and Tillbridge have been considered within the Report on the Interrelationship with Other National Infrastructure Projects [EX2/C8.1.8_A].
7A-162	Planning Policy & Process	Alternative Locations	Alternative locations. The Applicant has made this application based on where it can obtain a large area of land that meets its business case. It has then reverse engineered its EIA to fit the available land.	The selection of the Scheme's location has followed a systematic step-by-step process as set out in detail within C6.3.5.1 ES Appendix 5.1 Site Selection Assessment [APP-067]. This took a sequential approach to the consideration of potential sites for the Scheme. As paragraph 3.3.22 states, the Scheme maximises the utilisation of low grade, non best and most versatile (BMV) agricultural land with 95.9% of the land being classified as non BMV land. The land required for the Scheme has been demonstrated within C6.3.5.1 ES Appendix 5.1 Site Selection Assessment [APP-067] to perform better than 8 of the assessed Potential Development Areas (PDAs) and equal to the remaining one following the site selection process. Consequently, it has been concluded that there are no obviously more suitable locations for the Scheme within the Search Area.
7A-163	Climate Change	Carbon Assessments	Carbon assessment. The Applicant has not provided a detailed breakdown of their calculations. Furthermore, some of the	The Climate Change ES Chapter [APP-042] sets out the calculation methods and assumptions made in Section 7.8. Assumptions were applied where there were gaps in knowledge or

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			descriptions do not explain how they arrived at their conclusions and why some assumptions were applied.	uncertainty around future emissions values . It is considered that all assumptions made are reasonable and useful for determining the overall conclusion and impact of the scheme with regards to Climate Change.
7A-164	Planning Policy & Process	BESS	Battery Energy Storage System (BESS). The Applicant has provided no evidence why a BESS of this size is required, why its capacity should be uncapped and why it needs to trade energy with the National Grid. 7000Acres believes that the BESS is an "additional revenue for the applicant, in order to cross-subsidise the cost of the principal development".	Section 11.5 in C7.11 Statement of Need [APP-350] explains how electricity storage (BESS) will play an important role in the development of a low-carbon energy system in the UK. Electricity storage may be connected as a standalone asset or collocated with a renewable generation scheme. Because the Scheme's grid connection agreement provides both import and export capacity, it enables the Scheme to contribute to meeting the national need for electricity storage by including, as associated development, an electricity storage asset which supports the operation of the principal solar development and provides the ability to balance the electricity produced by the solar scheme, with demand on the National Electricity Transmission System. Section 4, paragraphs 4.5.21 to 4.5.26 of C7.5_A Planning Statement [EX2/C7.5_B] sets out that the BESS proposed as part of the Scheme is designed to provide peak generation and grid balancing services to the electricity grid by allowing excess electricity generated either from the solar PV panels, or imported from the

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				electricity grid, to be stored in and dispatched when required.
7A-165	Ecology & Biodiversity	Biodiversity	Biodiversity. There is no clear evidence that utility scale solar farms increase biodiversity. The Applicant has not clearly demonstrated they meet the requirements of the Environment Act 2021.	The C6.3.9.12 ES Appendix 9.12 Biodiversity Net Gain Report [APP-089] and detailed Landscape Mitigation Plan, which will be substantially in accordance with the Outline Landscape and Ecological Management Plan (LEMP) [APP/C7.3], is secured by Requirement 7 of Schedule 2 to the draft DCO C3.1_B Draft Development Consent Order Revision C [EX2/C3.1_C]. The BNG Report and Plan identify how the Applicant will meet habitat creation, management and enhancement objectives.
7A-166	Planning Policy & Process	Rochdale Envelope	Use of a Rochdale Envelope. The Applicant's application of a Rochdale Envelope has resulted in insufficient information being made available to interested parties in a timely manner.	Use of the Rochdale Envelope is an approach recognised by PINS, as set out within Section 4.3 of ES Chapter 4: Scheme Description [REP-013].The need for flexibility in design, layout and technology is recognised in National Policy Statement EN-1 as elements of a development may not be finalised.
7A-167	Planning Policy & Process	Timescale	Timescale. The 40+ year period of the scheme is not "temporary use" of the valuable farmland.	The Applicant has amended the Scheme to require decommissioning to take place no later than 60 years following the date of final commissioning. This is secured in Requirement 21 in Schedule 2 of the draft DCO C3.1_B Draft Development Consent Order Revision C [EX2/C3.1_C]. A Soils Resource Management Plan

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				(SRMP), substantially in accordance with C7.18 Outline Soil Management Plan [APP-355] will be submitted and approved prior to the commencement of development as secured by Requirement 19 of Schedule 2 of the draft DCO. The aim of the SRMP is to avoid the loss of soil material and soil functional capacity for supporting agricultural production from the Site.

2.18 Summary of Oral Submissions made at OFH1

7000 Acres – Summary of Oral Submissions made at OFH1 [REP-123]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-168	Energy Need	Statement of Need	This project comes down to three simple things: Need, Benefits and Impacts In terms of Need, we do not dispute, the need to decarbonise and that solar has a role to play. However, the first key question we would like the Examining Authority to address, in this regard is: What is the specific need, for large scale ground-mounted solar development in the UK? The UK Warehouse Association have found that by using only the largest 20% of commercial rooftops, this could double the UK's existing solar capacity, from 14GW to 28GW. And in May this year, Ecotricity published a report that estimated that from what they consider "suitable" domestic rooftops, a further 37GW of solar could be installed. These examples highlight that there is growing evidence that there is sufficient available rooftop solar capacity on suitable buildings for the UK to meet its solar requirements.	Paragraph 7.6.3 of C7.11 Statement of Need [APP-350] analyses the potential contribution of "brownfield" solar sites to the national need for solar generation. Brownfield sites, including rooftop and other community energy systems, are likely to grow in the UK and will make a contribution to decarbonisation of the UK energy system. However, C7.11 Statement of Need [APP-350] concludes in Section 7.6, that on their own, brownfield developments are unlikely to be able to meet the national need for solar. Paragraph 8.5.10 and Section 8.5 more generally of C7.11 Statement of Need [APP-350] describe and express agreement with Government's view that decentralised and community energy systems are unlikely to lead to the significant replacement of large-scale infrastructure. The Applicant therefore supports Government's view that large scale solar must be deployed to meet the urgent national need for low-carbon electricity generation.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				Figure 8.2 of C7.11 Statement of Need [APP-350] shows how solar is expected to work alongside other renewable and low-carbon assets to meet demand throughout the year. The inclusion of batteries as part of the Scheme will allow the Scheme to store energy when it is in abundance and release it to the grid when it is needed.
7A-169	Energy Need	Benefits	In terms of Benefits - it is clear, that the developer has persisted in providing over simplistic and misleading information regarding the role solar power can play in the future of electricity supply. A fundamental principle for the electricity system to operate is that supply must match demand at all times. This is a challenge as demand is highly variable, throughout the day and over the year. No solar scheme can power 100,000 homes - as the developer has repeatedly stated, not even a scheme as vast as this, because solar schemes do not address the fundamental requirement to match electricity supply with demand in the moment. Solar is an intermittent form of electricity generation.	Table 7.1 of C7.11 Statement of Need [APP-350] shows the electricity generated per hectare by different low-carbon technologies. At the UK's average solar load factor (11%), solar generation produces much more energy per hectare than biogas, and generates a similar amount of energy as onshore wind. In relation to comments made about curtailment, the Applicant directs the ExA to Section 7.1 of C7.11 Statement of Need [APP-350] describes that, according to Government's Energy White Paper (2020), meeting a possible doubling of electricity demand by 2050 "would require a four-fold increase in clean electricity generation with the decarbonisation of electricity increasingly underpinning the delivery of our Net Zero target." Figure 7-2 of the Statement of Need [APP-350] shows National Grid's projections of installed generation capacity in the UK by 2030 and 2050.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			It also has the lowest "load factor" of any renewable technology, which is the actual yield from the headline capacity figure for the scheme. For a 500MW capacity scheme, using UK Government energy statistics, solar delivers between 9 to 11% of this capacity on average, so, around 50MW in practice. However, increasingly, it is when power is produced that matters; peak solar output is when demand is typically very low. And when the country needs most power, on a winter evening, solar produces nothing. What is worse, is that the electricity system is already finding itself with too much power on summer days - resulting in a phenomenon the National Grid calls "curtailment" - where excess renewable power is switched off, for which the generator concerned will be compensated. National Grid foresees curtailment will grow to between 50 to 90 TWh's of energy per year by 2030. It is an amount of electricity that is hard to fathom. The whole country currently uses around 300TWh in a year - wasting between 15 to 30% of the countries demand need, because	Not only is renewable generation capacity expected to increase between now and 2030, but so is flexible capacity (shown as orange in that Figure). A significant increase in UK electricity generation capacity is required to meet growing demand and deliver security of supply under different weather conditions. Because the weather is uncontrollable, more capacity is needed to ensure that demand can be met even when renewable output is low. 7000 Acres point to curtailment as a disbenefit of the scheme and incorrectly cites numbers from National Grid's Future Energy Scenarios document. The Applicant addresses these incorrect statements in three parts. Firstly, it is important to put in context, the current reasons for curtailment in the UK, and the prices paid to generators to curtail. Currently, curtailment is experienced on the UK's large-scale wind fleet. Much of this is due to transmission constraints: the transmission wires between the asset, where energy is generated, and the major points of consumption, do not have the capacity to transmit all of the generation. In the 12 months starting 1st October 2022 and ending 30th September 2023, National Grid data records

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			of excess installed capacity that the system cannot handle.	metered wind to be 63TWh. Constraints due to location totalled 3.3TWh (5% off net generation) and constraints due simply to there being 'too much wind energy on the system' totalled 0.6TWh, or less than 1% of net generation. Chapter 9 of C7.11 Statement of Need describes that the Scheme proposes to connect to a well connected section of the NETS which has available transmission capacity and is unlikely to cause the scheme to be curtailed. In the event that the Scheme was required to curtail, the inclusion of a BESS as part of the Scheme provides additional tools to the operator to store any excess generation for dispatch to the system when it is needed. Secondly, put simply, without the build out of large capacities of renewable generation, the UK may not be able to meet demand at times of low renewable output, potentially causing: • Power cuts (contrary to Government's aim to ensure security of supply) • Price spikes (contrary to Government's aim to shield consumers from volatile energy markets), and/or

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				• Stand-by fossil fuel assets to generate (contrary to Government's aim to decarbonise the electricity system by 2035) The alternative approach, i.e. building out large capacities of renewable generation, meets Government's aims and provides opportunities for market approaches to manage curtailment if it occurs, and: • Use curtailed energy to support security of supply when demand is high • Keep consumer costs down by capturing and storing energy when it is abundant (therefore cheap) and releasing it when it is needed • Displace stand-by fossil assets by using stored energy as a low-carbon "peaking" energy resource, further supporting Government's aim for the electricity system to be operating with net zero carbon emissions from 2035. Section 8.7 of the Statement of Need [APP-350] describes four ways of diversifying renewable generation sources to maintain adequacy and

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				minimise curtailment. One of these is the development of Energy Storage Systems. Many different technologies are anticipated to be used for energy storage in the future, and National Grid's FES discusses in detail the prospect of electrolysed hydrogen offering an effective inter-seasonal storage solution (e.g. p192 of FES (2023) nationalgrideso.com/document/283101/download). The Applicant has included a proposal for a Battery Energy Storage System (BESS) as Associated Development to the main solar development. One of the benefits of the BESS is that it will be able to work as part of the Scheme, and other energy storage systems elsewhere connected to the UK's electricity system, to reduce curtailment, both specifically at the Scheme, and as an additional benefit, more widely. Thirdly, 7000 Acres have misrepresented the level of curtailment in National Grid's FES pathways. Data from FES(2023) Table FL.18 shows that average curtailment in the years 2031 – 2040 ranges from 31TWh ('Leading the Way') to 46.8TWh ('System Transformation') however a deeper dive into the data (via Table ES1 of the same report) shows that curtailment of *solar* generation is

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				anticipated to be much lower, with an average annual curtailment 2031-2040 ranging from 2.4TWh - 2.7TWh. In summary, future curtailment, if/when it occurs, would be a 'good' problem for the UK power sector to have. It would show that large capacities of renewable generation have been built out to deliver low-carbon supplies to meet peak demand, delivering security of supply, meeting carbon reduction targets and reducing wholesale costs of energy. Further, the market signals associated with curtailment, will drive the development of consumer and/or supply side flexibility to make efficient use of abundant resource and drive further security of supply, decarbonisation and affordability benefits for consumers across the whole energy system.
7A-170	Energy Need	Decarbonisation	Our second key question we would like to ensure the Examining Authority thoroughly covers is: To what extent can the proposed solar scheme truly contribute to the decarbonisation of the electricity system? In doing so, we would seek the Examining Authority to thoroughly understand and assess	Section 3.3 of document C7.11 Statement of Need [APP-350], specifically paragraphs 3.3.2, 3.3.5 and 3.3.11, describes the Government's view that large capacities of low-carbon generation will be required to meet increased demand and replace output from retiring (fossil fuel) plants, and that "a secure, reliable, affordable, Net Zero consistent system in 2050 is likely to be composed predominantly of wind and solar". This support for

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			the potential role of this solar scheme, what it can contribute, and crucially, what problems it also causes for the future decarbonised energy system. This question is crucial, because these benefits will be weighed against the harms and consequences of the development, therefore, the developer must not be allowed to overstate and oversimplify the benefits of the proposed scheme.	large scale solar as part of the 'answer' to net zero and energy security has been repeated in its recent policy documents published in March 2023. This point is reiterated in the newly published March 2023 Draft Revised National Policy Statement EN-3. Figure 7.1 of C7.11 Statement of Need [APP-350] shows National Grid Electricity System Operator's projections of the capacity of solar generation required to deliver a net-zero consistent system, which, as stated in para. 7.2.10, are 25 – 42GW by 2030, and 57 – 92GW by 2050, compared to just 14GW today (Section 7.2). Draft EN-1 (March 2023), para 3.3.25, sets out Government's emerging policy position in favour of BESS: "Storage has a key role to play in achieving net zero and providing flexibility to the energy system, so that high volumes of low carbon power, heat and transport can be integrated." The decarbonisation calculations to show the extent the proposed scheme are set out within the Climate Change ES Chapter [APP-042]. These calculations compare the existing emissions associated with energy generation to the offset

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				provided by generating electricity with the renewable source.
7A-171	Climate Change	Land Use	The final dimension is the Impact the scheme will have. Harm stems from the fact that solar, has an extremely low power density, which means that a ground-mounted solar scheme, of this capacity, uses a colossal amount of space. Using so much land has a tremendous, concentrated impact on the immediate area and its people. Consuming such huge areas of land also puts a wider pressure on land use and on agricultural crop land in particular which is facing many pressures. The UK Climate Change Committee asserts we will need to lose some of this land to plant trees to sequester carbon and for energy crops. There are fears that climate change will change the yields of UK farmland and rising sea levels have the potential to have a further impact.	Table 7.1 of C7.11 Statement of Need [APP-350] shows the electricity generated per hectare by different low-carbon technologies. At the UK's average solar load factor (11%), solar generation produces much more energy per hectare than biogas, and generates a similar amount of energy as onshore wind. Furthermore, paragraph 7.6.8 of C7.11 Statement of Need [APP-350] states that: "Draft NPS EN-3 includes an anticipated range of 2 to 4 acres for each MW of output generally required for a solar farm along with its associated infrastructure." The Scheme as proposed delivers a large-scale solar generation asset which is consistent with this range, as is described through paragraphs 4.2.1 to 4.2.3 of C6.2.4 ES Chapter 4_Scheme Description [APP-039]. This demonstrates that the proposed location is a suitable site which will provide for an asset which is consistent with government's view of best practice ratios of land take and installed capacity. Concerns relating to food security and land use have been responded to in C8.1.2 The Applicant's

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			All of which is before any renewed expansion of urban development is considered In addition to this, there are growing demands to increase self-sufficiency of food production, because of food security concerns in the wake of rising global political instability. This is not about land that is Best and Most Versatile, or what land is 3a or 3b, (which are distractions frequently used by developers to deflect from the fundamental need to use our precious land resources efficiently). Quite simply, over committing agricultural land to such inefficient land use as ground-mounted solar, could very quickly become a cause for regret. Our third question to the Examining Authority is therefore: What are the impacts of the scheme, when considered both from the perspective of the immediate area, but also from a macro-level, that truly considers the wider sustainability impacts of consuming crop land at this scale?	Responses to Relevant Representations [REP-049].
7A-172	Energy Need	Decarbonisation	There is a huge challenge to decarbonise the UK (and good progress is already being made),	Chapter 4 of C7.11 Statement of Need [APP-350] sets out the UK's legal requirement to decarbonise

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			particularly with the closure of coal fired generation and the significant contribution by renewable generation, especially from offshore wind. For energy, the challenges from here are in two main areas: • The first is about getting power to the right place. By far the largest source of the country's future energy will be Wind power – perhaps 50% or more, according to the National Grid. At a transmission level, it is essential this has the necessary grid infrastructure so it can be used. At a distribution level, we need to configure networks to enable the charging infrastructure to power electric vehicles and decarbonise transport. • The second challenge is about being able to flexibly produce clean energy, for when the wind doesn't blow, or the sun doesn't shine sufficiently to meet demand. This is about dispatchable low-or-no-carbon generation or inter-seasonal energy storage. These are the keys to decarbonisation.	and explains how that requirement has developed an increased need and urgency to meet the UK's obligations under the Paris Agreement (2015) as detailed within para. 4.2.7. The Section summarises the latest expert views on the urgency for and depth of low-carbon infrastructure needed to deliver the UK's Net Zero legal obligations, and demonstrates that there is an urgent need for the development of large-scale solar schemes. Paragraphs 3.3.1-19 of C7.11 Statement of Need [APP-350] summarises the 2021 Draft Revised National Policy Statement EN-3, which sets out Government's view that a Net-Zero consistent [energy] system in 2050 is likely to be composed predominantly of wind and solar (this point is reiterated in the newly published March 2023 Draft Revised National Policy Statement EN-3). Figure 7.1 of C7.11 Statement of Need [APP-350] shows National Grid Electricity System Operator's projections of the capacity of solar generation required to deliver a net-zero consistent system, which are 25 – 42GW by 2030, and 57 – 92GW by 2050, compared to just 14GW today (para. 7.2.1-21 [APP-350]). C6.2.5 ES Chapter 5 Alternatives and Design Evolution [APP-040] and its accompanying

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			NSIP scale solar farms are a massive distraction from these challenges; they exacerbate the backlog issues facing National Grid transmission connections, misuse the NSIP process and their voracious appetite for land could compromise other decarbonisation efforts. We do need solar, but even with 70GW of installed solar capacity National Grid estimates this would contribute less than 6% of the country's future energy needs. With its contribution so limited, solar should predominantly be delivered on rooftops, where it can make its contribution where there are fewest adverse impacts. It should not be ground-mounted on this scale. In the UK at present, there is a band wagon for large scale ground-mounted solar development, akin to a wild-west style gold rush. The developer must not be allowed to overstate and oversimplify benefits, and understate harms, for financial advantage. This proposed development, along with the other three in the West Lindsey District, have the potential to significantly harm and even decimate communities for decades, and in the	appendix C6.3.5.1 ES Appendix 5.1 Site Selection Assessment [APP-067] explain how the site was chosen in light of this need. Specifically, paragraph 2.1.10 of C6.3.5.1 ES Appendix 5.1 Site Selection Assessment [APP-067] explains the reasons why a site of the size proposed is required to meet the 600MW grid connection offer. The methodology used for the site selection process is considered reasonable and proportionate and complies with the requirements of NPS EN-1 4.4.3 as explained at Section 2.1 [APP-067]. Section 9 of C7.11 Statement of Need [APP-350] describes the suitability of the proposed location as a point of connection for the project. The Applicant has secured an agreement to connect to the grid at Cottam substation as demonstrated in C7.7 Cottam Grid Connection Statement [APP-346]. Section 8.8 of C7.11 Statement of Need [APP-350] describes the energy security benefits of solar generation when it is deployed alongside a portfolio of wind. Section 11.5 and Table 11.1 in particular describe the role of the energy storage facility as associated development to the main solar development, contributing to the smooth

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			worst case, all for schemes that could contribute very little to decarbonisation. It is essential that these decisions are right. This must not be all for fool's gold.	operation of an electricity system with a high share of renewable energy supply. Additionally, paragraph 7.6.3 of C7.11 Statement of Need [APP-350] analyses the potential contribution of "brownfield" solar sites to the national need for solar generation. Brownfield sites, including rooftop and other community energy systems, are likely to grow in the UK and will make a contribution to decarbonisation of the UK energy system. However, C7.11 Statement of Need [APP-350] concludes in Section 7.6, that on their own, brownfield developments are unlikely to be able to meet the national need for solar.
7A-173	Principle of Development	Examining Authority	One final point to address, is that we are aware the that you, Sir, have previously acted as the Examining Authority for the Longfield Solar Farm and recommended the approval of the scheme. Having read the recommendation report, it is clear that there are material considerations that appear not to have been presented to the Examining Authority, and so we explicitly do not consider the Longfield decision as a precedent. We will return to these considerations in our Written Representations and having reflected on	The Applicant notes these comments.

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			what will be the best way to present this material in the available agendas and hearings. Thank you.	

2.19 Decommissioning and Restoration

7000 Acres – Decommissioning and Restoration [REP-124]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-174	Other Environmental Matters	Decommissioning	A decommissioning plan should be submitted within 3 months of cessation of operations, rather than the 12 months	The Applicant confirms that a decommissioning plan is secured through Requirement 21 of Schedule 2 to C3.1_C Draft Development Consent Order Revision C [EN010133/EX2/C3.1_C]. The drafting of this Requirement was clarified in Revision B of the draft Order. The decommissioning plan must be submitted to the relevant planning authority no later than 12 months prior to the date that the undertaker intends to decommission any part of the authorised development. The decommissioning plan must then be submitted to the relevant planning authority within 12 months of the intended date of decommissioning. No decommissioning works must be carried out until the decommissioning plan has been approved by the relevant planning authority. Three months would provide insufficient time for a comprehensive plan to be developed, submitted and approved by the relevant planning authority. For the avoidance of doubt, all timescales within Requirement 21 pre-date any decommissioning works, and the Scheme cannot be

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
				decommissioned until the decommissioning plan has been approved.
7A-175	Other Environmental Matters	Decommissioning	Lack of clarity on trigger for decommissioning. There should be a defined point. At present, the applicant could delay decommissioning beyond the point that the scheme becomes uneconomic.	The Applicant has amended Requirement 21 of Schedule 2 to C3.1 Draft Development Consent Order (Revision B) [REP-006; REP-007]. The change requires the date of decommissioning of the Scheme to be no later than 60 years following the date of final commissioning. Please see the updated ES Chapter 23: Summary of Significant Effects [EX2/C6.2.23_A] submitted at Deadline 2 for further information.

2.20 Summary of Representations

7000 Acres – Summary [REP-125]

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-176	Energy Need	Decarbonisation	1. Overall, the limited energy security and decarbonisation benefits the Cottam Solar Project claims to achieve are outweighed by the significant adverse impacts it would have on the region (its communities, ways of life, landscape and its wildlife) and on the nation (in particular pressure on land use and food security). 7000Acres are a group of volunteers seeking to address the fact that our community faces development of solar farms on an unprecedented scale in our region.	Please refer to response 7A-01 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-177	Planning Policy and Process	Public Consultation	2. Public Consultation was insufficient/inadequate. Information was lacking and misleading. Those affected were unable to gain understanding of the proposals.	Please refer to response 7A-04 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-178	Landscape and Visual Impact	Size & Scale	3. The proposed Cottam Solar Project would have a significant impact on visual amenity. The combined effect of four large solar farms in one area of Lincolnshire would be overwhelming.	Please refer to response 7A-05 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-179	Other Environmental Matters	Health and Wellbeing	4. CSP has the potential to have a significant detrimental impact on the general health and wellbeing of residents (rural mental health is a	Please refer to response 7A-06 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
			particularly important issue locally), depriving access to visual amenity, changing views, destroying agricultural jobs and livelihoods.	
7A-180	Other Environmental Matters	Employment	5. CSP fails to describe how proposed development could mitigate the harm through loss of employment and livelihoods caused by the development or remedy the underlying socio-economic situation.	Please refer to response 7A-07 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-181	Principle of Development	Local Parish Councils	6. All local Parish Councils and Meetings that have expressed a view to date are opposed to the proposed developments.	Please refer to response 7A-08 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-182	Principle of Development	Opposition	7. CSP will provide power to the National Grid rather than local homes. It will displace agricultural jobs, provide few employment opportunities, and reduce local amenity.	Please refer to response 7A-09 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-183	Other Environmental Matters	Employment	8. Small villages surrounded by CSP have few opportunities for employment and very few amenities other than the open countryside landscape that it sits in. The scale of the CSP would rob villages of this key attribute and erode the attractiveness of villages, therefore reducing their capacity to sustain communities and populations.	Please refer to response 7A-10 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-184	Other Environmental Matters	Size & Scale	9. The development proposed for the CSP are, in terms of size, an order of magnitude larger than any of the surrounding villages.	Please refer to response 7A-11 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-185	Landscape and Visual Impact	Panel Height	10. CSP proposes solar panels which would have a height of 4.5m as well as extensive security fencing. At that height, the character of the land would undoubtedly be dominated by solar panels, which could not be adequately screened.	Please refer to response 7A-12 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-186	Cultural Heritage	Mitigation	11. The impact of the proposed scheme to heritage and such cultural assets has not been adequately explored or mitigated.	Please refer to response 7A-13 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-187	Transport and Access	Traffic	12. The Cottam Solar Project does not adequately consider the impact of traffic through rural routes and villages and the potential for disruption, damage, and noise.	Please refer to response 7A-14 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-188	Other Environmental Matters	Food Security	13. UK Food Security has not been considered, particularly in light of the circumstances of war, pandemic, crop disease and global warming on national and global supply chains.	Please refer to response 7A-15 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-189	Soils and Agriculture	Land Use	14. The overall sustainability impact of displacing what is currently grown on productive land has not been considered (what production will be lost and the additional food miles and carbon impact of production being required elsewhere).	Please refer to response 7A-15 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-190	Ecology & Biodiversity	Harm	15. CSP does not provide a thorough assessment of the potential harm to the ecology and biodiversity of the area.	Please refer to response 7A-16 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-191	Other Environmental Matters	Lifespan	16. 60-70 year nature of the schemes is not truly temporary.	Please refer to response 7A-17 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-192	Alternatives and Design Evolution	Mitigation	17. The project design fails to consider or mitigate the impact of the large area of CSP, which dwarfs surrounding villages.	Please refer to response 7A-18 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-193	Socio-Economics, Tourism and Recreation	Alter Character	18. Development at the scale of the Cottam Solar Project would alter the character and appeal of the region to attract visitors, tourists, or new people to the region.	Please refer to response 7A-19 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-194	Socio-Economics, Tourism and Recreation	Leisure impacts	19. The direct impact of CSP on leisure and recreation have not been adequately considered.	Please refer to response 7A-20 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-195	Principle of Development	Cumulative Impact	20. The four NSIP solar projects should be considered together by the Planning Inspectorate, i.e. Cottam Solar Project, West Burton Solar Project, Gate Burton Energy and Tillbridge solar.	Please refer to response 7A-21 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-196	Principle of Development	Neighbourhood Plans	21. The project does not consider the detailed work by communities in developing approved neighbourhood plans.	Please refer to response 7A-22 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-197	Principle of Development	Displacement	22. There is no clear case for extensive displacement of farmland through the installation of large- scale ground-mounted solar farms.	Please refer to response 7A-23 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-198	Planning Policy and Process	National Planning Statement	23. The proposed project has failed to follow the requirements of the current and draft National Policy Statements.	Please refer to response 7A-24 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-199	Soils and Agriculture	Land Use	24. CSP represents a grossly inefficient use of land in the face of ever-increasing pressures on its use.	Please refer to response 7A-25 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-200	Soils and Agriculture	Soils	25. Given the potential for a margin of error or change in the developer's ALC figures, it is imperative that there is an independent soil analysis conducted to establish the accurate picture and to be certain of the methodology that has been followed.	Please refer to response 7A-26 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-201	Principle of Development	Alternatives	26. The proposed project fails in that reasonable alternatives have not been adequately considered.	Please refer to response 7A-27 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-202	Principle of Development	NSIP Misuse	27. It is a misuse of the NSIP process to develop the project in this way.	Please refer to response 7A-28 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-203	Principle of Development	Compulsory Purchase	28. CSP does not meet the necessarily high threshold to allow compulsory purchase.	Please refer to response 7A-29 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-204	Principle of Development	Information failure	29. Supporting information provided by CSP is partial and fails to objectively consider all aspects and implications of the development.	Please refer to response 7A-30 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-205	Energy Need	Disproportion	30. Combined impact of solar on the region would be disproportionate.	Please refer to response 7A-31 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-206	Energy Need	Limited Benefits	31. Limited benefits of solar (load factor & timing).	Please refer to response 7A-32 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-207	Planning Policy and Process	Government Policy	32. There is no clear Government policy case for uncontrolled development of large scale, ground-mounted solar farms.	Please refer to response 7A-33 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-208	Climate Change	Limited Impact	33. Uncontrolled development of large-scale solar farms has the potential to limit the contribution of solar to carbon reduction policy.	Please refer to response 7A-34 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-209	Climate Change	Economy	34. The claimed economic benefit of solar on energy prices is marginal.	Please refer to response 7A-35 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-210	Climate Change	Economy	35. Claiming to be able to power homes with solar and batteries at low cost is misleading.	Please refer to response 7A-36 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-211	Socio-Economics, Tourism and Recreation	Community Benefit	36. Claims of community benefit are exaggerated or misleading.	Please refer to response 7A-37 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-212	Principle of Development	Inefficient Use	37. Connecting solar directly to 400kV represents an inefficient use of strategic national infrastructure.	Please refer to response 7A-38 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-213	Principle of Development	National Grid	38. There is no requirement to connect solar direct to the National Grid.	Please refer to response 7A-39 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-214	Principle of Development	National Grid	39. Congestion in National Grid connection applications process means that the likely connection date for CSP is July September 2029, not Q1 2026.	Please refer to response 7A-40 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-215	Soils and Agriculture	Land Use	40. CSP constitutes a grossly inefficient use of land.	Please refer to response 7A-41 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-216	Other Environmental Matters	EMF	41. The developer has not made adequate consideration of the impact of Electro Magnetic Fields.	Please refer to response 7A-42 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-217	Soils and Agriculture	Soils	42. Information available relating to flood management, drainage and soil erosion are inadequate.	Please refer to response 7A-43 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-218	Ecology & Biodiversity	Biodiversity Net Gain	43. CSP have failed to explain how Biodiversity Net Gain would be achieved, nor is it clear what methodology or assumptions lie behind the assertion.	Please refer to response 7A-44 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-219	Energy Need	BESS	44. Batteries operate in a separate segment of the electricity market; the proposed energy storage system cannot be considered "associated development".	Please refer to response 7A-45 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-220	Other Environmental Matters	BESS	45. The safety and environmental concerns arising from battery development at this scale have not been appropriately considered, including through operation and transportation.	Please refer to response 7A-46 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-221	Glint & Glare	Aviation	46. The impact of glint and glare on aviation (e.g. RAF, airfields, gliding clubs), or other outdoor activities (e.g. horse riding, hunts) has not been thoroughly considered, as well as visibility from prominent roads.	Please refer to response 7A-47 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-222	Noise & Vibrations	Pollution	47. It is unclear from the information provided by CSP what noise pollution will arise from the proposed Cottam Solar Project, either from electrical equipment (e.g. battery and inverter fans), or from wind noise / resonance from the configuration of large panel structures.	Please refer to response 7A-48 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].

Reference	Theme	Issue	Summary of Issue Raised	Applicant's Response
7A-223	Other Environmental Matters	Decommissioning	48. CSP documentation provides little detail on the arrangements for decommissioning and recycling, nor the standards to which the developer would be held to at the end of the life of the project.	Please refer to response 7A-49 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-224	Other Environmental Matters	Decommissioning	49. It is evident form Financial Returns that neither CSP nor its parent company Island Green Power have direct capital to support the estimated funds to develop the project or deal with the decommissioning.	Please refer to response 7A-50 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].
7A-225	Other Environmental Matters	Sustainability	50. Any materials sourced by CSP for the development should be truly sustainable, e.g. free of forced labour, where workers' safety is paramount, and where the full environmental implications are understood.	Please refer to response 7A-51 in C8.1.2 The Applicant's Responses to Relevant Representations [REP-049].