



One Earth Solar Farm

Volume 9.0: Other Post-Submission Documents [EN010159]

Applicant Response to ExA Written Questions 3

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1. Introduction

1.1 Purpose of the Report

- 1.1.1 This report provides the Applicant's responses to the Examining Authority's Written Questions and requests for information (ExQ3) [PD-017] issued 19 November 2025 in response of the proposed One Earth Solar Farm (the 'Proposed Development').

1.2 Structure

- 1.2.1 Section 1 of this report sets out the purpose and structure of this report and explains the approach taken by the Applicant in preparing responses. Section 2 of this report provides the Applicants responses to the questions raised of the Applicant by the Examining Authority (ExA), including signposting to other responses and documents were appropriate. Where questions have been raised of other parties, the Applicant has not provided a response to those questions except where it considers that it would be helpful for the ExA for it to do so.
- 1.2.2 To minimise duplication, the Applicant has sought to cross-refer where appropriate to responses provided in other relevant submissions that have been entered into the Examination.

2. Response to ExAs 3rd Written Questions

App Ref	Summary	Applicant Response
General and cross-topic questions		
Q1.0.1	<p>Health Survey</p> <p>A number of parties have referenced a survey undertaken in advance of the application being accepted. To date this has not been submitted into the examination. Should any party consider that it has important and relevant information which the SoS should be aware of and for it to be considered by the ExA in our report, it should be submitted into the examination.</p> <p>We therefore invite all parties that might have access to this survey and consider it important and relevant to submit it into the examination.</p> <p>Note: For all parties, there has been suggestion that the Applicant is required to submit all information submitted to them during the pre-application consultation exercise. The ExA is of the view this is not correct, the Guidance states “The consultation report should set out a summary of relevant responses to consultation (but not a complete list of responses)”</p>	See response to Q1.0.2, and copy of the survey at Appendix A.
Q1.0.2	<p>Previous Written Question</p> <p>In your D4 submission [REP4- 052] response to ExQ2 – Q1.01 We asked for clarification in respect of the consultation documents as set out below.</p> <p>(1) Can the applicant reexamine their submissions in this respect, and to aid both the ExA and concerned IPs identify where within the documentation a full suite of consultation documentation can be found. The ExA wonder if a table with index may provide a simple way of identifying for all parties the full information with corresponding EL references.</p>	The Consultation Report and Appendices include all of the necessary documents in accordance with regulations and guidance. There is no requirement to include the full text of every item of feedback within the Consultation Report and the Applicant has taken a proportionate and standard approach, which was accepted by the Planning Inspectorate in its s55 checklist and in accepting the DCO application for Examination.



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	<p>(2) In undertaking the review if documents are identified to be absent, please ensure any missing elements are provided.</p> <p>As part of your answer you state “<i>All responses received were reviewed and considered, and presented in Appendix J of the Consultation Report</i>”</p> <p>However, you did not provide an answer to part 2 of our question.</p> <p>Can you confirm whether you received the 2 documents referenced by IPs, a survey of 109 people by a local Doctor Sarah Fletcher and the script of the meeting held on 1 August with the SCPC and others.</p> <p>In the event that they were received can you provide copies, and a summary from your perspective of their importance and relevance to the examination.</p> <p>If you do not consider them to be important and relevant to the examination please explain why this is the case.</p>	<p>Confirmation of documents referenced by IPs</p> <p>We confirm that the Applicant did receive both documents referenced by IPs:</p> <ul style="list-style-type: none"> • Survey of 109 people by Dr Sarah Fletcher • Notes/script of the meeting held on 1 August 2024 with SCPC and others <p>Copies of both documents are appended to this response for completeness.</p> <p>Dr Fletcher’s survey</p> <p>The feedback from Dr Fletcher on her survey of mental health in the community was reviewed and considered by the Applicant. Our responses to the issues she raised are reflected in the Consultation Report in several locations, as described in previous examination responses. For transparency, we have appended the full text of her feedback to this document (see Appendix A).</p> <p>In summary, we acknowledge the concerns that she raised. The EIA assesses health impacts during the construction, operation and decommissioning stages, as required. The impacts highlighted by Dr Fletcher relate to the pre-application period, which is why they are not assessed in the Environmental Statement. Nevertheless, the Applicant has taken these concerns seriously. Throughout the development process, the Applicant has met with neighbours who live close to the site boundary to understand and address their key concerns. Their feedback from both stages of consultation has led to significant changes to the project design to address these key concerns. For the broader community, through her submission and follow up discussions, it was clear that a key concern is that of uncertainty. This is why the Applicant committed to and followed through with follow up meetings with parish councils on both sides of the River Trent (including the updated masterplan shared on 11 September 2024) and issued a newsletter to</p>



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		<p>explain the final design masterplan that was submitted with the application and to explain the next steps. The Applicant has committed to keeping the communications lines open and updating the website with project updates when relevant to help reduce uncertainty to the best of our ability. The Applicant has also committed to providing a Community Benefit fund to help provide local benefits, and to be developed in partnership with local stakeholders.</p> <p>Meeting of 1 August 2024</p> <p>The Consultation Report Appendix J [REP1-017] includes the detailed questions that were asked in the meeting on 1 August 2024, and the Applicant's Response to them. Separate to that document, the action group submitted their notes from that meeting, which is also appended to this document (see Appendix B).</p> <p>In general, many of the issues that were raised at the meeting were a result of the fact that the statutory consultation included the Preliminary Environmental Information, as required. By definition, this means that the surveys and assessments were not complete, such that feedback from the consultation could help inform the final assessments. The notes from this meeting reflect a snapshot in time; whereas the final assessments which were informed by feedback from that consultation, and the updated documents provided through examination are now all included in the Examination Library.</p> <p>Conclusion</p> <p>Both documents were received, reviewed, and considered. While they do not introduce new issues beyond those already addressed in the ES and subsequent submissions, they were important in shaping engagement and design refinements.</p>



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Site selection and alternatives		
Q5.0.1	<p>Application of the Mitigation Hierarchy</p> <p>In undertaking an application through the Planning Act, which is recognised as EIA development, both the EIA Regulations and the NPS expect the applicant to undertake a consideration of alternatives having followed the mitigation hierarchy.</p> <p>In light of the ongoing debate with regard to the suitability of the sequential test. Can all parties present the evidence they would wish the ExA to consider in deciding how the mitigation hierarchy has been applied to avoid, reduce, mitigate or compensate for any adverse impacts.</p>	<p>The Applicant's understanding is that this question relates to the application of the mitigation hierarchy with regard to flood risk, given the reference to the Sequential Test, not adverse impacts in general. Paragraph 004 of the Planning Practice Guidance (PPG) sets out the process to be used in decision making where flood is a consideration. Each step within the process and a discussion is set out below.</p> <p>Avoid</p> <p>The discussion within the PPG on this point is largely focussed around the application of the Sequential Test and, if needed, the Exception Test. The Applicant has first sought to avoid the use of Flood Zones 2 & 3 through the application of the Sequential Test, however, as set out in the numerous submissions from the Applicant on this point, this has not been possible for sound planning and environmental reasons.</p> <p>The Applicant has also sought to avoid and reduce adverse impacts with regard to flood risk at a site layout level. The PPG states the following relating to site layouts:</p> <p>"Within sites, using site layout to locate the most vulnerable aspects of development in areas of lowest flood risk, unless there are overriding reasons to prefer a different location. In addition, measures to avoid flood risk vertically can then be taken, by locating the most vulnerable uses on upper storeys, and by raising finished floor and/or ground levels, where appropriate and that such techniques are suitably designed. Such measures should also account for residual flood risks from flood risk management infrastructure."</p> <p>With the above in mind, the FRA [REP5-028] sets out the following:</p> <ul style="list-style-type: none"> • A sequential approach to the development layout has been taken and it is proposed that sensitive equipment (such as sub-stations



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		<p>and battery storage) will be located outside of the design flood extent, ensuring they remain operational even in times of flood.</p> <ul style="list-style-type: none"> • Although there will be a need to locate inverters, within the design flood extent, the applicant has committed to these being raised above the design flood level, providing a freeboard of 300mm to ensure protection. • Solar panels will be raised above the design flood level, with the majority of panels achieving a minimum of 300mm freeboard. There are some localised positions where this height of freeboard is not achievable and this has been agreed with the EA. <p>The above points are considered to meet the needs of the PPG in terms of sequential layout of the site and avoidance through vertical raising. The applicant considers therefore that the Proposed Development meets the needs of avoidance with regards to the site layout and design however, for clarity, commentary on the remaining steps within the process set out in Paragraph 004 are included below. #</p> <p>Control</p> <p>Flood control measures to manage flood risk at the Site are not considered appropriate given the nature of the development (i.e. essential infrastructure, which policy indicates is acceptable within Flood Zones 2 and 3 as long as the policy tests are passed) and on the basis that the avoidance measures applied above result in a negligible impact on flood risk.</p> <p>Mitigate</p> <p>Flood resistance typically refers to measures which prevent the entry of flood water to a feature. Preventing water from reaching or flooding around the panel mounting structures/inverter structures is not considered appropriate as this would likely have a significant impact on floodplain storage capacity which would be difficult to mitigate against.</p>



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		<p>It is preferential therefore to allow floodwater to enter the Site as it does currently and to surround the panel mounting/inverter structures as proposed. However, resilience measures are to be incorporated by ensuring the following:</p> <ul style="list-style-type: none"> • Structures are designed to withstand anticipated flood flows (in the design flood event as a minimum) and debris impact. • Including clear span and slender structures to minimise the potential for debris blockages. • Including for maintenance actions to be taken at regular intervals and following a flood event (such as debris clearance and inspection/remediation of panel supports) <p>The measures above are proposed to minimise damage, allow faster clean up operations and repairs within the Proposed Development.</p> <p>Manage Residual Risk</p> <p>The impacts in a residual flood event in the form of a breach of flood defences have been assessed within the FRA, which concludes the following:</p> <ul style="list-style-type: none"> • The most vulnerable areas of the Proposed Development (i.e. the BESS and Substation areas) would largely remain dry in a residual event. For the western BESS and Substation area, although part of the plot could be located within the breach extent, the sensitive infrastructure would be raised 300mm above the breach level (to at least 9.0m AOD) to provide protection. • Although there could be some flooding to the solar panels in a residual event, the majority would still achieve a 300mm freeboard above flood level and on the basis that this is a residual event, this is considered acceptable.



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		<p>It is worth noting that by definition, residual risk considers the amount of risk remaining after efforts to identify and eliminate risks have been taken. With this in mind, residual flood risk is considered to be beyond the design flood event and is something that is considered in the assessment but not designed to or mitigated against.</p> <p>The Proposed Development will be generally managed remotely and there is a limited occupancy expected on Site. There are significant areas within the Order Limits which are shown to be outside of the residual flood extents and design flood extent where dry refuge can be provided and there are access/escape routes offsite to areas of Flood Zone 1.</p> <p>Furthermore, it is anticipated that occupants will be predominantly based around the BESS/Substation compounds which as already noted are predominantly outside of the residual flood extent.</p> <p>The Applicant has therefore demonstrably followed the application of the mitigation hierarchy with regards to flood risk.</p>
Air quality and emissions		
Q6.0.1	<p>BESS unplanned emissions</p> <p>At ISH3, an IP stated that in the assessment of unplanned emissions contained within the oBSMP [APP-183], it states that no sensitive receptors have been identified.</p> <p>Can the Applicant please confirm how this conclusion has been reached, including why poultry sheds and a reservoir in the locations affected have not been identified?</p>	<p>The assessment in the oBSMP [REP5-044] focussed on unplanned emissions of hydrogen fluoride (HF) to air in the event of a thermal runaway scenario. HF is not considered a long term ecological pollutant and does not carry a hazard classification for harm to aquatic life. The only established exposure guidelines relate to human health.</p> <p>On that basis, the assessment identified residential receptors as the sensitive receptors for consideration. Poultry sheds and the reservoir were not included because the risk assessment methodology is based on acute human health exposure thresholds rather than ecological or agricultural sensitivity;</p>



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		There is no evidence that HF is harmful to aquatic life. The Unplanned Emissions assessment is based on the methodology used on multiple other solar farm DCOs and accepted as the industry standard approach.
Biodiversity, ecology and natural environment (including Habitats Regulations Assessment (HRA))		
Q7.0.1	<p>Adequacy of fish assessment</p> <ol style="list-style-type: none"> 1) In light of the outstanding matters in the latest iteration of the draft SoCG can both parties advise on their position and how you anticipate the differences between you can be resolved. 2) In the event the matters remain in dispute can the EA advise how either a requirement or management plan might be adjusted to provide appropriate mitigation to ensure the relevant species are appropriately protected. 	<p>The Applicant has revised the Environmental Statement, Chapter 6 Biodiversity [REP4-014] at Deadline 6 to include fish species explicitly in the list of species considered. This update will ensure completeness and clarity and does not alter the outcome of the assessment because the mitigation embedded into the design and to be implemented through the Construction Environmental Management Plan account for impacts on all fish.</p> <p>It is the Applicant's understanding that the issue relates to completeness, as opposed to disagreement on the outcome of assessment.</p>
Compulsory acquisition, temporary possession and other land or rights considerations		
Q9.0.1	<p>Outstanding Objection to Compulsory Acquisition</p> <p>At the present time there remains an objection to the powers being sought by the applicant over your land interests.</p> <ol style="list-style-type: none"> 1) Please advise what the latest position is in respect of the objection, and if the negotiations with the applicant are likely to resolve the objections prior to the end of the examination. 2) Do the changes to the extent of powers being sort submitted by the applicant at Deadline 5 address your concerns, and if not what do you regard as outstanding? 	<p>The Applicant continues to engage constructively with JG Pears in good faith to seek a voluntary agreement. However, despite continued work to reach a voluntary agreement, JG Pears has sought commercial terms that are not commercially reasonable. The commercial proposal put forward to JG Pears bears no relation to standard valuation principles and would amount, in effect, to a ransom position.</p> <p>As the Applicant is currently unable to agree terms on this basis, compulsory acquisition remains necessary to ensure the authorised development can proceed.</p>



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Schedule 2 - Requirements		
Q10.3.1	<p>Schedule 2(5) (detailed design approval)</p> <p>The change introduced at D2 to respond to concerns from Local Authorities appears to seek approval in consultation with the county authority for (f) external appearance.</p> <p>Should this be (h) vehicular and pedestrian access, parking and circulation areas?</p>	<p>Sub-paragraph (f) of Requirement 5 relates to access and therefore is the appropriate reference. External appearance is sub-paragraph (d).</p>
Historic environment		
Q11.0.1	<p>Draft SoCG</p> <p>Within the latest iteration of the draft SoCG issued at D5 there remain a series of matters under discussion</p> <ul style="list-style-type: none"> • Magnitude of effects, • Impact upon built heritage assets (02-05, 02-06, 02-08), and • Mitigation. <ol style="list-style-type: none"> 1) Can both the applicant and Historic England update the ExA with their latest position and can HE advise on what additional work if any is required from the applicant to reach a position of agreement, and what the timeframe is for achieving this. 2) In the event that agreement is not likely to be reached by the time the examination closes can Historic England advise on what changes to the dDCO or supporting management plans if any you would recommend that would ensure that the mechanisms are in place either prior to commencement (or other suitable time frame) that the historic environment is suitably safeguarded. 	<p>The Applicant can confirm that items 02-05, 02-06 and 02-08 (Impact on built heritage assets) and 02-07 (mitigation) are now agreed between the Applicant and Historic England.</p> <p>On the remaining item – 02-04 (magnitude of effects on the view from the Observation Post within the Roman Vexillation Fortress Scheduled Monument) - the latest position of the Applicant and Historic England is set out in detail within an updated Draft SoCG (Document reference 8.7.2) following recent discussions. To summarise:</p> <ul style="list-style-type: none"> • Historic England consider the view from the Observation Post is a designed view and that a low level of less than substantial harm would arise from change to this view. As Historic England believe this low level of harm would arise from any change in this view, there are no measures that could be incorporated to mitigate this effect. • The Applicant has provided evidence to support its position that the Observation Post does not form part of a designed view. Regardless of this interpretation, the Applicant does not find that harm would arise to the significance of the Scheduled Monument as the important aspects (the extent and range) of that view would remain. The Applicant considers that the particular character of the view is less important to its contribution (which is



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		already varied, featuring pockets of development and power-related infrastructure, rather than a pristine, historically-accurate landscape) and therefore, the Proposed Development would not materially affect the established character.
Hydrology and Hydrogeology and the Water Environment		
Q12.0.1	<p>Additional Submissions</p> <p>The ExA has decided to accept two additional submissions [AS-061 and AS-062] from Mr Fox which have been published on the infrastructure website for the examination.</p> <p>Can each party set out a detailed response to all matters in each document.</p>	<p>Detailed responses to the referenced submissions can be found in Sections 3 and 4 of the Applicant's Response to D5 Submission Document.</p> <p>The Applicant observes that Mr Fox's submissions at AS-061 and AS-062 (and previous submissions) appear to have been drafted (at least in part) using artificial intelligence (AI). The Applicant is not aware of Mr Fox having made any declaration of the use of AI, as is required by Planning Inspectorate Guidance (Use of artificial intelligence in casework evidence, September 2024). Specifically, if any person utilises AI then they are obliged to inform the Examining Authority that they have done so, identify which AI system has been used, identify the source of information that the AI content is based on plus take practical steps such as labelling information and providing dates of access to the AI.</p>
Q12.0.2	<p>Policy compliance</p> <p>Paragraph 5.8.12 of NPS EN-1 states:</p> <p><i>"Development should be designed to ensure there is no increase in flood risk elsewhere, accounting for the predicted impacts of climate change throughout the lifetime of the development. There should be no net loss of floodplain storage and any deflection or constriction of flood flow routes should be safely managed within the site. Mitigation measures should make as much use as possible of natural flood management techniques."</i></p>	<p>The Applicant notes that this question is to the EA, but would note the following in terms of interpretation of paragraph 5.8.12.</p> <p>Item (1)</p> <p>Paragraph 001 of the Planning Practice Guidance (PPG) defines flood risk as "a combination of the probability and the potential consequences of flooding". The Development Proposals are not considered to result in a change in probability of flooding as this is dictated by weather patterns and river conditions. The question as to whether an increase in flood level results in an increase in flood risk is therefore predominantly focussed on what the consequence of such a change would be.</p>



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	<ol style="list-style-type: none"> 1) Does an increase in flood levels of any amount, caused by the proposed development, result in a higher flood risk, in policy terms as outlined above? Please provide evidence and policy context for the position. 2) Does the proposed development result in a net loss of floodplain storage? 3) Has the scheme been designed to ensure that any deflection or constriction of flood flow rates are safely managed? 	<ul style="list-style-type: none"> • An increase in flood depth within the normal tolerances allowed for by the EA in their modelling software should not be considered to be an increase in flood risk. This is because the purpose of these tolerances is to allow for the potential for inaccuracies in the modelling software. The Applicant has used the term 'negligible' rather than 'no increase' to recognise that the flood volume assessment (as agreed with the EA) showed a very small increase in flood depth of 2.2mm and 3.5mm to the west and east of the River Trent respectively. • This is well within the tolerances of the EA model and would not in the Applicant's view result in an increase in actual flood risk. • Furthermore, as set out at page 34 of the FRA [REP5-028] the Applicant has carried out a conservative assessment which suggests that this figure is likely to be an over-estimation of the likely increase in flood depth. <p>Item (2)</p> <p>With regards to floodplain storage, locating any built development within the design flood extent will result in a loss of storage capacity, unless floodplain compensation is provided. However, floodplain storage and flood risk are inherently linked and the purpose for indicating there should be no net loss in floodplain storage is to aid in ensuring no increase in flood risk.</p> <p>There are typically two ways to assess impacts on floodplain storage. Firstly, through a flood volume assessment (as undertaken) and secondly via hydraulic modelling and assessing the depth difference impacts, both of which have been undertaken as part of the application. On the basis that both assessments indicate that the change in flood level would be within the negligible tolerance, it is considered that there is a negligible impact on floodplain storage</p>



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		<p>Item (3)</p> <p>Through the hydraulic modelling exercise, a flow constriction layer has been applied to take account of any blockage that the proposed panel mounting structures could have. The results of this assessment confirm that flood level increases are within the negligible tolerance as agreed with the EA.</p> <p>There are extremely minor and localised increases in flood extent shown in the proposed scenario (i.e. were dry, now wet) when compared to the baseline. These are discussed in greater detail in the FRA submitted at deadline 6 however, based on the land use and existing surrounding flooding at these areas, any minor change in extent is not considered to cause additional effects or constitute a change in flood risk. Based on these responses, it is considered that the deflection or constriction of flood flows are safely managed.</p>
Q12.0.3	<p>Policy compliance</p> <p>Paragraphs 5.8.30 and 5.8.31 of, NPS EN-1 states:</p> <p><i>“Where a development may result in an increase in flood risk elsewhere through the loss of flood storage, on-site level-for-level compensatory storage, accounting for the predicted impacts of climate change over the lifetime of the development, should be provided.</i></p> <p><i>Where it is not possible to provide compensatory storage on site, it may be acceptable to provide it off-site if it is hydraulically and hydrologically linked. Where development may cause the deflection or constriction of flood flow routes, these will need to be safely managed within the site.”</i></p> <p>1) Does the proposed development result in an increase in flood risk elsewhere through the loss of flood storage?</p>	<p>The Applicant notes that this question is to the EA, but would note the following in terms of interpretation of paragraphs 5.8.30 and 5.8.31: There is a negligible loss of flood storage for the same reasons identified in the Applicant’s response to item (2) of Q12.0.2. This is as a result of the panel mounting structures which water would flow around but nevertheless result in a minor physical incursion into the flood water, in the same way as an agricultural fence would do, which is normal development in this type of landscape. As noted above, this negligible loss of flood storage is not considered to result in an actual increase in flood risk and the associated increase in flood level is within the negligible 5mm tolerance as agreed with the EA.</p> <p>The Applicant’s position is that the negligible change in flood level set out, would not constitute an increase in flood risk.</p> <p>Please see the Applicant’s response to Q12.0.2 above for further detail.</p>



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	2) Can the EA please provide their position on whether both aspects of this policy test have been met, including evidence to support the position.	
Q12.0.4	<p>Policy compliance Paragraph 5.8.41 of NPS EN-1 states:</p> <p><i>“Energy projects should not normally be consented within Flood Zone 3b, or Zone C2 in Wales, or on land expected to fall within these zones within its predicted lifetime. This may also apply where land is subject to other sources of flooding (for example surface water). However, where essential energy infrastructure has to be located in such areas, for operational reasons, they should only be consented if the development will not result in a net loss of floodplain storage, and will not impede water flows.” (Our Highlighting)</i></p> <p>1) Can the EA confirm that the proposed development would not result in a net loss of floodplain storage?</p> <p>2) Can the EA confirm that the proposed development would not impede water flows?</p> <p>In light of the above two questions can the Applicant and the EA please provide their position on whether both aspects of this policy test have been met, including evidence to support the position.</p>	<p>The applicant interprets that Paragraph 5.8.41 should be read in its entirety and that the ExA highlighted section is with regards to Flood Zone 3b (i.e. there should be no loss of floodplain storage or impeding of flows within Flood Zone 3b). A discussion of losses in floodplain storage and impacts on flows for the design flood event has been provided in response to the previous questions.</p> <p>The only proposed development within Flood Zone 3b is associated with ecological enhancement and the proposed cable crossing which is beneath the River Trent. For clarity, no land raising will be proposed as part of the ecological enhancements or the proposed cable crossing, meaning there will be no loss of floodplain storage within Flood Zone 3b.</p>
Q12.0.5	<p>Policy compliance In the event that one or both aspects of the policy tests set out in question Q12.0.3 above, paragraph 5.8.42 of NPS EN-1 states:</p>	<p>The Applicant’s position is that the Proposed Development would not result in an increase in flood risk, for the reasons given above.</p> <p>Notwithstanding this, if the ExA form a different view, the Applicant’s position is that the Proposed Development would in any event comply with paragraph 5.8.42 of NPS EN1 for the following reasons:</p>



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	<p><i>“Exceptionally, where an increase in flood risk elsewhere cannot be avoided or wholly mitigated, the Secretary of State may grant consent if they are satisfied that the increase in present and future flood risk can be mitigated to an acceptable and safe level and taking account of the benefits of, including the need for, nationally significant energy infrastructure as set out in Part 3 above. In any such case the Secretary of State should make clear how, in reaching their decision, they have weighed up the increased flood risk against the benefits of the project, taking account of the nature and degree of the risk, the future impacts on climate change, and advice provided by the EA or NRW and other relevant bodies.”</i></p> <p>Can the EA please set out their position on this policy requirement, including evidence to support the position taken.</p>	<ul style="list-style-type: none"> • The increases in flood level for the design flood event (i.e. 1 in 100 year plus 39% climate change scenario) shown are within the 5mm negligible tolerance agreed with the EA (see Q12.0.2) and so is not considered to constitute an increase in flood risk. • On this basis, future flood risk is considered to be mitigated to an acceptable and safe level. • This modelled negligible increase in flood depth occurs in the 1 in 100 year plus 39% climate change scenario, which is considered be a relatively low probability of occurrence. • The benefits of the Proposed Development, as articulated in the Statement of Need [REP2-047] and Planning Statement [APP-168], for a development which is recognised by policy as Critical National Priority Infrastructure for which there is an urgent need, clearly outweigh any negligible impact to flood level, should the ExA disagree with the Applicant.
Q12.0.6	<p>Mitigation hierarchy</p> <p>At ISH3 the EA stated that they were satisfied with the Applicant's approach to the mitigation hierarchy.</p> <ol style="list-style-type: none"> 1) Can the EA please provide a full explanation and reasoning for this position, including reference to national policy. 2) Can the EA please explain how they consider the first stage of the mitigation hierarchy, avoid, has been addressed successfully? 	<p>Paragraph 004 of the Planning Practice Guidance (PPG) sets out the process to be used in decision making where flood is a consideration. Each step within the process and a discussion is set out below.</p> <p>Avoid</p> <p>The discussion within the PPG on this point is largely focussed around the application of the Sequential Test and, if needed, the Exception Test. With regards to the Sequential Test, the EA have indicated in response to the ExA questions at D4 that they defer to the Local Planning Authorities views on whether this is passed. It is assumed therefore that the expectation for responses be focussed around meeting the needs of a sequential approach to the layout of the development.</p> <p>The PPG states the following relating to site layouts:</p> <ul style="list-style-type: none"> • “Within sites, using site layout to locate the most vulnerable aspects of development in areas of lowest flood risk, unless there are overriding reasons to prefer a different location. In addition,



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		<p>measures to avoid flood risk vertically can then be taken, by locating the most vulnerable uses on upper storeys, and by raising finished floor and/or ground levels, where appropriate and that such techniques are suitably designed. Such measures should also account for residual flood risks from flood risk management infrastructure.”</p> <p>With the above in mind, the FRA [REP5-028] sets out the following:</p> <ul style="list-style-type: none"> • A sequential approach to the development layout has been taken and it is proposed that sensitive equipment (such as sub-stations and battery storage) will be located outside of the design flood extent, ensuring they remain operational even in times of flood. • Although there will be a need to locate inverters, within the design flood extent, the applicant has committed to these being raised above the design flood level, providing a freeboard of 300mm to ensure protection. • Solar panels will be raised above the design flood level, with the majority of panels achieving a minimum of 300mm freeboard. There are some localised positions where this height of freeboard is not achievable and this has been agreed with the EA. <p>The above points are considered to meet the needs of the PPG in terms of sequential layout of the site and avoidance through vertical raising.</p> <p>The applicant considers therefore that they meet the needs of avoidance with regards to the site layout and design however, for clarity, commentary on the remaining steps within the process set out in Paragraph 004 are included below.</p> <p>Control</p> <ul style="list-style-type: none"> • Flood control measures to manage flood risk at the Site are not considered appropriate given the nature of the development (i.e.



App Ref	Summary	Applicant Response
		<p>essential infrastructure, which policy indicates is acceptable within Flood Zones 2 and 3 as long as the policy tests are passed) and on the basis that the avoidance measures applied above result in a negligible impact on flood risk.</p> <p>Mitigate</p> <p>Flood resistance typically refers to measures which prevent the entry of flood water to a feature. Preventing water from reaching or flooding around the panel mounting structures/inverter structures is not considered appropriate as this would likely have a significant impact on floodplain storage capacity which would be difficult to mitigate against.</p> <p>It is preferential therefore to allow floodwater to enter the Site as it does currently and to surround the panel mounting/inverter structures as proposed. However, resilience measures are to be incorporated by ensuring the following:</p> <ul style="list-style-type: none"> • Structures are designed to withstand anticipated flood flows (in the design flood event as a minimum) and debris impact. • Including clear span and slender structures to minimise the potential for debris blockages. • Including for maintenance actions to be taken at regular intervals and following a flood event (such as debris clearance and inspection/remediation of panel supports) <p>The measures above are proposed to minimise damage, allow faster clean up operations and repairs within the Proposed Development.</p> <p>Manage Residual Risk</p>



App Ref	Summary	Applicant Response
		<p>The impacts in a residual flood event in the form of a breach of flood defences have been assessed within the FRA, which concludes the following:</p> <ul style="list-style-type: none"> • The most vulnerable areas of the Proposed Development (i.e. the BESS and Substation areas) would largely remain dry in a residual event. For the western BESS and Substation area, although part of the plot could be located within the breach extent, the sensitive infrastructure would be raised 300mm above the breach level (to at least 9.0m AOD) to provide protection. • Although there could be some flooding to the solar panels in a residual event, the majority would still achieve a 300mm freeboard above flood level and on the basis that this is a residual event, this is considered acceptable. <p>It is worth noting that by definition, residual risk considers the amount of risk remaining after efforts to identify and eliminate risks have been taken. With this in mind, residual flood risk is considered to be beyond the design flood event and is something that is considered in the assessment but not designed to or mitigated against.</p> <p>The Proposed Development will be generally managed remotely and there is a limited occupancy expected on Site. There are significant areas within the Order Limits which are shown to be outside of the residual flood extents and design flood extent where dry refuge can be provided and there are access/escape routes offsite to areas of Flood Zone 1.</p> <p>Furthermore, it is anticipated that occupants will be predominantly based around the BESS/Substation compounds which as already noted are predominantly outside of the residual flood extent.</p>
Q12.0.7	<p>SoCG</p> <p>Can the Applicant and the EA please update the SoCG to account for D5 submissions.</p>	<p>An updated SoCG has been submitted at Deadline 6 which indicates that with the exception of one item, all points have now been agreed.</p>



App Ref	Summary	Applicant Response
		<p>The outstanding item is with regards to the hydraulic flood modelling that has been undertaken. The hydraulic model and results of modelling have been shared and discussed with the EA who have broadly agreed with the model build and resulting impact on flood risk (all of which are considered to be negligible).</p> <p>The results of the modelling have been summarised in to the updated FRA, submitted at Deadline 6 and once the EA have had the opportunity to review this in detail, it is expected that this item can be amended to "Agreed".</p>
Q12.0.8	<p>Cumulative Impacts</p> <p>Are the EA satisfied that the cumulative impacts of the proposed development on the Trent Valley catchment have been assessed adequately?</p>	<p>The approach to cumulative effects that have been agreed with the EA are included as "agreed" within the Statement of Common Ground submitted for Deadline 6.</p>
Q12.0.9	<p>Sequential Test</p> <p>With in their D5 submission [REP5-081] WLDC repeated their request for a table showing for each AP site, the area of the sites within each of the flood zones.</p> <p>For clarity, the full request is as follows:</p> <p>(3) To provide clarity, WLDC request the applicant provide, for all sites considered in the sequential test, a table setting out, for each of the AP sites considered, the area (in hectares) located within each of flood zones 1, 2 and 3. WLDC also request a similar table setting out agricultural land classification per AP site. This will provide clear comparable data for each of the alternative sites.</p>	<p>As set out in Applicant Response to Deadline 4 Submissions [REP5-072] Ref: D4R5 and Applicant Response to Deadline 3 Submissions [REP4-051] Ref: D3R1, it is an over simplification to make a direct comparison between the proportion of the flood zones within alternative sites as a whole located compared with the Order Limits, as no design work has been undertaken or any further environmental impact assessment, and doing that further work could result in infrastructure other than panels being located wholly within Flood Zone 2 and 3 (whereas, with the Proposed Development the Applicant has avoided siting substations or the BESS in Flood Zones 2 and 3). Without developing each alternative site and undertaking detailed environmental assessments, and design development, a direct comparison of apportionment in each flood zone is not possible, and to do this additional work would not be reasonable or proportionate (nor required by the policy nor guidance). The approach taken to date is proportionate, and the Applicant must balance a wide range of considerations when selecting a site, which was done carefully and robustly both at site selection stage and during Examination.</p>



App Ref	Summary	Applicant Response
	<p>Can the Applicant please provide the full details of the request made by WLDC to further assist the examination in understanding the relative position of the sites considered.</p>	<p>However, the Applicant has been asked to provide this simplified table by the ExA at ExAQ3 Q12.0.9 and has therefore provided this below for all alternative sites identified in Sequential and Exception Test Assessment [REP2-080] and Sequential and Exception Test Assessment Addendum [REP3-069]. The Applicant has provided this comparison as a percentage which makes the information easier to compare across the different sites, given the different sizes provided in the different assessments.</p> <p>As set out above, it should be noted that the below percentages are based solely on the site boundaries, and no detailed environmental assessment or design work has been undertaken, which is not required by the relevant policies or guidance.</p> <p>It is noted that none of the landowners of the alternative sites identified in the Sequential Test and Exception Test Assessment or Addendum came forward during the initial site selection process to offer land to the Applicant. Whilst the PPG states that the Applicant does not have to own the land to make it reasonably available, it is recognised that it is desirable to assemble a solar site in as few land ownerships as possible to minimise legal complexities, disruption and project costs and that compulsory acquiring land is a lengthy and stringent process that would put the 2029 connection date at risk in this case whilst interfering with rights in property.</p> <p>The Applicant confirms that the following AP-sites have more or are comparable in terms of the proportion of Flood Zone 2/3 within the site boundary and as such are not sequentially preferable to the Order Limits; AP3, AP8, AP10, AP11, AP13 and AP16.</p> <p>8 AP-sites have a percentage of Flood Zone 2/3 within the site boundary, however the Applicant notes that the percentage is lower than the Order Limits, as set out in the table below. These sites have been discounted as not reasonably available, but not solely because of the apportionment of flood zones. It should be noted however, that the policy test and guidance aims to 'steer new development to areas with the lowest risk of</p>



App Ref	Summary	Applicant Response
		<p>flooding from any source' and the alternative sites identified which still have a percentage of Flood Zone 2/3 are still within areas of highest risk of flooding, and so even though there might be a smaller area of Flood Zone 2/3, there has been no design development, meaning that should this site have been selected using the sequential test approach alone, through design development and technical assessments, the sensitive equipment might have to be located in Flood Zone 3, all solar PV located within Flood Zone 2 and 3, and only mitigation/engagement measures located within the parcels of Flood Zone 1 which might be unavoidable, but an unknown at this stage. It is for this reason that sites with a percentage of Flood Zone 2/3 within the boundary cannot automatically be considered sequentially preferable to the Order Limits.</p> <p>It is also important to note that there are many other considerations that must be assessed and balanced against the sequential test and flood zones, and that all of the alternative sites had additional reason for being discounted, beyond simply land ownership and flood zone apportionment, which is supported by the PPG which confirms at paragraph: 023 Reference ID: 7-023-20220825 that the sequential test should be applied "where it is compatible with sustainable development objectives to do so". These considerations are set out in detail within the Sequential and Exception Test Assessment [REP2-080] and Sequential and Exception Test Assessment Addendum [REP3-069].</p> <p>AP15 and AP17 have 0% Flood Zone 2/3 within the site boundary. AP17 was discounted on heritage grounds, and for AP15 it was concluded that on balance this site could be considered acceptable, subject to detailed technical assessments. However, AP15 alone could not deliver the same development need within similar timescales (as required by the PPG) given its size and cannot therefore be considered 'reasonably available' in the context of the sequential test.</p> <p>The Applicant also reiterates that as per paragraph: 027a Reference ID: 7-027a-20220825 of the PPG, the sequential test should be applied proportionately, focusing on realistic alternatives, which the Applicant</p>



App Ref	Summary	Applicant Response			
		<p>considers has been done in this case, and the sequential test has been passed.</p>			
		Site ID	FZ3	FZ2 (inclusive of FZ3)	FZ1
		AP1	29.2%	35.0%	65.0%
		AP2	20.2%	42.3%	57.7%
		AP3	30.2%	70.1%	29.9%
		AP4	18.5%	40.5%	59.5%
		AP5	7.4%	9.4%	90.6%
		AP6	0.3%	0.7%	99.3%
		AP7	14.3%	20.8%	79.2%
		AP8	89.2%	93.8%	6.2%
		AP9	16.3%	37.7%	62.3%
		AP10	18.0%	71.0%	29.0%
		AP11	42.9%	51.9%	48.1%
		AP12	11.1%	33.3%	66.7%
		AP13	98.8%	100.0%	0.0%
		AP14	1.7%	2.6%	97.4%
		AP15	0.0%	0.0%	100.0%
		AP16	39.4%	53.1%	46.9%
		AP17	0.0%	0.0%	100.0%
		One Earth	44%	54%	46%
		<p>The Applicant notes the request from WLDC for a similar table for ALC, however the Applicant has confirmed within the aforementioned</p>			



App Ref	Summary	Applicant Response
		documents that all of the sites (with the exception of AP14) are located predominantly within Grade 3 ALC so are comparable to the Order Limits, and the grade of ALC has not been used to discount these sites, so whilst a table can be provided as part of the Statement of Common Ground if necessary it does not feel relevant to the discussions being had with WLDC on the sequential test approach. The Applicant confirms that AP14 is located predominately within Grade 2 land, which has been taken into consideration when assessing this site for suitability for solar development.
Land use and Soils		
Q13.0.1	<p>Draft SoCG – Soil Storage</p> <ol style="list-style-type: none"> 1) Within the latest iteration of the draft SoCG reference is made to WG – please clarify what this refers to. 2) Please clarify the status of the position in respect of soil storage, there appears there may be a discrepancy between Table 18.4 and the Risk and Issues Log NE17. <p>In respect of NE17 reference is made to a meeting with the Applicant on 15 September 2025, which document before the Examination addresses the concern identified?</p>	<ol style="list-style-type: none"> 1) WG refers to the Welsh Government. 2) Keeping soil within storage bunds for the duration of the project can result in a slight but not significant increase in potassium and phosphorous and no measurable change in organic matter. It is recognised that there is a potential small risk of storing soils for a long duration however with proper management outlined within the Soil Management Plan and a sustained grass overlay the soil is not expected to see a significant decrease in quality or function.
Transportation and traffic		
Q18.0.1	<p>Visibility splays</p> <ol style="list-style-type: none"> 1) Can the Applicant please provide evidence to substantiate the claim made at ISH3 and subsequently stated at D5 [REP5-071], that land outside the control of the Applicant (i.e. outside of the RLB and not on public highway) will not be required to provide visibility splays, as shown on drawings. 	The Applicant wishes to clarify this applies to a single location at Access 9 as depicted in the Transport Assessment [REP5-030]. In this location, the maximum visibility splay passes outside of the Order limits. This splay has been identified based on the outline design parameters and posted speed limit (rather than recorded speed limit). The design will be refined at detailed design and include a further review of measured road speeds.



App Ref	Summary	Applicant Response
	<p>2) Whilst noting the Applicant's reference to Requirements 5 and 15, can the Applicant please explain what happens in the situation that speed surveys show that full visibility splays are required for access points, being greater than the land within the RLB?</p> <p>Can the Applicant please explain what actions are necessary to give the SoS comfort that the access points as described with the dDCO are deliverable and appropriate visibility splays can be achieved to ensure the safe operation of the proposed access points?</p>	<p>During the construction phase, the Applicant would seek to implement a temporary speed limit reduction in the vicinity of the access to provide the appropriate stopping sight distances based upon speed survey data. Article 16 of the draft DCO provides the power for the undertaker to make traffic regulation measures, including making temporary provision as to the speed at which vehicles may proceed along any road.</p> <p>If the measured road speeds indicate that a visibility splay is required outside of the Order limits in this area, the undertaker would therefore rely on Article 16 to temporarily limit the road speeds to ensure the access point can be utilised safely. Additional measures including the use of temporary traffic signals and banksman monitoring may also be provided.</p>
Q18.0.3	<p>A57 access point</p> <p>Following the submissions at D5 from the Applicant, can NCC please confirm whether there are any outstanding matters still to be resolved?</p>	<p>The Applicant understands that all matters are now agreed with respect to this junction, subject to the formal submission of an updated drawing illustrating revised visibility splays and SSD details, which both parties agree can be delivered on site.</p>
Q18.0.4	<p>Access junction drawings</p> <p>Are NCC now satisfied that all relevant drawings have been submitted by the Applicant at D5 and those drawings provide the necessary detail you require? If not, please provide details of what matters remain outstanding.</p>	<p>The Applicant considers that all queries raised to date in relation to access junction drawings have been addressed as far as practicable at this stage of the Examination. The drawings submitted at Deadline 5 provide the level of detail appropriate for the consenting process. A further updated drawing is being issued at Deadline 7 to formally close out the remaining query and to allow the Statement of Common Ground to be fully agreed.</p> <p>Any remaining matters of detail will be resolved through the technical approval process with the relevant highway authority, in accordance with established procedures secured in the DCO.</p>
Q18.0.5	<p>New access points</p>	<p>The Applicant considers that the provisions within Requirement 5 (detailed design) and Requirement 15 (construction traffic management plan) are sufficient to ensure that suitable access junctions can be delivered.</p>



App Ref	Summary	Applicant Response
	Are NCC satisfied with the details within Requirement 5 (detailed design) and Requirement 15 (CTMP), with regards to the ability for safe access points to be delivered?	Any further matters of detail will be addressed through the technical approval process with the relevant highway authority, in accordance with established procedures.
Cumulative Effects		
Q19.0.1	<p>Cumulative Effects on agricultural land and soil function.</p> <p>Can Natural England advise on the latest position in respect of this matter, the latest iteration of the SoCG at 03-06 advises the applicant was to address this matter at D4. Are NE now content with the evidence provided by the applicant?</p>	Natural England have provided additional comments following the updates made at Deadline 6. These changes have been made, and Natural England will provide feedback at deadline 7.

Appendix A Dr Fletcher's Survey

Study: The Impact of the One Earth Solar Farm on Mental Health

BACKGROUND

[REDACTED] I have a background in community General Practice, currently specialising in patient health in custodial settings with a special interest in Substance Misuse.

The One Earth Solar Farm Proposal is a plan to convert around 3,500 acres of agricultural land and countryside around the over 1,000 year old historic villages of North and South Clifton, Fledborough, Ragnall, and surrounding Nottinghamshire parishes into a massive industrialised solar 'farm'. In total almost 4,000 acres of farmland will be removed from important food production and if it is given the go-ahead, it will be one of – if not *the* – largest solar farm in Northern Europe, and over four times larger than the largest solar farms in comparable countries such as France and Germany.

The loss of countryside has profound effects on small communities, disrupting their way of life and cultural heritage. Rural areas often rely on the countryside for their economic activities, such as farming, tourism, and local craftsmanship. As these lands are lost to urbanization or industrial development, small communities may face economic decline, loss of jobs, and diminished social cohesion. Additionally, the natural environment plays a crucial role in the identity and traditions of these communities and its loss can lead to a weakening of communal bonds and a sense of place. This transformation can result in population decline as residents move elsewhere, further eroding the social fabric of these communities.

A study into the mental health effects of industrial development is crucial for understanding how rapid industrialization impacts psychological wellbeing. Industrial developments such as this, by the developers own admission, do not provide large long term employment opportunities and increased wealth across these communities, but can instead lead to environmental pollution, in the form of noise, constraints on social activities previously enjoyed and disruption. This may then contribute to stress, anxiety, and other mental health issues. Additionally, the loss of natural spaces due to industrial expansion can further exacerbate these problems.

Unwanted industrial developments such as the One Earth Solar Farm can significantly impact mental health, often fostering a sense of social injustice among affected communities. This sense of injustice arises from a perceived disregard for their well-being and opinions, leading to frustration and diminished trust in decision-makers. The emotional toll of feeling sidelined or unfairly treated can exacerbate mental health issues, highlighting the need for equitable and transparent planning processes that genuinely consider community concerns and protect their quality of life.

By investigating these effects, the study can inform policies and practices that mitigate negative mental health outcomes, promoting a healthier balance between industrial progress and community wellbeing.

Study: The Impact of the One Earth Solar Farm on Mental Health

As a GP, human health falls high on my agenda. When browsing the One Earth information booklets, I was immediately struck by the following statement:

‘Human Health – Likely significant positive effect’.

This is a quote from One Earth regarding how they believe their solar proposal will impact human health. The booklet refers to positive effects on physical health from green energy but there was little to no mention of mental health, which forms one of the major components of human health alongside the physical element.

There is a strong association between mental and physical health. Evidence indicates that mental health problems such as stress and anxiety are strongly linked to causality and exacerbation of many physical health problems, for example stress and anxiety causing and/or worsening high blood pressure. We also know that physical health problems can cause and/or exacerbate mental health problems. Or mental health conditions can run parallel to physical health problems, but they may be unrelated. There is overlap between these two brackets of health, but they are equally important.

Concerned that mental health had not been recognised by One Earth, I produced a document outlining some personal concerns regarding the mental health of numerous residents I had spoken to privately about how the project was making them feel (Appendix 1).

These findings prompted me to conduct a study within the local area to produce some evidence relating to the impact of the One Earth Solar proposal on mental health.

METHODOLOGY

This is an anonymous study conducted over approximately two weeks in July 2024 to ascertain the impact of the One Earth Solar project on the mental health of the people living in the affected areas.

Mental health questionnaires were distributed throughout the villages of South and North Clifton (Appendix 2). No personal information other than gender and age was asked to be provided.

Those wishing to partake completed the form and handed it back, either at the time or at a later date.

The data from the above forms was then collated and summarised as follows.

Study: The Impact of the One Earth Solar Farm on Mental Health

STUDY RESULTS

109 completed questionnaires were received.

Demographics

Age

- Range: 23 - 85 years
- Mean (average): 50 years

Gender

- Female: 54 (49%)
- Male: 47 (43%)
- Not Stated: 9 (8%)

Area of Residence

- South Clifton: 35 (32%)
- North Clifton: 65 (60%)
- Spalford: 2 (1.5%)
- Thorney: 2 (1.5%)
- Not Stated: 6 (5%)

Findings

Demographics

- There was a similar split between male and female participants (43% and 49% respectively).
- Mean age of participants 50 years.
- North Clifton had the majority of participants (60%), followed by South Clifton (32%).

Impact of One Earth Solar project on mental health

- 83% (90 participants) stated that their mental health was already being negatively impacted by the One Earth Solar proposal.
- 86% (94 participants) stated that their mental health was likely to worsen should the One Earth Solar proposal be approved.

Individual comments regarding how the One Earth Solar proposal is currently negatively affecting mental health

- See Appendix 3

Individual comments regarding how mental health is likely to worsen should the One Earth Solar proposal be approved

- See Appendix 4

Study: The Impact of the One Earth Solar Farm on Mental Health

Further comments relating to mental health and the One Earth Solar proposal

- See Appendix 5

DISCUSSION

An overwhelming majority (83%) of participants stated they believed their mental health was already being negatively affected by the solar proposal with a similar majority (86%) believing their mental health was likely to worsen should the project be approved.

Emotions and disorders most referred to in the comments section included anxiety, stress, sleep problems, low mood and depression. One comment from a participant made reference to the fact they had already sought advice and support from their GP and were now on medication and having therapy. There was further reference to medication, with one individual stating they were requiring sleeping medication and another that they had increased the dose of their anxiety medication because of the impact the One Earth proposal was having on their mental health. A further comment was from an individual who stated due to anxiety and sleep deprivation they have lost time with their newborn baby. There were statements from several individuals who were concerned about worsening of their current mental health conditions.

Regarding physical health, one individual stated the stress from a previous solar farm installation caused them to have a stroke, whilst another expressed concern that the stress of the current situation was causing flare-ups of their vertigo.

Common factors which were repeatedly referenced to relating to why the project was causing deterioration of mental health included concern over destruction of the countryside, loss of countryside views, fall in house prices/reduced saleability, negative impact on leisure activities, increased flood risk, food insecurity, wildlife destruction, community disagreements due to differing opinions, uncertainty of long-term health risks and noise/traffic pollution.

There is an overwhelming sense of despair. Many imply their lives will never be the same again should the project go ahead, and due to the fall in house values, moving away would probably not be possible. There is an overall impression that many individuals feel trapped within the area and unable to escape what is coming to them. Many of the comments were extremely upsetting and disturbing to read.

There were no positive comments given relating to impact on mental health, even by the study participants who indicated their mental health is not, and likely will not be impacted by the proposals.

There has clearly been an oversight of the important matter of mental health by One Earth. The evidence provided here clearly demonstrates there **is** a major concern relating to human health **currently** in our local community which has been created solely by the One Earth Solar Panel proposal. This evidence clearly contradicts the statement that the One Earth Solar project is likely to have a 'significant positive effect' on human health. Given that this research has been conducted at a relatively early stage in the project, this is of **grave concern**.

Study: The Impact of the One Earth Solar Farm on Mental Health

ACTIONS

1. To submit this study to the company One Earth as evidence for the negative impact this proposal is already having on the mental health of the local community.
2. To submit this evidence formally to the South Clifton Parish Council requesting it is presented to One Earth at their next joint meeting.
3. Although not a member of the Parish Council, I intend to participate in future Parish Council meetings to encourage our community mental health to be given the priority status it deserves.
4. To continue collecting data as evidence of how this project is impacting community mental health.

Dr Sarah Fletcher

General Practitioner

MBChB, DFRH, DRCOG, MRCGP, GPwER Substance Misuse

July 2024

Study: The Impact of the One Earth Solar Farm on Mental Health

Appendix 1: The Impact of the One Earth Solar Project on Mental Health (Dr S. Fletcher, July 2024)

‘Human Health – Likely significant positive effect’.

This is a quote from the One Earth consultation booklet regarding how their solar industrialisation project will apparently impact human health.

Does it take a doctor to highlight that human health incorporates mental health as well as physical health? As a doctor, I am faced with the spectrum of manifestations of mental health conditions on a daily basis, therefore when I first became aware of the One Earth Solar proposal the impact on mental health came to mind immediately. I would expect the majority of people to realise the importance of mental health, especially as there has been a general increase in the awareness of such over recent years. I am therefore astonished that mental health has not been given any consideration whatsoever relating to the One Earth Solar proposal.

Mental health incorporates everything relating to how one feels, encompassing psychological and emotional well-being. This influences how the individual acts and the choices they make. A few examples of some of the common emotions and disorders that fall under the mental health bracket include stress, worry, anger, anxiety, sleep disturbance, low mood and depression, which can unfortunately then lead to acts such as self-harm, substance misuse and suicide. One in four people will experience a mental health problem of some kind each year in England¹, with around one in six people reporting to experience a common mental health disorder, such as anxiety and depression².

Mental health problems are **very common**. Mental health is **very important**.

So, what is the relevance of this in relation to the One Earth industrialisation proposals? I am certain that should this project proceed, it will have a significant negative effect on the mental health of many people in the immediate and surrounding areas. I can go further in saying I am certain mental health is already being damaged, even at this early stage, and included in this document is evidence to support this. Even though the numbers affected may seem small, the percentage of the population exposed to the proposed installation (whether nearby or further afield) whose mental health will be affected negatively by the project will be very high. It is important to realise that new mental health problems have sadly already been and will be created going forward. There will also be a worrying compounding of existing mental health problems, increasing the risk of more serious conditions developing.

Most people who live or have chosen to move to a rural area have intentionally done so to benefit from the countryside experience. This may include a considered move to a rural area from perhaps a more built-up environment, thus a contrast in views from buildings, for example, to open fields. There is the advantage of access to rights of way such as bridleways, byways and footpaths, benefiting those such as horse riders, walkers, cyclists and runners.

¹ McManus, S et al (2009). Adult psychiatric morbidity in England, 2007: results of a household survey.

² McManus S, Bebbington P, Jenkins R, Brugha T. (eds.) (2016). Mental health and wellbeing in England: Adult psychiatric morbidity survey 2014.

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These leisure pursuits are ways that people unwind from the stresses of everyday life and keep themselves physically and mentally healthy. The advantages of such cannot be overestimated.

‘Our economies, livelihoods and well-being all depend on our most precious asset: Nature’

(Dasgupta Review, 2021)

Nature is life. It underpins everything we do. It provides us with clean air, food, water and shelter. It regulates our climate and controls disease. Beyond this, it is central to recreational, cultural, social and spiritual aspects of human life. It is fundamental to our health and well-being³.

There is robust evidence to support the following:

- Exposure to green space is associated with improved psychological well-being, physical activity and linked health outcomes;
- Exposure to nature increases activity levels among children and young people;
- There are psychological benefits of nature-based interventions, in particular reduced depression and improved mood;
- Blue space exposure is also beneficial for psychological wellbeing and physical activity.

Should this project proceed as proposed, there will be disruption of and damage to popular rights of way such as the Sustrans cycle track and many footpaths and bridleways, both during the construction and operational phases. Consequently, individuals will be unable to carry out their normal leisure pursuits as they would have done and the positive visual impact of a walk, run, ride or cycle through the beautiful countryside will be destroyed within a black desert.

There will be some residents whose houses will sadly become swamped within in a mass of industrial black PV panels, having previously been surrounded by open farmland. Coupled with this is the noise pollution that will unavoidably affect certain areas that were once quiet. Furthermore comes the inevitable fall in house prices and reduced saleability that will ensue, both during the construction and operational phases of the proposed project. When deciding to move to the country to enjoy the peace and tranquillity of rural village life, this is not a situation such individuals could have ever envisaged. I challenge anybody to claim that in the same situation they wouldn't feel at very best, stressed, low or anxious. Realistically however, I predict a far greater impact.

Our body can be as fit and healthy as an Olympic athlete, but if we are not in a sound place mentally our quality of life is compromised. The stress caused by the One Earth project has the capacity to massively reduce the quality of life of every inhabitant of the immediate and surrounding areas affected by it.

³ Lamont R, Hinson C (March 2024). NEER030: A narrative review of reviews of nature exposure and human health and wellbeing in the UK.

Study: The Impact of the One Earth Solar Farm on Mental Health

Mental health **should not be ignored**.

Shocking statistics stated by Dr. Elaine Lockhart, Chair, Royal College of Psychiatrists' Child and Adolescent Faculty London, has stated there were nearly a million referrals to children and young people's mental health services in the past year, a rise of 143% compared with 2019-20. She went on to say, "we need all political parties to prioritise the prevention of mental illness and the treatment of mental health conditions."

Below is just a handful of the many, many comments from local residents concerning the impact that the One Earth solar project is already having on their mental health (note this is even at the early 'consultation' phase):

'I've been in South Clifton for 16 years and I will never be able to take my horse out again if the solar farm goes ahead'.

'I can't sleep to be honest'.

'We're a couple who have lived in North Clifton almost all our lives. We are in total despair with what may happen with the solar farm. It just can't. Our lives will be ruined'.

'I'd consider moving, even though I've been here for 40 years'.

'I've woken up in the night restless and angry, and have to get up, make a drink, and calm down, finally going to sleep some hour or so later. It's just wrong'.

'As a resident of our village I own and ride horses who are kept at home and also walk our little dog. The reality is I will no longer be able to hack whilst the work is undertaken and am not sure if it will be safe to hack when completed. I work in a stressful job and without the riding it will absolutely impact on my health and wellbeing. Also I think walking our dog without the filter of the beautiful countryside will have a similar impact. Walking mindfully looking at solar panels doesn't have the same impact as flowers and countryside I am certain'.

'I live in North Clifton, this solar installation is the devil's work. We may not live in an AONB but this does not mean our countryside isn't beautiful. I despair for the wildlife, and this is destroying peace of mind for so many. I am also scared we will hear the battery storage, especially at night. It regularly reduces me to tears, it's nothing short of environmental vandalism. Very worried that the new government will just rubber stamp this'.

'It's adversely affecting my work and my family life. I can't eat. I can't sleep. I feel anxious. I'm drinking more to help numb the pain. I'm not sure where this will lead'.

'I live in Fledborough and have ridden round here for 20 years except for the last 5-the ever-increasing traffic from pears factory including smalls tankers has made it literally impossible to access our one and only bridlepath as this has to be accessed via the main 60mph road and now with the proposed extra traffic with the solar fields it's too dangerous! I had hoped to maybe start riding out again that way but with the proposed increase of traffic during the solar fields construction it will make it nigh on impossible. I don't think anyone involved with the building of these projects understand how they have devastated our equestrian community, it saddens me and has made me contemplate giving up my horses altogether-I

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couldn't live with myself if anything happened on the road knowing full well the amount of HGVs that are on there 24/7, we can only hope they listen'.

'One Earth will cause and already has caused mental health problems. People are worried, upset and dismayed at the thought of our countryside being covered in ugly solar panels, BESS, inverters and sub-stations. Our leisure will be affected - walking, cycling and horse riding will be contained within fencing and with close views of panels etc. Homes will be surrounded by panels where before all they saw was green fields and trees. We are fighting to stop this abomination. If we fail a lot of people will be fed up and depressed by the major adverse effects this plan will bring'.

'I can't sleep. I can't function during the day. All I ever think about now is the solar farm. I am worrying about the knock-on effect it is having on my family'.

'My wife and I retired to Thorney 3 years ago. One of the main attractions were the open fields and big skies. This monstrous solar farm will destroy this feeling of wellbeing and happiness in our retirement. Our visits to the Red Lion bar in South Clifton would never be the same. We wouldn't see the panels from our lovely garden, but we will hear the hum of the inverters. We asked at the recent One Earth event at South Clifton about future expansion and disruption of our lanes caused by months of lorries and heavy machinery being moved about. They just looked sheepish and embarrassed. On expansion they said they would have to apply again, but admitted they could do. We understand the huge sub-station they plan to build will cater for expansion. We are very worried'.

'I have high pressure with my day-to-day job but feel now I am being pushed to the limit. People have chosen to live in a rural environment for their own wellbeing, but this is now being stolen from them – inflicted by other people's greed and lack of morals. I have worked hard all my life to get where I am, and it could all be for nothing'.

'I have moments of mixed emotions with frustration, anger and despair when I think that piles of money and big foreign industry are hiding under 'Greenwashed' cloaks that's stealing people's lives and livelihoods, killing our farmland, chasing our indigenous wildlife away and creating a PV panel desert amidst our beautiful countryside. I detest greed. And greed under the guise of 'For The Common Good' is wallowing close to the top of the cess pit of 'Legalised Criminal Activities'.

'I received a call from a close friend who lives nowhere near us, but saw the hideous industrial proposal. He said 'cut your losses and get out now while you still can.' I told him that this is our home, this is where we live and intend to live out our lives. He paused and replied 'Ok, I understand, but be prepared for what's coming at you and your friends. You're having a massive pile of monster [REDACTED] dumped on you. You may be in countryside and farmland now, it'll become worse than living in the middle of a city'. Could that have been some of the best advice of my life?'

'Our daughter has formally been diagnosed with being highly autistic, severe anxiety (medicated), learning difficulties and difficulties processing and understanding language and does not interact with peers or anyone outside of her circle (family and a few family friends).

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We moved to South Clifton to give her a better lifestyle suited to her needs - peace and quiet, less people, lovely countryside. Horse riding has been a massive part of her life since moving here. It's all she has. She is a novice horse rider who enjoys quiet riding around the tracks, bridleways and fields. If this proposal goes ahead, she will lose the one thing in her life she loves to do. It will be too dangerous to ride within these areas and beyond stressful. There are no other suitable riding areas locally. This is unthinkable and the effects on her mental health will be devastating. She is already in panic mode, not sleeping, worrying and is very unsettled. She will decline, inevitably. There will be a knock-on effect for our family and added pressure. This cannot be allowed to happen. It is too high a price to pay for this project to go ahead. In the past my daughter has self-harmed - an outlet for her anxiety and depression. Since moving here she has not harmed herself at all. However over the last few weeks due to her mounting anxiety and worrying over this solar development her mental health has deteriorated and she has begun to hurt herself again. This is genuine and witnessed by her support staff where she attends a special school for youths with disabilities. If you ignore this, then shame on you'.

'Although I am myself not local, I have family and friends in the area hence visit on a regular basis. I also horse ride in the local area and am familiar with many of the unspoilt paths and bridleways that allow for safe exploration of the area. This is a stunning part of the country; it is quiet, beautiful and enhanced by the vast variety of birds and wildlife. The thought of 3500 acres being blanketed in black panels is too shocking for words. When people often struggle obtaining planning permission for simple house extensions, how can the ruining of so much land surrounding quaint and historical village even be on the radar as a possibility? I am not against the development of renewable energy but this surely must be carefully balanced with the negative effects on the landscape, local people and wildlife. I can only envisage destruction if the plan is passed. Destruction of land; destruction of wildlife; destruction of family ties as people inevitably decide to flee the area; strain on and destruction of relationships as tensions build by either having to put up with/adapt to the variations or deal with the financial implications as house prices crash. I can already see the effect that this proposal is having on the mental health of friends and family members, even at this early consultation stage. The knock-on effect is that my own mental health is also starting to suffer. The proposal and the devastating effects that will follow if the plan is passed is at the forefront of my mind – and I am not local. I can only imagine the catastrophic effect on the mental health that is bound to ensue in relation to many directly affected'.

'I have been subjected to numerous acts of [REDACTED], both at home and abroad. As such, it has been paramount that I mitigate the residual effects of this for my emotional wellbeing. It is not by accident that I therefore chose to live in the village of South Clifton. There is immediate access to go running, walking, cycling or painting. All these pastimes are key in attaining the correct equilibrium needed for my mental health. I feel a pending sense of doom with the application of the One Earth Solar Panel project, which will destroy the very reason for my living here. How ironic that this may lead to another act of [REDACTED] This time the victim will be the beautiful countryside'.

'Erecting black panels over any area will stop the sun reaching the earth below, this will slow down the evaporation of surface water. We live in a HIGH RISK FLOOD AREA, the water needs

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to disperse/evaporate unhindered or the water table will rise quicker causing more devastation. Flooding will be another consequence. The prospect of this is already causing anxiety which is having an adverse effect of my daily life. When and how will this end?’

‘The threat of our lives being ruined clearly has a marked effect on our mental health. We have been married for a long time and together we have been experiencing matters of a similar nature. Starting with SLEEP or most notably the lack and quality of it. Nightmares are definitely on the increase, most are of a very dark nature and so vivid in their presentation that sometimes one wakes up actually wondering if the night horror just experienced is true! DEPRESSION, ANXIETY, ANGER, GLOOM and downright out of character outbursts of BAD TEMPER are all too common. We both worry about our future quality of life; the [REDACTED] of our beautiful countryside by mindless [REDACTED]; values of our homes that we have saved for all our lives disappearing with nothing to pass onto our children. The open greed of just a few individuals who want to make a financial killing by giving their land to a gang of foreigners. Also there is the NOISE aspect to consider. We both have pretty low noise thresholds so to be exposed to unnatural noise from a solar farm would be purgatory. Has anyone given any thought to the fact that in the next few years we and NATO allies are likely to be in armed conflict with a number of [REDACTED] authoritarian states. The Notts/Lincs area will be producing the bulk of UK electricity therefore turning us into very real target for modern weapons. Furthermore, another reason for DEPRESSION - where are the millions of solar panels coming from? Yes, you guessed it Red China. What a mess’.

‘I’ve found the impact of the solar farm plans to be impacting most aspects of my life, home and work. I got to a point where I was crying daily especially when outside my home or driving by the areas that are potentially going to have panels on them and if I thought about the scheme for any period of time I would also end up in tears. I am normally very robust, but this has had such a detrimental impact on my life and ability to function normally I have had to seek help from my GP. I am waiting for talking therapy and have started medication to try and help me cope with the plans. I can’t see any end to the way I feel as the impact on our home and village life is immense. The only way I can see me feeling better eventually is if the plans were to not be approved. If they do go ahead then I’m not sure how I will function long term without us moving away or taking medication which I really don’t want to be taking for prolonged periods of time. The worry about the potential loss of value on our home and inability to sell in the future, has also created a lot of stress and anxiety as we could find ourselves in negative equity and trapped in our home with no other options but to live within the scheme! The worry of the unknowns such as the noise of the inverters is also concerning as until the scheme is in, I don’t believe anyone can truly say people won’t hear the noise from their homes’.

The nature of some of these comments is so incredibly concerning that I feel a professional and personal obligation to follow some of these people and families up to try to ensure that their mental health does not deteriorate further. I have already advised several of these individuals to consult their own General Practitioners to seek additional advice and support.

I openly admit that I have experienced anxiety, low mood and sleep disturbance as a result of the One Earth proposals. Being a horse rider in South Clifton who also walks, cycles with my

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husband and [REDACTED] son, and runs along many of the public rights of way I am already concerned about the direct impact that industrialisation of this area will have on my family and I. I worry about our [REDACTED] son and future generations. I worry about my neighbours and local communities. I can see the negative impact this is already having on those around me. I have seen emotions in individuals that I have never seen before including anger, despair, frustration, resentment and even contempt.

At this stage, purely through direct messages being received, the evidence is clear. There are countless negative voices coming from those who feel that they have no power or influence over what is being forced upon them – changes that will affect their lives on a permanent basis. Some of the messages indicate total despair, hopelessness and loss, akin to a bereavement reaction. If the government ignore this and sign off the proposal to allow the erection of black panels so close to domestic areas, they are totally disregarding their moral obligation.

A genuine concern I have is that the company, 'One Earth,' by way of their marketing campaigns are manipulating people's perceptions to influence views and opinions about the project. Even the very name 'One Earth' is staggeringly misleading. 'One Earth' suggests a green agenda, protecting the world, uniting people even globally (a very bold statement). The unfortunate reality is very different. One Earth have stated in their own literature that should the marketing/consultation stage of the project be passed, One Earth will no longer exist and the true company behind this project, 'Orsted' (a Danish government-owned business) will become the owner and operator. One Earth has clearly been used as a marketing tool, implying that this is an environmentally friendly proposal which will also benefit human health. At that transition phase, people would understandably feel confused and betrayed.

There are better ways of supporting renewable energy – ways which don't impose such detrimental impact on human life, health and wellbeing. Ones which don't lead to a dramatic reduction in food security, irreparable destruction of farmland and incalculable harm to indigenous wildlife.

One Earth has demonstrated a disturbingly blinkered one-dimensional veneer vision regarding human health. Rather than being driven by genuine fact-finding, the mention of human health appears to be yet another tick-in-the-box exercise to push their project through. It has been used and passed off as evidence when clearly it is not. This astonishing and extremely concerning oversight of mental health needs addressing as a matter of urgency and to be given the priority status it demands.

These findings will constitute documentary evidence as part of an auditable process. It may be used in any future legal procedures regarding the adverse effects on a person's health. Should this document, with the evidence, be disregarded by any appropriate governance body for endorsement, they will be held culpable.

'Human Health – Definite significant negative effect'.

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Appendix 2: Questionnaire

Age: Gender: Area of residence:

Please circle as appropriate:

Do you think your mental health has been negatively impacted because of the One Earth solar farm proposal (for example anxiety/altered mood/disturbed sleep)? Y / N

If yes, please give details:

Do you feel your mental health is likely to worsen should the One Earth solar farm be approved? Y / N

If yes, please give details:

Do you currently, or have you ever had, any of the following mental health problems?

Please circle as appropriate:

Anxiety Sleep problems Depression

Low mood Post-traumatic Stress Disorder (PTSD)

Other (please specify)

Any further comments relating to your mental health/solar proposal (please include any concerns regarding worsening of current mental health conditions):

***Please note all information will remain anonymous.
Thank you for taking time to complete this survey.***

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Appendix 3: Individual comments regarding how the One Earth solar project is currently negatively impacting mental health

- Massively impacted every single day and night with anxiety, sleep disturbance, depression and low mood/palpitations;
- Anxiety, disturbed sleep;
- Anxiety, low mood, disturbed sleep, which also has a negative impact on my daughter who is autistic. I wake regularly with it on my mind. I'm anxious regularly;
- Anxiety/low mood/insomnia with a negative impact on my work/family/social life;
- A previous stressful experience from a solar farm proposal led me to have a stroke;
- Anxiety, anger, mood swings, disturbed sleep;
- Concerned for the future of our village and the impact on all the community;
- I am suffering from anxiety and I am unable to sleep;
- Feeling anxious most of the time and awakening me in the night;
- I believe it will negatively affect the value of our houses;
- I think the value of properties will decline;
- Worry! During all consultation, I do not feel anything will change – a 'tick-in-the-box' exercise. No answers given over specifics. Proposals massively over-sized. Landowners seemingly happy to be moving out of area leaving community to suffer once implemented;
- Anxiety due to not being able to walk/ride mindfully in the countryside;
- I am suffering from anxiety regarding the solar farm already. Just the thought of it is causing great stress;
- I am worried that we have ploughed a lot of money into renovating our house and now we risk losing a great deal should we ever have to sell;
- Worry about increased noise – including traffic during construction. Problems commuting to work from increased traffic. Long-term worries about loss of house value. Toxicity from panels, scared of potential fires;
- Change and uncertainty negatively impacting anxiety, mood and sleep – increasingly affected by age when change becomes more impactful;
- Sleep problems;
- Constantly on my mind all day, waking up at night and early morning, anxiety, sleep problems;
- This One earth solar farm proposal has caused large amounts of anxiety along with lack of sleep. It has made a huge negative impact on the time I will never get back with my newborn baby;
- I am very worried about my future environment, of living in my property if I am to be surrounded by an industrial estate. I have had anxiety, sleep problems, depression and low mood since this proposal was announced, but never before then;
- I have had anxiety and sleep problems since this all started;
- The proposal is always on my mind;
- Disturbed sleep;
- The proposed plans by One Earth solar have clearly caused a divide within the community. This has had a knock-on effect as individuals who previously got along well, now longer

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know where they stand with each other. I for one now worry that the subject will come up in conversation and disagreements with begin;

- The One Earth proposal has been dumped on us at the same time as several other proposals. This will result in 30,000 acres of prime farmland in the Trent Valley being INVADED – yes it feels like a carefully choreographed invasion by a hostile force;
- Anxiety;
- Anxiety due to uncertainty of future. No agricultural land for food;
- Visual landscape ruined, farmland lost;
- We moved here when we retired for the beautiful countryside having horses and dogs and as an artist. The peace and quiet was also important. This is all going to be destroyed – no wonder we are sleepless and anxious;
- Anxiety;
- Much concern and distress;
- Depression;
- The hypocrisy of the proposal has made me angry. It is unjust to ask our community to be altruistic when their motive is money, with little/no regard for the undesirable impact on our surroundings and life enjoyment;
- Our hard-earned homes will be valueless. We will not be able to sell and move away; so therefore we are destined to be tortured for something we have not done and not deserve – this is causing anxiety, low mood, depression sleep problems/bad dreams/irritability, gross unhappiness, fear of war with Russia – we will be a prime target for Putin's missiles;
- We moved to the countryside not to be surrounded by panels. It is stressful thinking about what we will lose, and this being 'Phase 1', worry whether 'Phase 2' will completely surround us;
- The stress and anxiety from this proposal is apparent in many. Fallings out, neighbourly upsets;
- Value of my property!! Overall look of the area I have lived in for over 30 years! This is causing sleep problems and low mood;
- It has caused a division in such a small community. Plus it has caused me to worry about local food production;
- Anxiety and disturbed sleep;
- Anxiety and sleep problems;
- I can't sleep at night knowing that the beautiful countryside will be destroyed;
- I already take antidepressants as I suffer from sleep problems and anxiety. As the peace and tranquillity of this area will be badly affected by the proposal I am already deeply concerned which has caused me sleepless nights. I am now having to take medication to help me sleep;
- We moved here a year ago to get away from the rat race, I already work in Nottingham and coming home gives me serenity;
- We came here in the recent past to escape the hustle and bustle of town life due to my acute anxiety. This has now made my condition worse! I am currently suffering from anxiety, sleep problems, depression and low mood;
- It will look so unnatural in the countryside;

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- Stress, anxiety, disturbed sleep;
- I feel the loss of the countryside and the open space will have a negative impact on my health and wellbeing;
- I moved to live in the countryside;
- It's causing me a feeling of worry and unease;
- Stress and worry to all local residents;
- Stress, disturbed sleep;
- My mental health is already very negatively being affected. I have spent many years working on my property to make nice and improve value and this solar farm will completely destroy all my hard work;
- Anxiety, disturbed sleep, altered mood. Since the plans for the solar farm were made public the impact on my day-to-day life has been significant. Working from home there is little escape from facing the reality this solar farm is going to destroy the life you live;
- Disturbed mood/sleep, anxiety;
- Low mood, sleep problems, anxiety;
- Since the plans have been out I have been unable to sleep and function normally. I was crying every day (at least once) and have had to seek medical advice/support. I am now on medication and having therapy;
- My mental health has been negatively affected because I don't want to be living next to solar panels;
- We moved from an area that was under heavy development for the sake of my mental health which was in a poor state. Within two years of making a huge lifestyle change we learned that our haven of peace may be destroyed. I can't think about it without crying;
- It has made me angry and frustrated;
- Of course – we choose to live in this area for its natural beauty which will be seriously impaired by this project!;
- How can you not realise what you are doing to the communities causing anxiety due to noise, wildlife destruction, constant traffic, loss of views;
- Moved to the area for my love of the countryside and wildlife. Pains me to see how much roadkill there is of all our precious wildlife, deer, foxes, badgers and others;
- Sad to think this could be built in our area. When we moved here we were at peace and happy to move to such a peaceful, green and calm village;
- Emergency services shift worker. The area is a lot quieter than Lincoln/Newark. Additional noise pollution will impact me further;
- Worry, disturbed sleep, anxiety;
- Anxiety due to potential impact on house sale/price;
- Anxiety about the future. Anxiety linked to comments made by other people whose opinions differ to my own;
- Concerned about noise pollution;
- Worried about house prices falling as we've just moved here;
- Anxiety because of local walking areas being ruined!;
- We have only just bought in the area and did so to get away from city life and have seen the impact on neighbouring areas on value of the house and my children's mental health;

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- Altered mood, worrying about the noise levels;
- I am concerned as when I come back from uni I like the views as this is a coping mechanism and helps me feel better when I go back;
- Worried over the impact it will have on the area – noise/light pollution, restricted walkways;
- No worries yet but will in the future;
- Altered mood/anxiety/sleep problems and frustration and anger. I didn't move here to be surrounded by a metal jungle and solar panels. House prices will decrease. This solar farm is about profit only;
- Anxious about how it will impact our lives – mainly from the noise and appearance.

Appendix 4: Individual comments regarding how mental health is likely to worsen should the One Earth solar proposal be approved

- Concern over increased flood risk and noise;
- This is causing anxiety;
- Yes, I do not want to live in such a grotesque environment and will feel trapped, as even trying to sell up will lose tens of thousands of pounds even finding a buyer! A living nightmare;
- Altered mood and anxiety;
- Two years of heavy construction and disruption will be stressful;
- I feel overwhelmed by the idea of such destruction of our countryside;
- I will get an increase in anxiety, my mood and sleep will worsen;
- Fencing alarms me;
- Views ruined, noise pollution;
- Currently no mental health issues, but as a villager for 50 years plus a scheme on this scale is bound to have an adverse effect on me. This village is surrounded by agricultural land/pleasant countryside views so the last thing we need are solar panels and the infrastructure that comes with them;
- Being anxious about how we will all be affected;
- Extremely worried about the loss of value and reduced saleability of house prices;
- We moved to the area to enjoy the tranquillity of the countryside – not an industrial area;
- The loss of the countryside views, which helps with any stress, will be gone. I will not be able to wind down after a tough day at work;
- I personally moved to this area for the countryside aspect. I am perturbed to think I may soon have a very different aspect;
- Change from green environment to industrial environment – proven studies are available to show psychological impact from lack of plants etc in surroundings at work and home having significant negative impact;
- Environmental issues, noise pollution, congestion causing anxiety/low mood;
- No escape from the views of this industrialisation on my doorstep (close);

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- Destroying our beautiful landscape, house price deterioration – who wouldn't this impact when your whole life's work is destroyed;
- I will be even more unhappy if this is approved as I will be unable to sell my property and move elsewhere;
- My mental health will worsen due to my future living here;
- We want to live in the countryside not an industrial estate;
- The community divide will increase. Plus the increased traffic/noise will negatively impact my life and cause great concern for me. Having a small child, we regularly walk/bike ride around the village, there will be a greater risk of traffic;
- The prospect of being surrounded by mega monster solar panels is totally depressing and the fact that this will be for 60 years will last until by 3-year-old grandson will be old;
- Increased anxiety;
- Property value, noise, visual landscape ruined;
- Anxiety - unknown future;
- I don't tolerate noise well and the constant traffic when the solar 'farm' is being installed is a worry, as is the buzz from the battery storage systems. We also like to buy fresh local produce which is healthy – that will go and I worry about it;
- Concern over decrease in house prices and relationship with neighbours being affected;
- Depression may become extreme;
- Depression, daily environmental experience being permanently changed by the destruction of the local environment;
- This is an ongoing situation, akin to the feudal where landed gentry dictated to the underlings. Research indicates the habituation does not lead to acceptance or change of opinion – so I won't have any relief from the anger, upset and altered landscape.
- The noise/glare from the panels, heavy traffic on our single track roads, loss of valuable wildlife, loss of money invested in our homes;
- Who wants to look out over a sea of silicone. I live in the countryside for a reason. House pricing will also cause anxiety;
- The overall look and disturbance to natural habitats;
- It will look absolutely dreadful and will 100% affect the wildlife and the look of where I live;
- It will be a HUGE blight on the countryside. The money-greedy companies need stopping!;
- Anxiety and disturbed sleep;
- Stress, anxiety, disturbed sleep;
- I feel my mental health will worsen because I love the beauty of my area;
- I love the beautiful scenery so I expect my mental health to worsen;
- My mental health is likely to worsen because of the thought of having to see this every day;
- As I moved here for open views, I feel this will be lost and will have a negative impact on my mental health;
- I work hard to be able to have my home which I love as a family space but feel it won't be worth it if the plan goes ahead, I may move;
- Disruption whilst being constructed causing worry and anxiety;

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- Ongoing noise, people around more, destroying landscape;
- Living in the middle of this solar farm, I feel I will no longer want to live in my once idyllic home and will suffer a massive financial loss doing so, which is also causing stress;
- Nice view outside my residence at the moment, do not wish to be seeing solar panels on my doorstep;
- I am struggling to imagine how life will be living within a solar scheme. The joy of countryside living will be gone and my happy home life won't be the same. I worry about the views and the noise there will be;
- At the moment I have a lovely view of countryside outside my windows. I don't want to be looking at solar panels;
- Without a doubt my mental health will worsen. Everything here that has dragged me from depression – the peace and quiet, the wildlife, the beautiful walking routes – will be negatively affected, and I honestly don't know how I will cope. I am dreading it;
- There will be concerns regarding the effect it will have on our health and also financial security with all our money being tied to our property;
- Value of house will diminish;
- It will probably worsen due to the increased noise and battery safety;
- Mental health will worsen due to environment changing – moved to the country for the landscape and sounds;
- Importantly the devaluation of my house is a major factor;
- I need to walk in the countryside every day to help keep my mental health stable;
- We retired here – it's quiet. You are ripping communities apart, covering farms with panels. Really wish we were somewhere else;
- I believe with large areas of countryside fenced off it will leave little space and wildlife will be concentrated towards roads;
- Constant noise, unable to walk around the countryside with restricted views and access;
- Impact on sleep in daytime (emergency services shift worker) with construction and inverters;
- The friction the proposed project has caused in the community has caused increased levels of stress and anxiety when attending community events;
- If the solar farm is approved I am concerned I will have further anxiety/guilt in relation to the impact on local wildlife and ethical implications arising from Chinese production and labour;
- I often work nights and have disturbed sleep. The noise will keep me awake leading to other issues with my health;
- Moved here for the tranquillity of a small village, will be worried about the panels causing health problems;
- Anxiety will worsen as more stress comes because of noise, nowhere to walk etc!;
- Worrying about my children's health, investment in the local area and also my own sleep patterns. I have stayed in other areas close to solar farms and the noise of the panels affects my sleep;
- Won't be anywhere local to ride my bike that's quiet;

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- A coping strategy would have been removed and will feel like I am just surrounded by plastic/metal instead of away from anyone else;
- My feelings about this going ahead are bad enough. I fear the long-term impact this will have on my family and I;
- We need to move house at some point in the next few years. If this goes ahead then there will be significant worry around house prices and whether we can afford to move;
- Noise! Ruins our beautiful countryside as well!

Appendix 5: Further individual comments regarding mental health and the One Earth solar proposal

- The accumulative impact of the vast range of solar farm developments in one area has basically made his part of the midlands area a gargantuan industrial scale solar plant. To call them solar 'farms' completely misrepresents the situation from when district to district, county to county across Lincolnshire and Nottinghamshire we are becoming completely swamped. The utter rage, frustration, and desperation residents feel is immeasurable. This adds significantly to our daily mental load. We feel put on and disregarded. The impact this has on all our mental health is hugely significant. Having recently moved to this area specifically to be in the natural surroundings of the countryside, so we can enjoy views, quiet sounds of nature, after having worked hard all our lives, to now have to face this mass scale industrial development leaves us depressed, sleepless, and worried about the future;
- Many as yet unknown factors, but a solar farm of this scale will disrupt many leisure activities – walking, cycling and horse riding - all good activities to improve mental health;
- I find that as time passes I become more anxious – feelings I've never experienced before;
- I already take anxiety medication (fluoxetine). I was stable and doing really well but I have had to increase the dose solely because of the solar farm proposal;
- My mental health will only deteriorate due to the One Earth solar project;
- This proposal is a money-generating project only!!;
- Please, please leave our countryside as it is;
- I am deeply saddened about the proposals. I moved to the countryside for its views, relaxation and tranquillity. This will be all gone of the proposals go ahead;
- I feel this would cause unnecessary stress;
- Moved to the countryside from urban environment to improve physical and mental health. Now feel that moving again would be the best option, however may not be possible if house value has dropped – increasing stress levels, anxiety and depression which in turn is having a knock-on effect on a long-term condition I have leading to more pain. It is bad enough whilst we are in limbo awaiting the outcome – if it goes ahead I am afraid about how much worse it will get;
- The sheer amount of stress this causes, flare-up's of my vertigo episodes;
- Didn't need any additional stress, no warning;
- Concerned how it will affect my mental health in the long-run;

Study: The Impact of the One Earth Solar Farm on Mental Health

- We thought we had found the ideal place to retire – now it is going to be destroyed. We cannot sell and move always our property is being devalued – money we thought our kids would inherit. The most distressing and heart-breaking element in all this is that it is not necessary, but it is out of our control. Even our MP cannot help us against ‘green at all costs’ mania;
- There are many other ways of generating cheap electricity without resorting to solar panels. With that said why not cover the roofs of Nottingham City and Mansfield with solar panels as leave us country folk alone. We fear for our children and grandchildren. Why do organisations trade with rogue states such as China for solar panels;
- For several years I struggled with leaving the house. Moving to a more rural area has helped tremendously – I walk regularly in the beautiful countryside and have started getting involved in the local community. I am genuinely worried that I may go back downhill if all I see when I leave my house is a sea of monstrous solar panels;
- The positive effect of living in a beautiful, rural environment should not be underestimated. There is escape and peace in the open countryside that cannot be found in industrial settings;
- This is a nightmare and NO-ONE cares about us – we are just collateral damage. Shame on you and your shareholders – it’s all about money;
- Worried about our futures, house prices and desirability of the area;
- Although it will not severely impact my mental health, wellbeing is important and physical health also with noise pollution initially and unaware of long-term issues with lithium batteries/solar panel parts needs to be considered when in close proximity to houses with families and pets. Use of green space which supplies oxygen through trees and pollens for bees and insects which are all vital for our health and part of the nature and nurture;
- Increased stress due to worries over construction traffic and noise, operating noise, lack of good agricultural land and UK food production, and loss of property values;
- I feel if the solar installation was to go ahead, it would lead to further community tension and give a general feeling of loss in relation to the landscape around our homes as well as uncertainty about the long-term implications on employment and house prices;
- I am concerned that the construction and installed inverters will cause noise pollution leading to sleep deprivation which in turn will negatively impact mental health. I am also concerned that access to nature and the countryside will be impacted and restricted and will again negatively impact mental health.

Appendix B August 1st Meeting Notes

Solar Panel Consultation Meeting

Parishes of North & South Clifton and One Earth

Venue: South Clifton Village Hall Date: Thursday 1st August Time: 7.30pm

Present:

Residents

██████████ – Meeting Chair

██████████ – Chair – Solar Panel Action Group

██████████ – Vice Chair – North Clifton Parish Meeting

██████████ – Chair South Clifton Parish Council

██████████ – Minutes

Other concerned Residents

One Earth Consultation Team

██████████ – Logika – EIA co-ordination and management

██████████ – DWD – planning consultant

██████████ – Pershing – project lead

██████████ – AECOM – Engineering Lead

██████████ – Icení – design lead

██████████ – SEC Newgate – Consultation Team

██████████ – SEC Newgate – Consultation Team

The meeting opened at 7.27pm, chaired by ██████████, who set out initial points of concern.

All parties agreed to the meeting being recorded by ██████████.

[Type here]

Initial Points: [REDACTED]

The Action Group felt that in the previous meeting the consultation team had not listened to their concerns.

The consultation team said they had listened and made a genuine effort to respond.

The apparent increase in size of the area of solar panels is because it now includes routes for cables, boundaries and siting of BESS. The actual area of solar panels has decreased. Fields could be returned to agricultural use after a period of 60 years by which time technology would have moved on past anything now in existence.

The reason for siting the solar panels in this area is the proximity to High Marnham to maximise grid use.

Mitigation – a piece of land has been de-commissioned.

Cost Benefit Analysis of the economic effects of the project on the community was absent. The consultation team agreed the detail was poor due to the fact that assessment is still ongoing. Further *opportunities for consultation need to be developed* as information is prone to changes. One Earth are following Government guidelines.

The soil report which should have been published at the end of June is still being prepared in consultation with Natural England.

The Cost Benefit Analysis for using High Marnham *will be published in January*. The consultation team appreciate local concerns but financial considerations make this the best site.

Planning Meeting– the Action Group can ask to attend. The Preliminary Assessment has been used by One Earth for statutory consultation and they are following Government regulations.

Air quality – the Action Group pointed out that the area sampled was not in the immediate project area. The consultation team felt it was appropriate as traffic would be coming into the site in that area. *They will respond to this concern in writing*

Pollution – the team explained they are planning to lay cables under the river Trent. The Severn Trent water treatment plant supplying potable water to Lincoln is sited here and there was concern that cables and other infrastructure could pollute the water. The team had no information on this but said they would be following legislation guidelines.

Flooding – in view of recent events there was considerable concern from residents on this issue. The consultation team have worked with the Environment Agency using their flooding maps. The solar panels have been designed to stand higher off the ground to enable water to flow underneath. They believe that surface flow from solar panels does not alter channelling. Ditches will be managed. It was not clear when and by whom.

[Type here]

██████████ asked if any modelling had been done as they need to show the solar panels will not increase the speed and quantity of the water reaching the Trent. The One Earth team had not done this.

It was pointed out that property prices will be adversely affected by the development.

The consultation team said this would be covered by the Orsted Community Fund. No details were available as to the extent of this funding or how it would be implemented.

Mental Health – to be addressed later in the meeting.

Legal Action- The consultation team assured the meeting that Development Control Regulations would prevent the plan being accepted if adequate consultation had not been done. All chapters of the plan would be reviewed by the Local Authority and Inspectorate

██████████ explained that the community felt they were not respected by the consultation team and he cited an incident that had affected him personally. The team assured the meeting that this was not the case and had tried to show respect by visiting seventeen individual properties to exchange ideas.

They understood the need to balance the production of green energy with the need for food security.

██████████ concluded this section of the meeting by asking the consultation team if they were clear about the feelings of the community regarding the project – they oppose it. The team agreed that they were.

Mental Health – Dr Sarah Fletcher and ██████████

Sarah asked whether the consultation team felt mental health was important. They replied that it was. She then asked why there was so little coverage of it if that was the case. Her survey of 119 residents showed some people already on medication for stress caused by the potential development. Other issues such as alcoholism and fear of the unknown risk of contamination from the project. There was also concern for people who had no previous mental illness becoming affected by the disruption to their lives and those of their families and future generations. 99% of people surveyed did not want this disruption.

The consultation team believe that positive mental effects will be seen when the project is completed as evidenced in Appendix 17-1 of Chapter 17 -Human Health

The final plan is due to be released in January, but they will *arrange a meeting in Sept/Oct* to help reduce anxiety.

Sarah asked whether the project needs to be sited here – have they looked at other places. The consultation team reiterated that High Marnham is the most suitable.

The consultation team feel they will be able to give evidence of improved mental health after the project is completed.

Asked whether they regularly met with Orsted, the team said they reported formally once a fortnight to a person named ██████████ and attended weekly meetings.

[Type here]

■ asked what studies/research have been done to support One Earth's view that embodied carbon and other emissions from construction and decommissioning will not have a health impact. Have they considered a scale model.

The consultation team *will provide us with further information on this.*

During the operational phase there is concern about the effect of lighting on mental health.

The consultation team are undertaking design studies with solar panels of similar spatial dimensions and will be using anti-reflective coatings to reduce glare.

The possible effects on health of living close to a solar farm are not known.

The consultation team responded that there would be benefits such as reduction in dust, and no use of pesticides or fertiliser.

Soil and Bio-diversity - ■

■ will forward his questions to the team in writing.

He asked the team how the decision was made that this is the best place for the solar farm. The consultation team admitted that it was largely through desk-planning and mapping. The justification being its proximity to High Marnham.

He also asked why a parcel of land in Newton-on-Trent is not being utilised.

The consultation team said that Geo-physical surveys had indicated a Buried Heritage Site. A biological survey will be carried out in 2025.

Mitigation – it was suggested that wind-farms could be incorporated into the project to reduce the number of solar panels needed. The consultation team agreed to ask *Orsted to look into this and come back to us.*

General Questions

It was pointed out to the consultation team that the initial Government investigation into the siting of solar panel farms, specifically stated that no such development should be put on prime agricultural land. The team responded that this has been amended to “avoid where possible.” In our case the cost effectiveness of using the decommissioned High Marnham Power Station is the deciding factor.

Hydrology - concern was expressed regarding the possibility of contamination during the installation of the solar panels. The consultation team is aware and will take the appropriate precautions.

Cables – pollution from the decay of underground cables was also a concern. The team said that the cables were of the same standard as the National grid, but admitted that no research had been done on contaminated land with cables laid on this scale.

There was concern that polluted water may find its way into the Lincoln water system. The team said there is a system to collect any water used in a fire and if contaminated to treat it.

Fire risk – there was considerable concern regarding this issue.

[Type here]

Water stored around the edge of the site for use in the event of a solar panel fire could find its way into the Lincoln water system. The team said there will be a system in operation to collect any water used in a fire, and treat it if contaminated.

The consultation team explained that the batteries being used in the project are water cooled and not so prone to fire. They plan to model a fire and will *come back to us with information on this*. They also will *agree a response plan* with Notts and Lincs Fire Services. It was noted that the site will be monitored remotely.

Reference was made to the Carnegie Road Fire (Liverpool). The consultation team explained that these were air-cooled batteries and that legislation has changed since then. The Fire Brigade are now aware and prepared for this type of event. They agreed to provide *a copy of the Fire Brigade Report*. The consultation team were not aware of an official Ørsted report on this fire, despite Ørsted saying in the press that an official report was going to be produced. After originally saying that the fire was handled well and the delay was down to localised response, it was pointed out to the consultation team that delays due to failures in Ørsted's remote monitoring procedures themselves had been implicated in this event. Asked again whether the BESS will be monitored from Denmark, Dan said that he is aware of a monitoring site in Grimsby but will check to see where ours will be monitored from and report back.

Asked whether they monitor BESS fires they agreed *to come back to us with an answer*.

It was confirmed by the team that BESS power is stored during the day for use at night. It was also confirmed that there is a section of the battery storage that is used more for something called arbitrage, that can be used to store electricity when that electricity is cheap. Power from wind turbines when it is a very windy night can also be stored by them.

Noise from inverters – It was raised by [REDACTED] that their PIER chapters reporting that the noise coming from inverters and substations etc is the same as the noise given off by an electrical telephone exchange box on the pavement is clearly wrong as video with sound readings had been taken of inverters which shows sound levels of between 65dbs and 75dbs. The consultation team said the inverters would not necessarily be sited where they are indicated in black on the map of the project, as this map was wrong. Details of these parameters are not yet available. Asked about their 300m rule regarding distance between noisy equipment and 'sensitive receptors'. They confirmed they would be developing parameters to ensure inverters were not too close to houses and rights of way. Asked if this included the cycle route, Dan answered 'yes'.

Flooding – it was pointed out that panels could cause lowering of the temperature in the local vicinity by 2-3°C in January and February leading to an increased flood risk.

The team agreed to *look into this and respond*.

Local Employment; [REDACTED] pointed out that whilst in the short-term there would be 750 jobs, in the long-term there would only be 15-20. He asked if any modelling had been done to assess the impact on the locality of taking out 4,000 acres of agricultural land. For example, a small transport company using 137 lorries for agricultural purposes could be put out of business and if the project went ahead this would happen on a wider scale. The consultation team agreed *to look into this and respond*.

[Type here]

The One Earth Consultation Team asked that any questions unanswered be sent to them for a response.

[REDACTED] thanked the consultation team from One Earth for attending and closed the meeting at 9.20pm.

[Type here]



one earth
solar farm