

Our Ref: EN010153/DR/8.1

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Application Reference: EN010153

Applicant Response to Planning Act 2008 – section 51 advice following issue of decision to accept the application for examination

I write on behalf of Frodsham Solar Ltd (the “Applicant”) in response to the letter received on 27th June, which provided the Planning Inspectorate’s advice under section 51 of the Planning Act 2008. The letter included several observations on the application documents, requesting that the Applicant act accordingly on the advice provided.

The Applicant has reviewed the advice. This letter sets out our response to the points raised. For ease of reference we have repeated the advice provided by the Planning Inspectorate prior to providing our response. Where relevant we have referenced supporting appendices or revised application documents. We have also enclosed an updated Guide to the Application and Application Document Tracker.

1. We advise that recent Decision Letters and made DCO for similar Nationally Significant Infrastructure Projects (NSIPs) are reviewed, that the draft DCO is updated as appropriate, and that the EM is updated to include an explanation of any differences between the draft DCO and recently made DCO for similar NSIPs.

The Applicant has submitted alongside this letter an updated draft Development Consent Order (DCO) and an updated Explanatory Memorandum (EM) to account for the advice provided by the Planning Inspectorate. The Applicant is not providing a Schedule of Changes to the Draft Development Consent Order as part of this submission, but when that document is submitted as part of the Examination process the Applicant will ensure that it reflects the updates made to the draft DCO as part of this submission.

In respect of the Planning Inspectorate’s Advice Point 1 above, the Applicant has reviewed recent Decision Letters and made DCOs for other solar projects including The East Yorkshire Solar Farm Order 2025, The Heckington Fen Solar Park Order 2025 and The West Burton Solar Project Order 2025 and updated references in the article descriptions within the EM to more recent precedent DCOs where it has been appropriate to do so. The Applicant’s position is that differences between the draft DCO and recently made DCOs for solar projects are due to minor cosmetic drafting points or because there are site-specific differences between the Applicant’s development and other recently made DCOs. Where this is the case, precedents are provided in the EM from other non-solar DCOs to show that the Secretary of State has approved the powers in principle elsewhere.

2. With reference to The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 and Advice Note 15 we advise that thorough justification is provided in the EM for every Article and Requirement [emphasis added], explaining why the inclusion of the power is appropriate in the specific case. The extent of justification should be proportionate to the degree of novelty and/ or controversy in relation to the inclusion of that power.

The Applicant's updates to the EM set out explicitly and in practical terms for each article why the powers have been included and are required and necessary to facilitate the delivery of the authorised development. The Applicant's position is that there are no novel or particularly controversial powers being sought in the draft DCO and that is illustrated by the EM's references to made Orders as precedents for the drafting of the DCO's articles.

The Applicant notes that justification has been requested to be included in the EM for each Requirement. The justification for the inclusion of any Requirement in the draft DCO is that it reflects the mitigation and commitments made as part of the Environmental Statement [APP-33 to APP-124] and as summarised in the Commitments Register [APP-133]. A note to this effect has been added to the updated EM to clarify this point.

3. Article 20 of the draft DCO provides for the temporary closure or restriction of the passage of vessels in any way, in any part of the River Weaver within the Order limits regardless of any other enactment or in any rule of law. We advise that:

- the EM is updated to clarify the purposes for these broad powers and the ES and mitigation plans are updated to set out the related impacts and mitigation;
- justification is provided in the EM for each enactment or rule of law that is disapplied, providing information on the purpose of the legislation, the persons/ body having the power being disapplied, an explanation as to the effect of disapplication and whether any protective provisions or requirements are required to prevent any adverse impact arising as a result of disapplying the legislative controls, and (by reference to s120 and Schedule 5 of the Planning Act 2008) how each disapplied provision constitutes a matter for which provision may be made in the draft DCO;
- the Marine Management Organisation is notified (together with other prescribed persons) of the accepted application under s56(2)(a) of the PA2008; and
- notices are placed in the Lloyds List and an appropriate fishing journal.

The Applicant has amended the EM to clarify why the inclusion of article 20 in the draft DCO is necessary and to explain where the exercise of these powers is managed both in the drafting of the article itself and in the environmental management plans submitted with the application, compliance with which is secured via the DCO Requirements. The impact of temporarily closing or restricting vessels on the River Weaver has been assessed within the Environmental Statement (ES) and other application documents. The Applicant considers that sufficient information has been provided to evaluate the likely significant effects of Frodsham Solar on users of the River Weaver. The entities referred to in article 20 of the draft DCO (Weaver Sailing and Ski Club and Frodsham Kayaking) are the only ones that the Applicant has identified as using the narrow and limited stretch of the river that could potentially be subject to the powers in this article. Additionally, adequate control measures have been proposed to minimise or avoid these effects. Therefore, we do not propose supplementing the application documents with any further assessment or mitigation.

References to relevant parts of the application documents which consider the effects of the temporary closure or restriction of the passage of vessels on the River Weaver are:

- Paragraphs 2.5.43 – 2.5.45 of ES Vol 1 Chapter 2: The Proposed Development [APP-035] explain that there would be a need to prevent the use of this section of the river by craft, swimmers, fishermen, and other recreational and navigational activities for up to two weeks while the 132kV cables to Frodsham Substation are installed across the river. Diligent enquiries found no rights for any commercial transport use of the river, with users limited to recreational activities.

- Table 5-7 Summary of the construction mitigation and management measures – Tourism & Recreation, of the outline Construction Environmental Management Plan [APP-136], includes a commitment to provide at least 3 months' advance notice to the recreational clubs on the River Weaver of any closure of the River Weaver (and the draft DCO submitted alongside this letter has been updated to be consistent with this). Notices shall also be published in local newspapers and online community resources e.g. Frodsham Town Council newsletters of scheduled closures. These commitments are reiterated in the outline Operational Environmental Management Plan [APP-137] and the outline Decommissioning Environmental Management Plan [APP-138], to address temporary impacts that may arise during these phases of the Proposed Development. This is documented as commitment ref. C53 within the Commitments Register [APP-133].
- Table 12-10 - Summary of baseline activity of ES Vol 1 Chapter 12: Tourism and Recreation [APP-045] describes the findings from consultations of known users of the River Weaver, i.e. Weaver Sailing and Ski Club, Frodsham Kayaking.
- Paragraphs 12.8.19 to 12.8.25 of ES Vol 1 Chapter 12: Tourism and Recreation [APP-045] assesses the effects of temporary impacts on users of the River Weaver and concludes, with the adoption of the committed mitigation, that the overall level of effect for Construction Impact 3 (disturbance to leisure and recreational businesses, organisations or groups using the adjacent watercourses) is considered to be negligible and not considered to be significant.

The EM has also been updated to explain that the Applicant is not aware of any enactments that need to be disapplied to enable this article to operate as a local legislation search did not find any enactments that are relevant to or relate to the Proposed Development and this location. In this context, the reference to "any enactment" in article 20(1) is simply a catch-all provision. The reference to "rule of law" being disapplied in the article is in respect of the common law right to use the river for navigation and as this is a public right, protective provisions which relate to private rights of third parties would not be appropriate.

The Applicant can confirm that in response to the Planning Inspectorate's section 51 advice it will notify the Marine Management Organisation of the acceptance of the planning application and the section 56 notices will be published in the Lloyds List and Fishing News.

4. Requirement 18 of the draft DCO provides for a Written Scheme(s) of Investigation. We advise that an Outline Written Scheme of Investigation is provided for consideration during the Examination.

An outline Written Scheme of Investigation (WSI) has been prepared which addresses the areas proposed to be subject to a WSI within section 11.9 of ES Vol 1 Chapter 11: Cultural Heritage and Archaeology [APP-044].

The outline WSI is submitted with this letter as document reference EN010153/DR/8.2. Requirement 18 of the draft DCO has been amended accordingly.

5. We advise that the Book of Reference (including Part 2) is updated before the applicant gives notice of the deadline for the submission of relevant representations under s56 of PA2008, in order that there can be certainty that all relevant persons (including those within s56(2)(d) and s57(4)) have been notified and are afforded the opportunity to submit a relevant representation. Where relevant, the Land Plans (Doc 2.2) and the Statement of Reasons (Doc 4.1) should also be updated.

A refresh of the land registry titles within the Order Limits as part of the preparation for the section 56 process has been undertaken. We can confirm there have been no changes since submission. As such no updates to the Book of Reference [APP-20] are necessary and consequentially for these specific purposes, neither are updates required to the Land and Crown Land Plans [APP-008] or the Statement of Reasons [APP-018].

6. The Grid Connection Statement states that the proposed development would have a 147MW generating capacity, that the current grid connection offer is 100MW export, and that there would be opportunities to store electricity and to export electricity directly to local businesses. We advise that clarification is provided of whether the 147MW generation capacity would be utilised, providing any relevant evidence in relation to agreements with local businesses, the ability to increase the current grid connection offer, and calculations of storage capacity utilisation.

Context

The Proposed Development would be located at the heart of a nationally significant industrial corridor, stretching from Ellesmere Port toward Runcorn, where over 5% of the UK's energy is consumed¹. Business sectors in this corridor include petrochemical, advanced manufacturing and resource recovery. The operations of these businesses is energy intense and consequently they have a very high demand for electricity.

In the same regard, in the vicinity of the Site there are advanced plans as part of HyNet North West for the production of hydrogen gas, to be used as a power source. The production process itself is energy intense and it's therefore most sustainable when powered by renewable electricity.

The strategic location of the Proposed Development is described in detail in paragraphs 2.5.8 to 2.5.17 of the Planning Statement [APP-128]. The significance of the Site's industrial context, and the benefits associated with the Proposed Development's contribution to decarbonising the industrial corridor referred to, is discussed in detail from paragraphs 2.1.1 of the Outline Skills, Supply Chain and Employment Plan [APP-142].

Since submitting the Application, this contribution has been strengthened through the Applicant's parent company, Cubico Sustainable Investments, becoming an associate member of Net-zero North West, an organisation that unites industry and communities, providing a forward-thinking/leading voice and holistic vision for industrial decarbonisation in the North West.

Private-wire

The Applicant is in commercially confidential discussions with businesses operating near to the Site who have large-scale industrial operations. These businesses have expressed interest in the prospect of securing private-wire connections to Frodsham Solar. Under such an arrangement, a proportion of the electricity generated by Frodsham Solar would be supplied directly to one or more of these businesses, reducing their demand and reliance on their supply from the national grid.

There are clear commercial advantages to such arrangements which make them attractive to both the company generating the electricity (the "generator" who in this case is the Applicant) and the business purchasing the electricity (the "buyer"). UK industry is currently at an economic disadvantage relative to European and G7 competitors, due to the significantly higher industrial power prices². The Government has identified these high electricity costs as a significant barrier to growth and investment in the UK³. Under a private-wire arrangement, the buyer would purchase electricity at a lower-rate than they pay for a supply from the national grid, and the generator will receive a higher-rate than if they were to export the electricity into the national grid. There is therefore a margin inside which both parties financially gain. There are additional attractions such as Environmental Social Governance benefits in terms of sourcing

¹ Protos, (2017). UK's first Energy Innovation District [online]. Available at: <https://www.protos.co.uk/news/uk-s-first-energy-innovation-district> [Accessed 8 April 2025].

² Department for Energy Security and Net Zero (2024). International Industrial energy Prices. Industrial electricity prices in the IEA (QEP 5.3.1) [Statistical data set]. Available at: <https://www.gov.uk/government/statistical-data-sets/international-industrial-energy-prices> [Accessed 19 May 2025].

³ Department for Business & Trade (2024). Invest 2035: the UK's modern industrial strategy. [online] Available at: <https://www.gov.uk/government/consultations/invest-2035-the-uks-modern-industrial-strategy/invest-2035-the-uks-modern-industrial-strategy> [Accessed 19 May 2025]

locally generated renewable electricity and reducing the carbon footprint of the buyer's business or the products it produces.

It is intended that the Applicant and the buyers will enter into Power Purchase Agreements (PPA) – long-term contracts detailing the amount of electricity that the buyer will purchase and the pre-negotiated price. However, as the project is several years from being at a point where it can supply electricity, there are no agreements in place at present. This is standard practice owing to the dynamic nature of power prices, and buyers not wishing to enter into agreements before the project is consented.

Nonetheless, given the relatively unique position that this NSIP solar development has in terms of proximity to energy intensive businesses, there is an expectation that a private-wire arrangement will be established. Confidence is sufficiently high to justify the Applicant's financial investment in the design and environmental work committed to date, with respect to the underground cable that forms part of the Proposed Development, running from the onsite substation and out through the Western Array towards Protos (Work No. 4B).

Energy storage

The onsite Battery Energy Storage System (BESS) that forms part of the Proposed Development would be capable of storing any surplus electricity generation that cannot be exported onto the national grid. The Applicant will have flexibility to optimise the way in which the BESS is operated. This means that under a scenario where the maximum estimated installed capacity of 147MWac is installed, the surplus electricity output above the 100MWac grid connection (approximately 47MWac) could be stored by the BESS. This stored energy would then either be supplied to buyers under the private-wire arrangement or exported via the grid connection at times when it's needed most.

Grid connection

The current grid connection agreement is capped at 100MWac export because, at the time the connection offer was issued which was in 2021, that was the capacity that it was estimated could be accommodated on the available land, and the capacity that would be available on the distribution network at the time the solar farm will be commissioned i.e. the grid connection date which is April 2029.

Pursuant to section 7 'Grid Reform' of the Planning Statement [APP-128], the Clean Power 2030 Action Plan published by the National Electricity System Operator in 2024, indicates that after accounting for the known project pipeline in the distribution network region where the Site is located, there is still approximately 1000MW of additional solar capacity required in order to achieve the 1,500MW regional target for 2030. In order to provide the necessary network capacity and upgrades to accommodate this additional generation, SP Energy Networks is investing £3.3 billion to upgrade their network⁴.

In the unlikely event the private-wire opportunity is not realised, the Applicant is already engaging with SP Energy Networks in relation to options for securing a second grid connection offer to enable export of the surplus capacity, on the premise that there will be increased network capacity available in the future, as required to accommodate the additional solar power generation identified as being required in this particular distribution network region.

Project economics

From a commercial perspective, the Applicant – and any developer in the UK for that matter – would not invest in the significant capital expenditure of installing solar panels without first being certain that the electricity generated by the panels would generate income. In this case, such an income would come from either the private-wire arrangement or from exporting the electricity to the national grid. There is therefore reassurance that while it makes sense to secure consent for the largest solar farm that is feasible from a technical and environmental perspective, it would be unviable to install panels that are surplus to demand.

⁴ SP Energy Networks, Enabling the path to Net Zero: Our RIIO-ED2 Executive Summary for 2023 – 2028. [online] Available at: https://www.spenergynetworks.co.uk/userfiles/file/35312%E2%80%9393SPEN-ED2_ExecutiveSummary_Final_web.pdf

7. We advise that comment is provided on the potential for, and justification of, any overplanting of solar panels, including in relation to Footnote 92 of the National Policy Statement for Renewable Energy Infrastructure and in the context of the High Court judgement in ‘Lynn Ross v SSHCLG & Renewable Energy Systems Ltd’ [2025] EWHC 1183

It is acknowledged that the maximum design for Frodsham Solar provides more generating capacity than is currently agreed under the grid connection agreement with SPEN, as set out in the Grid Connection Statement [APP-145]. Footnote 92 defines the following as overplanting :

“Overplanting” refers to the situation in which the installed generating capacity or nameplate capacity of the facility is larger than the generator’s grid connection. This can be referred to as overplanting.

The High Court judgement in ‘Lynn Ross v SSHCLG & Renewable Energy Systems Ltd’ [2025] EWHC 1183 clarified that the justification for overplanting in footnote 92 are not a ‘closed list’, and can therefore go beyond merely module degradation, and encompass other reasons, including maximising energy generation. In the Lynn Ross case, the reasons given by that project developer included the difference between laboratory and field output and site maximisation.

The judgment is clear that footnote 92 does not provide that there is a separate test of whether or not the overplanting can be considered to be ‘reasonable’. Instead, the starting point is that overplanting is acceptable if it is justified, that the NSIP installed capacity threshold is not exceeded, and that the full extent of the project, including overplanting, is assessed.

If those tests are met, the overarching question of whether the Proposed Development is acceptable in the planning balance is considered, inclusive of that overplanting.

The Applicant is seeking to make best use of the land available at the Site in order to maximise the opportunity to generate as much renewable electricity as possible over the lifetime of the scheme in accordance with paragraph 4.2.21 of EN-1 that sets out *“energy security and decarbonising the power sector to combat climate change”* requires a *“significant number of deliverable locations for CNP infrastructure and for each location to maximise its capacity”*.

With this in mind, the following describes the justification for why the Applicant has overplanted the design when compared to the current grid connection agreement:

- 1) As set out above, it is considered a realistic prospect that a private wire connection to local businesses will be delivered or that there will be an increase in the grid connection offer. Should either of these materialise, it would be necessary to ensure the generating capacity of the Site can be maximised to deliver that available demand.
- 2) There will be a very limited period of the day, at certain times of year and in certain weather conditions when the panels will generate at maximum capacity. During these limited periods it may be necessary to curtail or ‘clip’ the power exported from the Site (noting the subsequent point on the use of the BESS). Outside these peak generating periods, including the morning and evening periods in mid-summer, the overplanting will enable the power exported from the site to be maximised for a longer duration. The net impact would be that more power would be generated outside periods of peak solar intensity (which also coincide with peak power demand) than power that is ‘clipped’ during the periods of peak solar power, thus maximising the renewable energy generating potential of the Site.
- 3) The BESS could be used to store excess electricity generated during periods of peak solar intensity when the electricity generated exceeds the export threshold, this power can then be exported into the grid when generation drops back below 100MW. This again maximises the renewable energy generating potential of the Site.
- 4) As recognised in paragraph 2.10.55 of NPS EN-3 Solar panels will degrade over time and overplanting above the export capacity will mean that the development can maximise export capacity for a longer period of time.
- 5) The Site is crossed by a number of utilities. Until the Applicant has secured consent and progressed to the detailed design phase, the precise extent of the areas that can or will be developed is unknown and could

ultimately be affected by engineering, commercial or procurement factors. At this stage, the layout is based on the Applicant being able to develop the entirety of Work No.1, having accounted for the 'standard' utility easements understood to be applied, however the detailed design and accompanying asset protection/safety processes may require further set-offs.

- 6) Two other 'Net Zero' projects are proposed on Site, both of which are in the pre-application stage. These are the Cadent Hydrogen Pipeline and the Eni Carbon Dioxide Runcorn Spur Pipeline. These projects are described and assessed within the cumulative effects assessment – see ES Vol 1 Chapter 4: Environmental Impact Assessment Methodology [APP-037] and ES Vol 1 Chapter 13: Cumulative and Intra-Project Effects [APP-046]. Should these projects proceed they will reduce the area available within Work No 1 of the development of solar PV arrays.

The application has been assessed on the basis of the maximum possible extent of the Proposed Development, which is controlled by virtue of the Works Plans, the certified documents in Schedule 10 and the requirements in Schedule 2. It is therefore clear that, in accordance with the judgement, the impacts of proposals are fully considered in light of the full scheme, including overplanting. Furthermore, it is noted that the likely significant effects identified within the Environmental Statement would not be avoided were the scheme developed at a lesser capacity i.e. between 100MW and 147MW.

As such, and in the context of the High Court judgement in 'Lynn Ross v SSHCLG & Renewable Energy Systems Ltd' [2025] EWHC 1183, it is considered that the Proposed Development meets the 'tests' established by the judgement relevant to this project:

- i) The Applicant has justified the overplanting within the Application, which will make the most effective use of the land at the Site and maximise the renewable energy generating potential of the Proposed Development in accordance with Government policy.
- ii) The full impacts of the proposals have been considered, including the maximum extent of overplanting.

8. ES Chapter 5 (Climate Change) utilises the 147MW generation capacity when calculating the offset greenhouse gas (GHG) emissions of the proposed development. Given the current connection offer of 100MW export, we advise that clarification is provided of how the 147MW export figure has been derived for the calculation of the offset GHG emissions and whether this is a reasonable assumption.

Our responses to the points 6 and 7 above describe why the Applicant considers that generation using the 147MW capacity is justified and is therefore a reasonable assumption for the basis of the offset GHG emissions presented in ES Vol 1 Chapter 5: Climate Change [APP-038]. However, even in a scenario where the scheme was to have a maximum export capacity of 100MW it would still offer significant GHG benefits. In order to demonstrate this the carbon calculations have been re-run on the basis of a maximum generating capacity of 100MW. The results are summarised in Table 1 below.

Table 1 – Comparison of electrical export capacity and GHG emission result between a 100MW and 147MW scheme

Comparator	100MW capacity	147MW capacity
Electricity generation capacity	5,130,874 MWh	7,549,802
tCO ₂ e offset compared to the grid average from DESNZ Fuel Mix Disclosure Table 2023/2024	877,379 tCO ₂ e	1,291,016 tCO ₂ e
GHG intensity of the electricity generated over the lifetime of the Proposed Development	78.9 gCO ₂ e/kWh	53.6 gCO ₂ e/kWh
Average operational GHG intensity	0.000437gCO ₂ e/kWh	to 0.000297gCO ₂ e/kWh

The results show that the Proposed Development would result in lower emissions of CO₂ when compared to the grid average from DESNZ Fuel Mix Disclosure Table 2023/2024, in both the 100MW and the 147MW scenario.

The GHG intensity of the electricity generated over the lifetime of the Proposed Development for both scenarios remains well within the range of estimates from literature for solar PV development and significantly lower than the GHG intensity of gas with carbon capture, which lies in a range of 90 to 245 gCO₂e/kWh.

Finally, both scenarios remain well below the long-run marginal generation-based electricity emission factor from DESNZ's Green Book supplementary guidance: valuation of energy use and greenhouse gas emissions for appraisal at 2070 (the decommissioning year of the assessment) which is 2 gCO₂e/kWh.

Whilst clearly the 147MW scheme would deliver greater reductions in GHG emissions, both the 100MW and the 147MW scenarios would achieve significant GHG emission reductions.

When calculating these alternative figures for the 100MW scenario, a number of conservative assumptions have been applied so that the figures are likely to be an underestimate of the GHG savings generated:

- 1) The construction related emissions for the 100MW and 147MW scenario have been kept the same for the purposes of the above calculations. If the scheme was constructed at 100MW export capacity the construction related emissions would be less than accounted for in the calculations.
- 2) For the purpose of this assessment, a proportional reduction of DC to AC capacity has been assumed, with DC capacity scaled down by 68% (from 207.7 MW to 141.3 MW), in line with the AC capacity reduction. However, DC capacity does not typically decrease in direct proportion to AC capacity, as solar PV systems are often designed with a higher DC-to-AC ratio to maximise energy yield and ensure efficient inverter performance. As such if the DC-to-AC ratio were to be modified this would result in greater GHG savings than reported.

Information to Inform Habitats Regulations Assessment (HRA) Report (Doc 5.3)

9. Several documents contain information needed to fully understand the effects on European sites. We advise that a consolidated HRA Report is provided that includes, but is not limited to:

- assessment of effects from operational noise (presented at a site level in the Noise Impact Assessment provided as ES Appendix 4-1 (Doc 6.2));
- details of the consultation undertaken relevant to European sites (provided in ES Appendix 7-4: Consultation and Engagement (Doc 6.2) and the Consultation Report (Doc 5.2));
- relevant habitat calculations and details of the final preferred mitigation options identified to reach a conclusion of no adverse effect on integrity on the identified qualifying features (provided in the outline Landscape and Ecological Management Plan, Appendix B (Doc 7.13));
- providing a definition of 'air quality pollutants' (HRA Report, paragraph 5.7.13); and
- providing headings on each page of tables that span multiple pages

The Information to Inform Habitats Regulations Assessment [APP-125] has been revised to include key findings from the previously cross-referenced documents within the report itself. The revised report also now provides a definition of the 'air quality' pollutants considered in the assessment and has reformatted the tables to ensure each page has headings when tables extend across multiple pages.

The report also includes a more comprehensive explanation of why Midland Meres and Mosses Phase 1 and Phase 2 Ramsar sites have been screened out as having no potentially significant effects.

Revised clean and track change versions of the Information to Inform Habitats Regulations Assessment are therefore enclosed alongside this letter.

10. We advise that evidence is provided of the in-principle agreement mentioned in the Potential Main Issues for Examination document (Doc 5.9) reached with Natural England on the mitigation proposed in relation to HRA, including the Non-Breeding Birds Mitigation Area.

As set out in the revised HRA the Applicant has undertaken multiple meetings with Natural England and Cheshire West and Chester Council in the pre-application stage relating to impacts on the Mersey Estuary SPA and Ramsar site. The in-principle agreement was achieved through this process of dialogue, with the understanding that written agreement would need to be achieved post-application following detailed consideration of the evidence provided within the ES and the HRA. The Applicant remains in dialogue with Natural England and Cheshire West and Chester Council and will soon begin the process of drafting a Statement of Common Ground with both organisations to reflect the progress made to date. This will include the acceptability of the mitigation proposed in relation to HRA, including the Non-Breeding Birds Mitigation Area. These Statements of Common Ground will be submitted in the early stages of the Examination.

11. We advise that a figure is provided within the FRA to clearly identify all watercourses within the Order limits and distinguish their types, e.g. tidal, river, canal.

Appendix J of ES Vol 2 Appendix 9-1: Flood Risk Assessment and Drainage Strategy Part 1 of 5 [APP-084] has been updated to include an additional figure titled 'Watercourse Location Plan' which distinguishes the types of watercourse within and adjacent to the Site.

Revised clean and track change versions of ES Vol 2 Appendix 9-1: Flood Risk Assessment and Drainage Strategy [APP-084 to APP-088] are therefore enclosed with this letter to reflect this update.

12. We advise that a figure is provided within the FRA to clearly show flood zones within the Order limits alongside the key infrastructure components to demonstrate their spatial relationship.

Appendix F of ES Vol 2 Appendix 9-1: Flood Risk Assessment and Drainage Strategy Part 1 of 5 [APP-084] has been updated to include two additional figures "EA Flood Map for Planning Rivers and Sea Data published March 2025 – with Indicative Key Infrastructure Shown", and "EA Risk of Flooding from Surface Water Data published January 2025 – with Indicative Key Infrastructure Shown".

Revised clean and track change versions of ES Vol 2 Appendix 9-1: Flood Risk Assessment and Drainage Strategy [APP-084 to APP-088] are therefore enclosed with this letter to reflect this update.

13. We advise that evidence is provided of whether the Environment Agency supports the proposal to disapply a requirement for flood risk activity permits.

The Applicant is continuing dialogue with the Environment Agency during the pre-examination stage and will seek its position on whether it is satisfied to disapply the requirement for flood risk activity permits. The outcome of the Applicant's discussions will be set out in a Statement of Common Ground with the Environment Agency submitted early in the Examination process.

The Outline OEMP states that the final OEMP submitted for approval would not include details of specific measures to be put in place for large scale replacement activities. It further states that for replacement activities which involve more than 50% of the solar panels for the project, notification would be submitted to Cheshire West and Chester Council with details of the management measures and be consistent with the principles of the approved management plans, but also commensurate to the scale of activity proposed.

14. We advise that the ES is updated to set out the solar panel replacement considered in the assessment and to provide an impact assessment to allow the identification of matters to be considered in the planning balance.

The Outline Operational Environmental Management Plan [APP-137] prescribes environmental management measures which are suitable to control effects from routine maintenance and also from major replacement campaigns. The measures prescribed are sufficient to ensure that the effects of a large-scale replacement would not exceed the effects predicted in the ES. Measures provided within the oOEMP include:

- measures to protect and maintain existing vegetation, ensuring that retained vegetation is safeguarded throughout the operational phase.
- Temporary lighting will be designed to minimise light spill, using directional fittings and low-intensity lamps where possible.
- Any works with the potential to disturb wildlife, such as vegetation clearance, will be scheduled outside of sensitive periods. If this is not possible, pre-work surveys will be conducted by the EcoCoW or other suitably qualified ecologist.
- An Environmental Incident Management and Pollution Prevention Plan will be produced that will contain information relating to the location of spill kits and any sensitive receptors, as well as the procedure for incident response.
- An Unexpected Contamination Protocol will be prepared.
- Upstanding heritage assets of value will be retained and permanently fenced to avoid damage from routine operational maintenance works or periodic replacements.
- Any works being undertaken during the core Non-Breeding Bird Period (Nov-Feb) that lie within 180m of the eastern boundary of Cell 3 and within 120m of the SSSI to the north of Cell 2 and Cell 3 could require mitigation (to be determined by the Ecological Clerk of Works), this may include acoustic hoarding around noisy plant or other measures to reduce noise levels. If works are undertaken outside the core Non-Breeding Bird Period (Nov-Feb) within the aforementioned distances, the Ecological Clerk of Works should be consulted to determine the need for mitigation.

The principle of the approach taken in the Application is that the assessment of the construction phase provides a worst-case assessment in respect to construction and, ergo, large-scale replacement activities and that is reflected in the assessments carried out across the different topics of the ES. Where relevant, any specific effects from large scale replacement campaigns have been referenced in the ES.

In virtually all instances the effects during a large-scale replacement campaign are likely to be of a lower magnitude than during construction, particularly bearing in mind there would be no below ground works required to facilitate the replacement works.

The site-specific factors for this development are also relevant, especially regarding traffic-related effects. During the replacement campaigns, and at all other times during the project's operational phase, access to the Site would be via Pool Lane and the dualled A5117, which connects to Junction 14 of the M56 and Junction 10 of the M53. These roads are designed to accommodate HGV traffic and avoid the need to pass through residential areas. This situation is uncommon, particularly for NSIP solar schemes.

However, in recognition that major replacement campaigns would have a greater level of effect and be more noticeable to the community than routine maintenance operations, it is proposed that where a replacement campaign involves more than 50% of the solar panels, then a notification would be submitted to CWACC. This is considered to be a sensible and proportionate approach, particularly in light of the fact that at the point of a major replacement campaign, likely to be 15 to 20 years from commissioning of the development, the baseline environment or regulatory context could have altered, such that it may be prudent to apply specific mitigation for the replacement campaign.

The assessment provided in the ES is therefore considered to be robust and sufficiently comprehensive to enable the likely significant effects of replacement campaigns, including major replacement campaigns, to be considered by consultees and the Examination Authority. Similarly, the OEMP is considered to provide adequate control to ensure that the Proposed Development would not give rise to significant environmental effects during the operational phase and that where possible, environmental effects are minimised or avoided.

15. We advise that the draft DCO and Outline OEMP are updated to secure the extent of panel replacement and mitigation measures relied on by the updated ES.

On the basis of the response to point 14, the Applicant does not consider that the draft Development Consent Order or the outline Operational Environmental Management Plan [APP-137] need to be updated to deal with these concerns.

16. A portion of the Non-Breeding Bird Mitigation Area, Skylark Mitigation Area and main site access with private wire connection area have not been assessed within the Agricultural Land Classification (ALC) Survey. We advise that clarification is provided of the ALC in those areas, together with an assessment of effects, mitigation measures and how they are secured.

The ALC survey, provided as Appendix 17.2 to ES Vol 2 Appendix 1-1: Frodsham Solar Scoping Report (May 2023) [APP-048], covers the agricultural areas of the Site which would be subject to development. We have set out below the reasons why we do not consider that additional ALC survey is required in the areas identified in the s51 advice.

Non-Breeding Bird Mitigation Area

The Non-Breeding Bird Mitigation Area (NBBMA) is currently managed for SPA species pursuant to the planning conditions of the Frodsham Wind Farm, through the creation of wet areas ('scrapes') and grassland for foraging SPA birds. The grassland is managed through grazing, but the land is not intensively farmed. In particular, it is not used for any arable crop production or for the production of silage.

The creation of the NBBMA will involve re-engineering the soils and introducing water level management mechanisms. However, the area will remain in a similar land use to its current state, i.e., wetland areas and grassland. The emphasis will be on creating higher value habitats for SPA species through the delivery of areas of wet grassland and improved wetland areas. As set out in the Non-Breeding Bird Mitigation Strategy (Appendix B to the Outline Landscape and Ecology Management Plan [APP-144]), grazing will continue to be used in this area to achieve the habitat outcomes required to meet the objectives of the NBBMA.

On this basis, it is not considered that there would be any agricultural impacts from the Proposed Development in the NBBMA, and as such, an ALC survey of this part of the Site is not necessary.

Skylark Mitigation Area

The skylark mitigation will not be subject to any physical intervention as part of the development. The land identified will be managed as neutral grassland for the benefit of skylark as described within the Outline Landscape and Ecology Management Plan [APP-144]. This land will therefore be capable of continued agricultural use through the cropping of hay and/or silage, and also potentially for grazing⁵. On this basis it is not considered that an ALC survey is required for this area of the Site as there will be no impact to its agricultural use.

⁵ Skylark conservation - Advice for farmers. Available at: www.rspb.org.uk/helping-nature/what-we-do/influence-government-and-business/farming/advice-for-farmers-helping-bird-species/skylark-advice-for-farmers [Last Accessed: 07 July 2025]

Main site access with private wire connection

The Applicant can confirm that, as set out at paragraph 2.4.109 of ES Vol 1 Chapter 2: The Proposed Development [APP-35], the main site access with private wire connection lies within an existing access road and is therefore not agricultural land. Table 5-6 of the Outline Construction Environmental Management Plan [APP-136] confirms that the Private Wire Connection will be delivered within the footprint of the existing access tracks. On this basis it is not considered that an ALC survey is required for this area of the Site.

17. We advise that evidence is provided of whether Natural England is satisfied with the ALC Surveys and related soils impact assessment and mitigation.

The Applicant is continuing dialogue with Natural England during the pre-examination stage and will seek its position on whether it is satisfied with the ALC Surveys and the related soils impact assessment and mitigation. The outcome of these discussions will be set out in a Statement of Common Ground with Natural England submitted early in the Examination process.

18. A description is provided of the types of waste and how they would be managed but does not provide the quantities of waste produced during the construction and operation phases as requested by the Planning Inspectorate Scoping Opinion. We advise that, in line with Schedule 4 of the Environmental Impacts Assessment Regulations and the Overarching National Policy Statement for Energy NPS, information is provided of:

- the anticipated volumes of waste from the proposed development;
- the proposed on-site waste management strategy; and
- an assessment of the impact of the waste generated on the capacity of waste management facilities, including consideration of other waste arising in the area.

As noted in the advice, the Applicant has outlined in section 2.8 of ES Vol 1 Chapter 2: The Proposed Development [APP-035] the types of waste anticipated in each phase of the development. The section also describes how the Applicant would manage waste in accordance with the waste hierarchy and would seek to avoid landfill where possible.

The oCEMP [APP-135], oOEMP [APP-136] and oDEMP [APP-137] describe embedded mitigation measures to control and manage waste on-site, including the development of a Waste Management Plan for each phase.

However, in order to address the points raised in the section 51 advice additional information is provided below.

The anticipated volumes of waste from the proposed development

Many of the scheme components will be prefabricated offsite e.g. solar PV modules, mounting structures, PCUs, battery units, substation infrastructure etc. As such, wastage during construction and during replacement activities, is expected to be minimal. During decommissioning, it is assumed that the infrastructure that has been constructed would be removed, including cabling.

Table 2 to 4 below (construction, operation and demolition respectively) provide an estimate of the waste volumes generated by those elements of the Proposed Development considered likely to produce the largest amounts of waste, and reflects the types of waste described in section 2.8 of ES Vol 1 Chapter 2: The Proposed Development [APP-035]. The tables set out the waste type, the estimated tonnage of the waste type and the expected fate in terms of the waste hierarchy based on the application of best practice and implementation of the Waste Management Plans which would be implemented at each phase of the development.

Table 2 – Construction Phase Waste Estimates and Fate

Waste Type	Tonnage / unit	Fate
General waste from offices and welfare (mixed municipal waste)	35 tonnes	50% recycle / 50% landfill or energy recovery

Waste Type	Tonnage / unit	Fate
Oils, chemicals, solvents etc (liquid)	Minimal	50% recycle / 50% landfill or energy recovery
Waste aggregate and concrete (inert)	874 tonnes	90% recycle / 10% landfill or energy recovery
Cable waste (metal and plastic)	39 tonnes	95% recycle / 5% landfill
Mounting structure steel (metal)	4 tonnes	Recycle
Wooden posts (wood)	1.5 tonnes	35% recycle / 65% energy recovery
Fencing wire (metal)	0.65 tonnes	Recycle
Wood pallets (wood)	165 tonnes	70% re-use or recycle / 30% energy recovery
Plastic and foam packaging (plastic)	44 tonnes	90% recycle / 10% landfill or energy recovery
Cardboard packaging (cardboard)	217 tonnes	90% recycle / 10% landfill or energy recovery
Cable drums (wood, metal and plastic)	6,355 tonnes	95% re-use or recycle/ 5% energy recovery

Table 3 – Operational Phase Waste Estimates and Fate

Waste Type	Tonnage / unit	Fate
General waste from offices and welfare (mixed municipal waste)	2 tonnes / year 80 tonnes over operational life	50% recycle / 50% landfill or energy recovery
Oils, chemicals, solvents etc (liquid)	Minimal	50% recycle / 50% landfill or energy recovery
Solar PV modules (metals, glass, plastic)	317,460 units 12,100 tonnes	90% recycle / 10% landfill or energy recovery
PCUs (Metal, plastics, electronics)	54 units 1,944 tonnes	90% recycle / 10% landfill or energy recovery
Battery units (Metal, plastics, electronics, battery cells)	828 units 19,044 tonnes	90% recycle / 10% landfill or energy recovery
PCSs (Metal, plastics, electronics)	104 units 3,744 tonnes	90% recycle / 10% landfill or energy recovery
Fencing wire (metal)	31 tonnes	Recycle
Fencing wood (wood)	70 tonnes	35% recycle / 65% energy recovery
Wood pallets (wood)	165 tonnes	70% re-use or recycle / 30% energy recovery
Plastic and foam packaging (plastic)	48 tonnes	90% recycle / 10% landfill or energy recovery
Cardboard packaging (cardboard)	238 tonnes	90% recycle / 10% landfill or energy recovery

Table 4 – Decommissioning Phase Waste Estimates and Fate

Waste Type	Tonnage / unit	Fate
General waste from offices and welfare (mixed municipal waste)	21 tonnes	50% recycle / 50% landfill or energy recovery
Oils, chemicals, solvents etc	Minimal	50% recycle / 50% landfill or energy recovery

(liquid)		
Solar PV modules (metals, glass, plastic)	288,600 units 11,000 tonnes	90% recycle / 10% landfill or energy recovery
PCUs (Metal, plastics, electronics)	49 units 1,764 tonnes	90% recycle / 10% landfill or energy recovery
Battery units (Metal, plastics, electronics, battery cells)	184 units 4,232 tonnes	90% recycle / 10% landfill or energy recovery
PCSs (Metal, plastics, electronics)	23 units 828 tonnes	90% recycle / 10% landfill or energy recovery
Cable waste (metal and plastic)	1,762 tonnes	95% recycle / 5% landfill or energy recovery
Fencing wire (metal)	31 tonnes	Recycle
Fencing wood (wood)	70 tonnes	35% recycle / 65% energy recovery
Aggregates (inert)	28,000 tonnes	90% recycle or recovery / 10% landfill
Concrete (inert)	8,808 tonnes	90% recycle or recovery / 10% landfill
Mounting structure steel (Metal)	206 tonnes	Recycle

An assessment of the impact of the waste generated on the capacity of waste management facilities, including consideration of other waste arising in the area

In terms of the fate of waste materials, reasonable estimates have been provided for the level of recycling. However, it is recognised within the solar and BESS industries that there will be a need for recycling facilities to be upscaled over time. Nonetheless, there are already companies and technologies that achieve very high recycling and recovery rates from solar PV panels and BESS units, and this technology is only likely to advance over time, particularly considering the value of the constituent materials which form the basis of these components.

Based on the above, the vast majority of waste produced during the project lifecycle would be recycled or reused. Estimates for the landfill or energy recovery of waste is provided in Table 5.

Table 5 – Landfill or energy recovery tonnages

Phase	Destination	Tonnage
Construction	Non-Hazardous landfill / energy recovery	414
	Inert landfill	87
	Hazardous landfill / incineration	<1
Operation (over 40 years)	Non-Hazardous landfill / energy recovery	427
	Inert landfill	-
	Hazardous landfill / incineration	< 10
Decommissioning	Non-Hazardous landfill / energy recovery	1,926
	Inert landfill	3,680
	Hazardous landfill / incineration	<1

The Cheshire West & Chester Waste Need Assessment 2023 has been prepared to support the development of the next Cheshire West and Chester Local Plan and identifies the future need for additional waste management capacity in the authority up to 2045.

The assessment indicates a surplus recycling and composting capacity of approximately 772,500 tonnes per annum in 2025, decreasing to approximately 736,000 tonnes in 2045. The specific types of recycling capacity are not detailed, and it is considered unlikely that current capacity would accommodate some of the more specialised wastes, such as battery and PV panel waste. Nonetheless, it is evident that there is sufficient existing and planned recycling capacity for more common waste streams. Furthermore, as noted in the recent decision by the Secretary of State for East Yorkshire Solar Farm⁶, although the capacity of facilities to handle decommissioned solar PV panels is still developing, the recycling industry is likely to respond to demand over time.

In terms of energy recovery, CWACC has significant capacity available for non-hazardous, biomass and hazardous waste streams as shown in Table 6 below. The assessment identifies that in 2045 there would be a surplus recovery capacity of 973,495 tonnes of non-hazardous waste per annum.

Table 6 – Energy from Waste Recovery Facilities

Site Name & Operator	Waste type	Capacity (tpa)
Protos Energy Recovery Facility	Non Hazardous residual waste/RDF	500,000
Lostock Sustainable Energy Plant	Non Hazardous residual waste/RDF	600,000
Ince Bio Power, Evero Energy Services Ltd	Waste wood primarily from C,D&E waste stream only	176,500
Ellesmere Port HTI, Veolia ES Cleanaway Ltd	Primary inputs hazardous waste	100,000

The authority does not at present have an operational landfill accepting non-hazardous waste. However, the assessment describes that there is a consented landfill at Kinderton Lodge with a void capable of accommodating up to 2.1M tonnes of non-hazardous waste over a 12-year period. The site may accept up to 275,000t of non-hazardous waste along with 25,000t of inert waste in each of the 12 years of operation. The assessment recognises a potential shortfall in non-inert landfill from 2037, this forecast shortfall will be more than offset by the substantial surplus in 'Other Recovery' capacity offered by the energy from waste plants. The assessment also identifies that the north west has a non-inert landfill capacity of 13M tonnes. In relation to inert landfill capacity, the assessment sets out that there will be a requirement for inert materials for the restoration of Kinderton Landfill, but also sets out that the capacity of inert waste in the north west region was approximately 3.5M tonnes.

Based on the above, it is apparent that there is sufficient recovery and disposal capacity available to accommodate the volumes of waste set out in Table 5, taking into account other waste arising in the area.

The proposed on-site waste management strategy

Section 2.8 of ES Vol 1 Chapter 2: The Proposed Development [APP-035] sets out the approach that would be taken to the management of waste during the project's lifecycle. The primary mechanism to deliver the sustainable management of waste associated with the project will be the waste management plans that will be prepared and implemented for the construction, operation, and decommissioning phases of the project.

The waste management plans will document the types of waste that will be generated and how these wastes will be managed in accordance with the waste hierarchy. The plans will describe measures that would be used to reduce waste arisings and also the process of managing waste to maximise its potential for being managed as high up the waste hierarchy as possible. The oCEMP [APP-136], oOEMP [APP-137], and oDEMP [APP-138] describe the requirement to implement a waste management plan for each phase and outline the measures that will be adopted, including:

- Waste minimisation in design
- Just-in-time delivery;
- Precision in material ordering;
- Segregated waste streams and provision of dedicated waste stream storage; and
- Identification of specialist waste recycling contractors.

⁶ SoS Decision letter for East Yorkshire Solar Farm, 9 May 2025 and ExA report ref 3.13.50 and 3.13.51

Post-consent, the outline plans will be developed into full plans which must be in substantial accordance with the outline and will require approval by CWaCC. This will include the production and approval of specific waste management plans. The Proposed Development must be undertaken in accordance with those approved plans. This is secured via a Requirement in Schedule 2 of the draft DCO.

Based on the information provided above and the implementation of the measures which are secured within the draft DCO, it is evident that there would be no likely significant effects arising from the Proposed Development in relation to waste management.

Minor errors and omissions

There are minor errors and omissions, as reflected in Box 30 of the acceptance checklist.

All of the matters set out in Box 30 are addressed within this letter.

Works Plans (Doc 2.3), Access PROW Plans (Doc 2.4) Land and Crown Land Plans (Doc 2.2) and Hedgerow Plans (Doc 2.7): Inconsistencies in positioning of cut lines between sheets.

We have revised the following plans to ensure that there is consistency in the positioning of cut lines between sheets for each of the sets of drawings as follows:

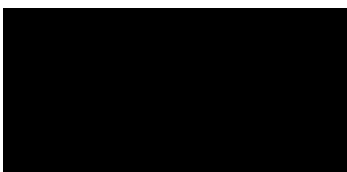
- Location, Order Limits and Grid Coordinates Plans
- Land and Crown Land Plans
- Works Plans
- Street Works, Public Rights of Way, Vehicular Usage and Access Plans
- Hedgerow Plans
- Statutory and Non Statutory Sites or Features of Nature Conservation Plans
- Statutory and Non Statutory Sites or Features of the Historic Environment Plans
- Water Bodies in a River Basin Management Plans

Conclusion

We trust that the responses contained within this letter and the associated attached documents assist the Planning Inspectorate and the Examining Authority in their consideration of the application.

Please do not hesitate to contact if you have any questions or require any further information regarding this letter.

Yours sincerely



Mark Flaherty
Development Manager on behalf of Frodsham Solar Limited (FSL)
FSL is a Cubico Sustainable Investments owned company