Submission ID: 37119

Dear Inspectors
Please find attached two documents which contain Comments on Responses to ExA Written Questions 1 on responses from the Applicant to questions relating to:
1. surplus power generation, panel technology, batteries and national need vs Very Special Circumstances.
2. Comments regarding a lack of Residential Visual Amenity Assessment and issues with Glint & Glare Report
Yours
Rosemary Lewis
Resident of Church Hanborough

Comments on responses to Examiners Questions 1: Surplus Generation, Battery Storage, Need and Very Special Circumstances.

1. SURPLUS ENERGY GENERATION and PANEL EFFICIENCY.

1.1. Since the Botley West Solar Farm was first proposed the applicant has made much, in communications and in the press, of "the agreement to supply 840 MW". In some articles they implied that the size of the proposal could not be reduced because they could not fall short of this amount. However, this is not the case.

1.2. In the ExA 1st written questions, the ExA asks two questions about panel efficiency.

1.2.1. Question 1.1.18 part 4. Whether using more efficient or productive panels, likely to be availabile by the time construction started, would result in waste.

1.2.2. Question 1.1.18 part 5 Whether there would a reduction in the number of panels in order to limit the output. due to the of panels with greater efficiency or productivity by the time BWSF was built.

1.3. In their answer to 1.1.18 (4), the Applicant admits that the 840MW is the upper limit to what they can supply. They go on to say that "any additional generation would primarily offset natural performance degradation over time." They fail to answer 1.1.18 (5).

1.4. They do not provide any evidence of either the timing or amount of this degradation but if there was surplus generation, particularly in the early years, there is no guarantee that this surplus could be used and therefore the answer to question 4 should be "yes, there will be waste" (especially without battery storage - see below).

1.5. I can confirm the fact that 840MW is the agreed maximum to be supplied - as shown in a letter I received from NESO (see Appendix A) on March 2023 which states clearly that:

"*The amount that a developer applies for forms the basis of a right to connect to and use the system. This is a right rather than an obligation. A developer can apply to change the amount and there are provisions within the CUSC for cancellation etc."*

1.6. So, the CAP by NESO means there is no need or even commercial advantage in generating more MW than the 840MW limit, especially without any on-site battery storage (BESS) planned and, further, there is no financial penalty for not reaching that cap.

1.7. In the light of this, the Applicant needs to justify the over-specifying of panels using current technology and their failure to consider a reduction in panel area due to the improved performance of new panel technology.

2. BATTERY STORAGE.

2.1. In ES: Para 5.8.2 Alternatives considered (Ref: APP-042), the Applicant confirms that

"The Project does not incorporate any battery storage. Energy generated by the Project will be despatched to the grid but stored, as required, by Battery Energy Storage Systems (BESS) that are connected to the Grid elsewhere, ***including the EDF 50MW BESS located at Cowley substation."***

2.2. However in his response to ExQ1 submitted for deadline 2, (Ref: REP2-122) Michael Field gives an engineer's perspective on this. He writes:

"EDF's 50MWh Cowley battery provides inertial grid support for the Oxford area. It can absorb or inject energy at 50MW for up to 30 minutes. It is neither suitable nor available as storage for solar energy."

2.3. On the consequences of this for BWSF Michel Field concludes that

"it is far from certain a [suitable] third party battery storage will ever exist, let alone commit to purchasing BWSF energy. This has two further consequences: BWSF's Surplus energy will be curtailed (discarded) in the daytime and, in the evening, demand will be satisfied by alternative generators.".

2.4. This conclusion casts doubt on the accuracy of Applicant's statement of the availability of alternative battery storage.

3. THE NEED and VERY SPECIAL CIRCUMSTANCES

3.1. Within their answer to ExQ1 question 1.3.3, the Applicant writes: *"in terms of the weight to be given to the contribution of the Project to the urgent need for renewable energy generation, NPS EN-1 paragraphs. 3.2.6-8 are clear that the need should be given substantial weight".*

3.2. Recent data suggests that the need for an one particular project can and should be considered on more than this need alone, in view of the current high number of other proposals either approved, in planning or awaiting connection in the queue.

3.3. On Radio 4 in World at One on 13th of December, Head of Mission for Clean Power at the Department for Energy Security and Net Zero, Chris Stark, described his role as;

"*unique, being within the department for Energy but also looking across Whitehall so that we can get all the various leavers pulled and blockages removed to get to where we need to get to by the end of this decade".*

3.4. He went on:

"What we're doing today is being much more specific about why do we need to do this and where this new infrastructure needs to go? That will be a signal back into the planning regime itself about the priority that we're giving to these projects for 2030 and again that's a new step."

3.5. In answer to the question "*Can you be clear about what the blockages are at the moment*?", he replied

"The biggest barrier is how we manage the Grid so we already have in the queue more capacity than we will ever need for our energy system."

3.6. These needs are identified by National Energy Systems Operator (NESO) formerly ESO. An article from Feb 2023 states;

"The ESO Future Energy Scenarios modelling shows that Great Britain needs between 123-147 GW of low carbon transmission generation by 2030 to be on a net zero compliant pathway, and there is already 83 GW connected. As of February 2023, Great Britain had 257 GW of generation with contracts for future connection to the transmission system. That's three times as much than is needed."

3.7. In ES Chapter 5 paragraph 5.5.4, (APP-042) the Applicant also acknowledges that 'there are many schemes currently in the consulting process" but then goes on to consider only the largest, NSIP solar schemes, claiming they would "only add approximately 15.2GW to the 15.8 installed capacity ie a total potential capacity of 31GW." This fails to give an honest assessment, and contradicts the data supplied by NESO, because the Applicant has been arbitrarily selective in counting just "the largest schemes", ignoring many smaller but equally important - indeed in many cases, more appropriate - schemes. In terms of national energy needs they have also ignored the contribution of schemes offering alternative and more efficient sources of energy such as on- and off-shore wind to the overall national energy target.

3.8. NESO continues to face a significant bottleneck in grid connections. **Over 1,700 applications were received in 2023/24, creating a backlog exceeding 700 GW of capacity, far surpassing the UK's projected needs for 2030 and 2050**. This backlog is hindering the progress of renewable energy projects seeking to connect to the national electricity transmission system. **The 700+ GW backlog is significantly larger than the UK's projected energy needs for the next few decades, highlighting the severity of the issue, according to the Energy Advice Hub and the National Energy System Operator (NESO).**

3.9. Since then applications to join the queue have continued to expand rapidly with the NESO website reporting that they will begin the process of reorganising the over 3,000 projects in the transmission connection queue after July 2025.

3.10. In April 2025 Kayte O'Neill, Chief Operating Officer at NESO said "approximately, 296GW of projects are expected to receive gate 2 offers." [in September 2025]. This is still 3 times the predicted need by 2030.

3.11. The conclusion is that the Applicant can no longer simply rely on the "National need to avert the Climate Crisis" as the very special circumstances for building on Green Belt and BMV land and the Inspectorate can be more selective about which projects to recommend based on these factors.

3.12. The connection date for BWSF currently shown on the TEC register is 30 October 2026. This is confirmed in NESO's letter of 23 Dec 2024. With this examination not ending until November 2025 and a decision not expected until mid 2026, there is no way that the Project will be reading to connect until at least mid to late 2028 at the earliest (even if the 2+ years construction was started immediately) with the risk that it will lose its place in the queue to connect.

3.13. Further, as ExA point out in question 1.3.3, "*the likelihood of the National Grid substation being constructed fully and ready to receive the proposed development is in doubt".* Again, in this eventuality it is likely that other projects, able to proceed, would be offered connections ahead of BWSF in order to meet the urgent need already described.

4. CONCLUSIONS

4.1. With the current specification, surplus generated electricity would be wasted - particularly in the early years.

4.2. Without battery storage on site, or guaranteed to be available elsewhere as the Applicant claims, there is no need or advantage to the Applicant to over specify the number of panels to be installed, particularly without regard to improvements in panel technology.

4.3. Based on the Goverments own figures, there is capacity among projects likely to accepted at gate 2 of the queue to provide 3 times the energy needed by 2030.

4.4. The Applicant can no longer simply rely on the "National need to avert the Climate Crisis" as the "very special circumstances" and a reason for approval to build on Green Belt and BMV land and the Inspectorate can be more selective about which projects to recommend based on these factors.

Appendix A follows

APPENDIX A.

Facsimiles of the first two pages of 23 Dec 2024 Letter from NESO, with relevant comments highlighted

Public

Ref: EIR/24/0007

National Energy System Operator
Faraday House
Gallows Hill
Warwick
CV34 6DA

InformationRights@nationalenergyso.com

nationalenergyso.com

23 December 2024

Dear requester

Request for Information

Thank you for your request for information which was received by the Information Rights team on 11 December 2024. We are aware that you initially submitted your request to NESO on 13 October 2024 and would like to apologise for the delay in responding to you.

Your request has been considered under the Environmental Information Regulations 2004 (EIR) as we believe that the requested information falls within the definition of environmental information

as set out in Regulation 2(1) of the EIR. The exemption at Section 39 of the Freedom of Information

Act 2000 (FOIA) covers information that a public body is obliged to consider under the EIR and has the effect of routing all requests for environmental information via the EIR rather than the FOIA

Request and our response

Note: In your request you have referred to an agreement with the National Grid. National Grid Electricity System Operator was part of the National Grid PLC group of companies. On 1 October we became the National Energy System Operator (NESO), a new public corporation and not part of National Grid.

National Energy System Operator Limited
Company Number 11014226
Registered office address St Catherine's Lodge, Bearwood Road,
Sindlesham, Nr Wokingham, Berkshire, RG41 5BN

NESO manages and holds any agreements for the connections to the transmission network. We can confirm that we hold information which falls within the scope of your request:

A developer, Photovolt Development Partners GmbH acting on behalf of SolarFive Ltd, is currently in the pre-application stage of a NSIP planning application to install and operate a utility-scale solar farm in Oxfordshire called Botley West Solar Power Station. I understand the developer has an agreement that was made with National Grid to supply approximately 840MW of solar energy connecting to the electricity transmission system via a new 400kV substation to be constructed to the west of Oxford.

1. Re the amount of power to be supplied:

a. I understand that the developer is contractually obliged to supply a maximum of 840MW. Please can you confirm this?

b. Is there a minimum amount the developer is contractually obliged to supply?

c. If the developer decided to reduce the size of their scheme so that they would regularly supply a lower amount than 840MW to National Grid/NESO, would this be permitted within the terms of their contract with National Grid/NESO or would it be a breach of contract?

The TEC Register contains information about existing and future connection projects and projects that can be directly connected to the National Electricity Transmission System (NETS) or make use of it. The latest TEC Register is published on the NESO website: Transmission Entry Capacity (TEC) register | National Energy System Operator.

The TEC Register dated 17 December 2024 shows an entry for SolarFive Ltd's 840MW project 'Botley West – Cote Solar Power Station' with a connection at Botley West 400kV Substation. The effective date is 30 October 2026.

Connection offers are made substantially in the form and under the terms of the Connection and Use of System Code (CUSC). The CUSC has exhibits containing proformas of the documents which set out the main content of the connection agreements with a developer and you can find the CUSC and the proformas on our website: CUSC Code Documents | National Energy System Operator.

The amount that a developer applies for forms the basis of a right to connect to and use the system. This is a right rather than an obligation. A developer can apply to change the amount and there are provisions within the CUSC for cancellation etc.

In terms of providing information that relates to a specific connection agreement with the customer, SolarFive Limited, relating to the Botley West Solar Power Station project, we are relying on the exception at Regulation 12 (5)(e) of the Environmental Information Regulations 2004 which states that a public authority may refuse to disclose information to the extent that its disclosure

Comments on ExQ1 Responses - Residential Visual Amenity Assessment (RVAA) and Glint and Glare

1. ExA WQ1 1.14.4 Residential Visual Amenity Assessment (RVAA)

1.1. The Examiners ask: "*ES chapter 8 [PDB-006] table 8.5 shows that the scoping opinion required assessment for RVAA. Paragraph 8.6.78 to 80 of this document referred to RVAA. However, the very brief paragraphs do not clearly demonstrate that the 4-step assessment suggested in The Landscape Institute Technical Guidance note TGN2/19 has been undertaken*." and go on to request a more in-depth assessment

1.2. In their response PVDP seem to have ignored this question, simply replying: "*professional judgement and applicable guidance was used to determine 25 meter buffer zone from individual properties and settlements".*

1.3. They do not identify or even provide a number for these properties. They claim, with no justification, that "*many of the individual properties have existing vegetation within their boundaries which would further limit the effects of the project".*

1.4. Again, without any evidence provided, they add "*Due to the low level of the project and proposed mitigation, it is anticipated that there is no potential for any private views to be adversely affected to an extent that would result in a level of effect that would trigger the requirement for RVAA."*

1.5. The Stop Botley West (SBW) Community Impact Report [Ref: REP2-081, para 7.3-7.6] has already criticised PVDP's conclusion that the requirement for an RVAA has not been triggered.

1.6. By PVDP's own admission there are at least 699 individual properties that "have a potential view of the panels" and "are within the 1Km assessment area" as these were the criteria used in deciding the properties to be assessed for the Glint and Glare report. [Ref APP-128 ES 6.5 Appendix 4.4 Glint & Glare Study, para 5.4.1]

1.7. It is difficult to understand why the Applicant has ignored these when assessing and dismissing the need for an RVAA.

1.8. The Stop Botley West (SBW) Community Impact Report [Ref: REP2-081, para 7.7] identifies "255 residential properties within 100m of the site and a least 70 on or within the red line boundary". SBW data also shows over 5,000 properties in total within 1km of the site.

1.9. I can personally attest, having visited nearly all of the impacted properties/ settlements within 100m of the site, that most do not have existing vegetation affording any screening from the panel area. Additionally, due to the steep contours in the Central and Southern sites, NO amount of hedging or fencing would screen the views for many properties eg all those along Lower Road, Church Hanborough or on Tumbledown Hill, Cumnor and for some of the properties in Bladon, Cassington and Begbroke.

1.10. A sample of around 20 of the most impacted property owners have requested an ASI so that ExA can judge for themselves the level of impact on Residential Amenity involved.

1.11. PVDP go on to say "*The impact of glint and glare upon residential amenity has been assessed within the Solar Photovoltaic Glint and Glare Study [APP-128] (section 7.4]. The Glint and Glare report identified a moderate impact upon residential amenity for seven dwellings for which mitigation was recommended. This recommendation was looked at and changes made to the design as required. These recommendations can be revisited to ensure that all have been considered properly and any further mitigation can be added as necessary."*

1.12. This assessment has already been questioned in The Stop Botley West (SBW) Community Impact Report [Ref: REP2-081, section 8.0 Glint and Glare Study] due to a number of failings:

1.12.1. Over 600 properties were assessed as requiring no mitigation. In the majority of cases this was incorrect due to a failure to distinguish between existing and proposed vegetation.

1.12.2. Only 7 properties were assessed as requiring mitigation and, of these, two do not require it due to a well established hedge.

1.12.3. Thirty impacted properties in Bladon within 100m of the site were omitted from the study altogether.

1.13. The case for not carrying out a residential visual amenity assessment relies on the applicant's insistence that very few properties are impacted. The fact that they identified nearly 700 properties "within 1km with potential sight of the panels" and the data collected by Stop Botley West contradicts this conclusion. NB A full analysis by SBW of the presence or absence of vegetation was not possible due to the lack of images/maps provided by the Applicant - see para 2. below

2. <u>ExA WQ1 1.17.9 Glint and glare on road traffic users</u>

2.1. The ExA ask: "Section 9 of the assessment refers to dwellings railways roads and aviation as receptors were vegetation has been specified as a possible means of mitigation for potential impacts. What assurances can the applicant provide that, should this form for mitigation be selected, it will be effective immediately with no reliance on plant growth which could take several years.

2.2. NB. This question applies equally well to the 606 dwellings assessed for Glint and Glare assessed as needing no mitigation due to "existing or new vegetation". (See para 1.12.1 para above)

2.3. Response from PVDP. "*If vegetation is proposed which would not initially screen views of the reflecting panels temporary fencing will be utilised the screen views towards the sensitive receptors until vegetation mature sufficiently."*

2.4. This option has not previously been mentioned in relation to dwellings and no plans exist showing where this would happen.

2.5. Building a 2m high solid fence (not specified but presumably solid and up to 2m high) would have an immediate, overwhelming and unsightly impact on the outlook from the many impacted properties with no existing vegetation.

2.6. It is impossible to independently assess which of the 606 properties assessed for Glint and Glare would be affected in this way. This is because, apart from the Northern Site, images identifying whether individual properties have existing vegetation or whether new vegetation is proposed have not been provided by the Applicant despite being described as "provided on request" on page 190 of the Glint and Glare report [APP-128: Appendix 4.4 Glint and Glare Report] .

2.7. An email was sent by this respondent to Mark Owen-Lloyd on 28 March 2025. A copy of the e-mail exchange is attached at Annex A. The email asked him to:

2.7.1. Explain the difference between "proposed vegetation" and "mitigation"

2.7.2. Supply the missing maps

2.8. Mr Owen-Lloyd replied on 15 April 2024

2.8.1. To the first point, he has not answered the question either through intention or failure to understand or appreciate the importance of this distinction as used in the Glint and Glare Report. .

2.8.2. To the second point, he acknowledged the request but, to date, no maps have been received.

3. Requests to the ExA

3.1. Please would the ExA reiterate the need, originally identified in their scoping opinion, for an RVAA and require the Applicant to comply.

3.2. Please require the Applicant to supply the promised copies of the images showing a distinction between “existing” and “proposed” vegetation for the more contoured Central and Southern sites to the ExA without further delay.

3.3. For each of the 606 properties assessed as not requiring mitigation “due to existing or proposed vegetation”, pease require the Applicant to reassess and make a distinction between these two conditions so that those with no existing vegetation and therefore requiring mitigation can be identified and further assessed as to whether fencing is appropriate or whether panels need to be pulled back from these properties.

Appendix A follows.

Appendix A.

RL **Rosemary Lewis** 28/03/2025
To: [redacted]

Dear Mark

I have a couple questions regarding the Glint & Glare report on which I would appreciate clarification.

1. The desktop analysis refers to "proposed vegetation" and "mitigation". Please could you explain the difference?

2. On page 190 of APPENDIX 4.4 Glint & Glare, the Desk-based analysis Overview states:
"*Representative desk based analysis for receptors is shown on the following pages including the identification of relevant screening and reflecting panel areas.* ***Further images can be provided upon request.***"

Please will you arrange for images for the remaining locations (ie the whole of the Central and South sites) to be sent to me at this e-mail address as soon as possible?

Thank you.
Rosemary

MO [redacted] 15/04/2025
To: Rosemary Lewis >

Dear Rosemary,

I have asked RPS to obtain the images from Pager Power.

To your first point - mitigation is anything that we do in our design in order to reduce perceived or actual issues of glint and glare. We have been talking to Oxford Airport for the last twelve months about changes to our design which would make them more comfortable with Botley West Solar Farm as a neighbour.

Regards,

[redacted]