

The Planning Inspectorate
Temple Quay House
Temple Quay
Bristol
BS1 6PN

Our ref: AC/2022/130910/01-L01
Your ref: EN010106
Date: 16 March 2022

Dear Sir/Madam

APPLICATION FOR DEVELOPMENT CONSENT ORDER - SUNNICA ENERGY FARM - RELEVANT REPRESENTATION ON BEHALF OF THE ENVIRONMENT AGENCY

Please find enclosed the Relevant Representation on behalf of the Environment Agency in relation to the above application for a Development Consent Order (DCO).

The Environment Agency's Role

We are a statutory consultee on all applications for development consent orders. We have a responsibility for protecting and improving the environment, as well as contributing to sustainable development.

We have three main roles:

We are an environmental regulator – we take a risk-based approach and target our effort to maintain and improve environmental standards and to minimise unnecessary burdens on business. We issue a range of permits and consents.

We are an environmental operator – we are a national organisation that operates locally. We work with people and communities across England to protect and improve the environment in an integrated way. We provide a vital incident response capability.

We are an environmental advisor – we compile and assess the best available evidence and use this to report on the state of the environment. We use our own monitoring information and that of others to inform this activity. We provide technical information and advice to national and local governments to support their roles in policy and decision-making.

One of our specific functions is as a Flood Risk Management Authority. We have a general supervisory duty relating to specific flood risk management matters in respect of flood risk arising from Main Rivers or the sea.

Pre-application consultation

We have been working with the applicant, Sunnica, and their consultants to advise them on the environmental constraints and opportunities associated with the scheme.

We are in discussions with the applicant to agree a Statement of Common Ground (SoCG) that we will continue to progress throughout the application process.

Overview and issues of concern

This Relevant Representation contains an overview of the project issues, which fall within our remit. We are of the opinion that most, hopefully all, of these issues can be resolved and in this Relevant Representation we provide suggested solutions.

We reserve our right to add to or amend the matters set out in this Relevant Representation. We will keep the matters set out under review and update the Examining Authority on progress with the resolution of these issues at the appropriate point as the pre-examination stage or examination itself progresses.

There are still outstanding issues in the documents that have been submitted as part of the draft DCO application and accompanying information that require further attention or resolution. These are:

1. Flood risk

- Further details required to ensure that the scheme remains operational during a flood event and does not increase flood risk elsewhere, and to demonstrate that a sequential approach has been taken to the site layout

These matters are discussed in full in the attached appendix.

Please do not hesitate to contact me if you require any further information.

We look forward to continuing to work with the applicant to resolve the matters outlined within our Relevant Representation to ensure the best environmental outcome for the project.

Yours sincerely

Alison Craggs
Sustainable Places Advisor


Direct e-mail planning.brampton@environment-agency.gov.uk

Relevant Representations

On behalf of the Environment Agency

Flood Risk

The submitted Flood Risk Assessment (FRA), ref. EN010106/APP/6.2, dated 21 January 2021 is considered to be unacceptable for the following reasons:

Issue 1.1 – Inadequate assessment of residual flood risk at Burwell Substation

Burwell Substation extension is located within Flood Zone 3a on both our Flood Map for Planning and East Cambridgeshire District Council's SFRA maps (see Appendix B of SFRA). The SFRA climate change mapping (Appendix C of SFRA) shows the site to be located outside of any defended climate change scenario. However, the SFRA climate change maps should not be considered to supersede the flood zones shown our Flood Map, as indicated in para 4.1.23 of the FRA, as our Flood Map is based on the undefended scenario whereas the SFRA climate change maps are based on the defended scenario. In addition, the Environment Agency mapping included in Annex C of the FRA, which shows the 1 in 100 year plus 20% climate change flood extent, is also based on the defended scenario. There is likely to be a residual risk of flooding in this area in the event of a breach of the Burwell Lode / Reach Lode flood defences. As no assessment of this residual risk has been undertaken as part of the FRA, it is unknown whether the proposal to raise finished floor levels 850mm above ground levels would be adequate to prevent the extension from flooding in the event of a breach. As solar farms are classed as 'essential infrastructure', it is important to ensure they remain operational in the event of flooding.

Solution

Burwell Substation should be considered to lie within Flood Zone 3a for the purpose of applying the Sequential and Exception Tests and the FRA should be amended accordingly. The FRA should include breach analysis / modelling to determine the predicted flood depth in the event of a breach of the flood defences during a 1 in 100 year event, including an appropriate allowance for climate change. The predicted flood depth in the event of a breach should be used to recommend appropriate flood mitigation measures (e.g. raising finished floor levels of the extension above this depth).

Issue 1.2 – Solar stations located within Flood Zone 3

Table 13 of the FRA states that two of the solar stations (within W10 and W15) are located within Flood Zone 3 and two other solar stations are located in very close proximity to Flood Zone 3 (within W11 and W15). The FRA states that these solar stations will need to be raised above predicted flood levels but the relevant predicted flood levels are not included in the FRA. In addition, no consideration has been given to the potential loss of floodplain and increase in flood risk elsewhere. It is not acceptable to assume that if stilts are used there would be no material impact on flood risk elsewhere, as indicated in the FRA, as voids can become blocked by debris over time and may be used for storage purposes.

Solution

The FRA should include details of proposed floodplain compensation for any increase in built footprint within the modelled 1 in 100 year flood extent, including an appropriate allowance for climate change. Floodplain compensation is required to ensure there will be no increase in flood risk elsewhere, in accordance with the requirements of the NPPF. We would expect calculations to be provided showing the volume lost to the development and the volume gained by the compensation area for a number of horizontal slices (usually 200mm thick) up to the 1 in 100 year flood level including an

allowance for climate change. We would also expect some cross-sectional drawings to be provided showing the volume lost and gained within each slice.

Issue 1.3 – Solar PV panels located within Flood Zone 3

The FRA indicates that some of the solar PV panels will be located within Flood Zone 3. The proposed mitigation measure for these PV panels is to raise them 850mm above ground level. As no modelled flood levels have been provided in the FRA, it is unclear whether these will be raised high enough to ensure they would remain operational in the event of flooding and there would be no impedence to flood water flows. Paragraph 4.3.9 of the FRA states that the estimated climate change fluvial extent is approximately 3.6mAOD. However, this level has been estimated by overlaying the SFRA climate change maps onto a topographic survey, which is not an acceptable method for estimating the 1 in 100 year flood level including an allowance for climate change.

Solution

Drawings should be provided that clearly show the location of the PV panels in relation to the extent of Flood Zone 3b and Flood Zone 3a. Modelled flood levels / depths should be included in the FRA and the PV panels should be raised above the relevant 1 in 100 year modelled flood level / depth, including an appropriate allowance for climate change.

Issue 1.4 – No drawings showing site layout in relation to Flood Zones

No drawings have been included in the FRA showing the site layout in relation to the flood zone extents. This is required to demonstrate that a sequential approach has been taken to the site layout and to clearly show which parts of the development are located within flood risk areas and therefore require flood risk mitigation measures. The FRA states that no above ground development will be located within Flood Zone 3b but this has not been demonstrated in the FRA.

Solution

Drawings should be included in the FRA that clearly showing the proposed site layout in relation to the extent of Flood Zone 3b, Flood Zone 3a and Flood Zone 2.

Issue 1.5 – Temporary use of land within the floodplain

No drawings have been included in the FRA to show the proposed location of any temporary site compounds and storage areas in relation to the flood zone extents. All site compound areas / storage areas should be located outside the extent of Flood Zone 3, or outside the 1 in 100 year modelled flood extent, to ensure there is no loss of floodplain and no increase in flood risk elsewhere during the construction phase.

Solution

Drawings should be included in the FRA which clearly show the location of any proposed temporary site compounds and storage areas in relation to the extent of Flood Zones 2 and 3. If any temporary site compounds or storage areas need to be located within the floodplain then it will need to be demonstrated that adequate floodplain compensation can be provided to ensure there is no increase in flood risk elsewhere.

Disapplication of Legislation and Protective Provisions

The applicant seeks to disapply the need for flood risk activity permits under the Environmental Permitting (England and Wales) Regulations 2016. We are content to agree to this in principle subject to the agreement of a satisfactory form of protective

provisions for the benefit of the Environment Agency. We are currently in discussions with the applicant about this.

The applicant also seeks to disapply a number of local Acts. We consider the applicant should explain the need for the disapplication of the relevant legislation.

Groundwater and Contaminated Land

We are satisfied that our previous comments and recommendations have been brought forward into the draft DCO, including requirements for further site investigations to confirm ground conditions / update conceptual site models and risk assessments, then to take appropriate mitigation actions in line with relevant guidance.

Specifically, we note the following Draft DCO Schedule 2 Requirements:

- 12 (surface and foul water drainage)
- 14 (construction environmental management plan)
- 18 (ground conditions / contamination)

and the following commitments in the supporting documents:

- Consultation Report - Table 6-18.
- Framework CEMP – Table 3-10.

Pollution Prevention

We have reviewed the following documents:

- Volume 6 Environmental Statement. 6.2 Appendix 16D: Unplanned Atmospheric Emissions from Battery Energy Storage Systems (BESS) (ref EN010106)
- Volume 7. 7.6 Outline Battery Fire Safety Management Plan. (ref ENV010106)

We are satisfied that an appropriate assessment of risk and mitigation measures has been considered.

Biodiversity

We are satisfied that an appropriate assessment of risk and mitigation measures have been considered.