

Andrea Mageean
Lead Member of the Examining Authority
National Infrastructure Planning
Temple Quay House
2 The Square
Bristol
BS1 6PN

Our ref: AN/2022/132712
Your ref: EN010132

Date: 31 January 2024

By email:

WestBurtonSolarProject@planninginspectorate.gov.uk

**Order Granting Development Consent for the West Burton Solar Project
(EN010132) – Issue Specific Hearing 3, 07 February 2024.**

Dear Andrea

I refer to your recent notification of the above and the request that it would be helpful if the Environment Agency could attend the Hearing.

Unfortunately, we are unable to attend and are therefore trying to assist in the form of a written response.

We consider the likely topics where we might be asked to have an input are:

4c. BESS Management and Safety, noting revisions to Outline Battery Storage Safety Management Plan (OBSSMP) REP3-032;

6d. Biodiversity Net Gain; and

6e. Consideration of the impact of the project on (i) drainage and flooding (ii) rivers, ditches and aquatic life.

As you will be aware, we commented on all these topics in our reply dated 8th January 2024 to your first set of written questions (copy attached for your convenience).

The latest situation on each of these topics is as follows:

4c. BESS Management and Safety, noting revisions to Outline Battery Storage Safety Management Plan (OBSSMP).

We have nothing to add to our answers to questions 1.12.7 and 1.12.11 in our letter of 8th January 2024.

6d. Biodiversity Net Gain (BNG).

You will note we ended our reply to question 1.15.6 by advising 'At this stage, we are happy to proceed on the basis of no deterioration in WFD but that BNG requirements need quantifying through the metric calculator and more work on this is required from the applicant'.

The applicant has responded to this by advising as follows:

'We then talked about BNG and the predicted water quality improvements within ditches and other watercourses on and adjacent to Cottam and West Burton as a result of the cessation of agricultural practices and inputs. Unfortunately, there is no facility within the Defra Biodiversity Metric (used to calculate BNG) to enable a quantification of likely habitat condition improvement specifically through the removal of agricultural inputs. The calculator rather more simply relies on the ecologist's professional judgment to take into account the various land use changes associated with the development to determine whether a watercourse's habitat condition will change post-construction. In the vast majority of cases, watercourses at or adjacent to the Cottam and West Burton schemes were described as being of 'poor' or 'moderate' habitat condition at baseline. When assessing likely change post-development, the majority of these habitat condition assessments were assumed to remain unchanged. However, as approximately 10-25% of the land of both schemes lies within zones entitled 'Opportunity for Enhancement' within the Greater Lincolnshire Nature Partnership's Biodiversity Opportunities Mapping, we determined to improve all ditches within these zones which scored 'poor' at baseline to be improved to 'moderate' condition post-development. As has been previously pointed out, we cited the mechanism for this being a combination of reduction in agricultural run-off as well as periodic, rotational ditch maintenance to include silt and vegetation management (as set out in the Outline Landscape and Ecological Management Plans created for the Schemes). I hope that you will agree that this proposal is realistic, proportionate and achievable and does not seek to over-promise on any account'.

We are currently considering this statement with the aim that we respond to the applicant as soon as possible in connection with discussions taking place for the Statement of Common Ground.

Consideration of the impact of the project on (i) drainage and flooding (ii) rivers, ditches and aquatic life.

(i) Our comments in relation to drainage and flooding in our answer to question 1.15.13 remain the same.

In addition, there are some ongoing discussions on hydrology, flood risk and drainage as shown in Sections HFD 11, 12 and 13 in the Statement of Common Ground.

HFD11 and HFD12 relate to the protective provisions and discussions on these are taking place between the Environment Agency's Legal advisors and those of the applicant.

HFD13 relates to The Book of Reference which refers to Environment Agency rights and easements within the land that the cable route will pass through. The applicant has submitted further information on this which we are currently considering.

In addition, there have been further discussions in relation to HFD10, which concerns whether the proposal will result in a loss of floodplain. The applicant has provided some calculations on this topic. We have considered these and confirmed we agree that the volumes calculated resulting from the solar panels are insignificant in comparison to the size of the floodplain.

We are therefore happy for this point to be moved to the agreed section of the Statement of Common Ground. Related to this, we have asked is it would be possible for these calculations to be put on a referenced document. It is understood this is currently in preparation.

(ii) In terms of impacts on aquatic life, and in particular, the impacts of Electro Magnetic Fields (EMF) on fish where the cables from this and other schemes will pass under the River Trent, further discussions have taken place with the applicant in connection with the proposed Cottam solar project. He has provided some more information.

We have considered this and concluded as follows:

As a regulator, the Environment Agency uses the best available evidence to make informed decisions. The potential impacts of EMF on fish are a new/emerging issue,

and not well researched. We have contacted leading academic researchers in the field of EMF to help make an assessment of the application. Using the evidence submitted in the risk assessment, we believe the figures provided would prove a low risk to fish.

However, as this is an area of very little research, we cannot say there will categorically be no risk to fish populations. Accordingly, we would like the Applicant to agree to undertake a scheme of monitoring to corroborate the predicted impacts of EMF on fish, as presented in the Environmental Statement.

We would suggest that the monitoring is linked to (and will therefore add to) academic research currently on going within the Trent catchment to demonstrate presence/absence of any impact to key protected species such as Lamprey at this site. This may include provision of fish tagging, and receivers at the cable crossing points. Relaying the results of the monitoring to us at regular intervals is also requested.

We therefore request the imposition of the following Requirement on the DCO:

- (1) No part of the electrical cables permitted under Work No. 6B shall become operational until a written electromagnetic field monitoring strategy for the River Trent has been submitted to and approved by the Environment Agency.
- (2) The electromagnetic field monitoring strategy must include, but not be limited to -
 - (a) an appropriate mechanism for surveying any behavioural responses from migratory fish species passing through the area of the cable crossing under the River Trent;
 - (b) a mechanism for relaying the results of the surveys to the Environment Agency on a regular basis; and
 - (c) proposed periods and timings during which surveys will be undertaken to coincide with the main migratory periods for species such as salmon and lamprey.
- (3) The monitoring strategy must be implemented as approved.

This response was submitted on 30 January 2024 in reply to the Examiner's second set of questions on the Cottam scheme. It is considered that the same Requirement should be recommended in the case of the West Burton solar project. We should therefore be grateful if you could consider this. As the reference to 'Work No. 6B' relates to drawings submitted in connection with the Cottam scheme, it should be updated for the relevant area of work in the West Burton Scheme where the cable is to pass under the River Trent. This is currently believed to be Works packages 5a

and 5b (as shown on sheet 7 of 10 of the Works plan Revision B dated November 2023).

I hope that this information is of assistance. We will aim to look at the records of the Hearing on 7 February 2024 and respond with any further views as soon as we can.

In the meantime, should you require any additional information, or wish to discuss these matters further, please do not hesitate to contact me on the details below.

Yours sincerely

Wayne Cattell
Planning Advisor

[Redacted]

[Redacted]

Andrea Mageean
Lead Member of the Examining Authority
National Infrastructure Planning
Temple Quay House
2 The Square
Bristol
BS1 6PN

Our ref: AN/2022/132712
Your ref: EN010132

Date: 08 January 2024

By email:

WestBurtonSolarProject@planninginspectorate.gov.uk

Order Granting Development Consent for the West Burton Solar Project (EN010132) - Examining Authority's first written questions.

Dear Andrea

I refer to the email that we received from the Planning Inspectorate on the 15 December 2023 notifying us of the Examining Authority's first written questions.

Our answers to the questions where the Environment Agency is referred to in the 'question to' column are as follows:

1.5.28 - Applicant and Environment Agency. Schedule 16.

Question: Protective Provisions, Part 9. With reference to Schedule 16 of the dDCO [REP1-006], noting the update provided in the Schedule of Progress regarding Protective Provisions and Statutory Undertakers at Deadline 1 [REP1-048], and the draft Statement of Common Ground [REP1-065] and the made by the Environment Agency [REP1A-006]. A further update on the status of these negotiations is requested.

Environment Agency Answer:

In relation to the Protective Provisions, we have undertaken a comparison between our standard protective provisions and what the applicant has submitted in the draft Development Consent Order. The two are not that far apart and there are no significant concerns that would make us think that we are not going to be able to reach agreement. However, discussions are ongoing and this has not been reached yet.

In relation to the draft Statement of Common Ground, we made some comments on this on 30th October 2023 and some progress has been made since then.

Related to this, it is noted that the applicants have submitted a Statement of Commonality (Revision A) on 4th January 2024 which indicates the latest situation from their point of view.

In this, reference is made to the potential impact of Electromagnetic Fields (EMF) associated with the development upon ecology. The applicant needs to do more work on this topic as is referred to in the answer to question 1.6.10 below.

Another topic that is discussed is the assessment of fertiliser and nutrient input rates into the surface drainage system at field boundaries. In response to this, on 21st December 2023, the applicant provided information on this topic. As referred to in the answer to question 1.15.6 below, the applicant also needs to do more work on this topic.

In relation to other matters not referred to in the applicant's Statement of Commonality, one of the comments we made on 30th October 2023 was to ask for HFD10, on the topic of how much flood plain would be lost as a result of the development, to be moved from the matters agreed section to the one relating to matters of discussion. This resulted in more information being provided by the applicant on this topic which showed the volumes calculated were insignificant in comparison to the size of the floodplain. This situation was accepted by us on 28 November 2023 and we have asked that the related calculations be put in a referenced document.

Discussions on other matters are ongoing.

1.6.10 - Environment Agency /Applicant. EMF – Environment Agency Concerns.

Question: The ExA notes that the Environment Agency is holding ongoing discussions about the impact of EMFs on marine life in connection with another solar farm proposal [REP1A-007] para 3.1. Please can the Applicant and Environment Agency provide an update in so far as relevant to West Burton Application. This can be by way of update on progress within the SoCG [current draft version reference REP1-065].

Environment Agency Answer: We have contacted the applicant's consultant about this. He has advised they have prepared a Risk Assessment for the Cottam solar

project, in line with the one produced for the Gate Burton energy park scheme. They aim to prepare the same document for the West Burton scheme and will let us know once this is produced and uploaded to the PINS project directory.

1.10.16 - Applicant/ Environment Agency. Soil Excavation.

Question: Section 4.5.47 of the ES Chapter 4 [APP-042] states that, “excavated soil will then be backfilled on top of the installed cables.” The Environment Agency [RR-90] stated that the CEMP should include information about adhering to waste management legislation if the excavated material is contaminated. Excavated materials that are recovered via a treatment operation can be reused on-site under the CL:AIRE. The Applicant states [REP1-065] that it makes no explicit reference to waste management legislation at this stage, but that this can be secured as required through the final CEMP, which itself is secured by Requirement 13. a) Can the Applicant please clarify whether the CL:AIRE Definition of Waste: Code of Practice will apply. b) Is the EA satisfied that this can be addressed through the CEMP, but that it is not explicitly referred?

Environment Agency Answer: Yes. We are satisfied that this matter can be addressed via the agreement of a Construction Environmental Management Plan (CEMP) prior to the development commencing.

1.12.7 - LCC Lincolnshire Fire and Rescue, NCC Notts Fire and Rescue, Environment Agency. Optionally HSE may choose to comment. Battery Energy Storage System (BESS).

Question: The OBSSMP [APP-318] refers to the types of safety systems available on the market at present, along with risk reduction barriers which are likely to be incorporated into the system to be installed at the Sites. The OBSSMP states that it is possible that by the time of construction that all solid-state batteries, or other battery technologies may be available, and if so, this will be reflected in the BSSMP approved by the Local Authorities in consultation with the HSE, Lincolnshire Fire and Rescue Service and the Environment Agency. Are Lincolnshire Fire and Rescue, Nottinghamshire Fire and Rescue Service and the Environment Agency satisfied with the approach and conclusions. Optionally, whilst noting the Additional Submission received during pre-examination on behalf of the Health and Safety Executive (HSE) [AS-008], the HSE is invited to comment if it wishes to do so.

Environment Agency Answer:

The Battery Energy Storage System (BESS) has the potential to pollute the environment. Therefore, we would recommend the applicant considers the impact to

all environmental receptors during each phase of the development. Provided the Outline Battery Storage Safety Management Plan (OBSSMP) has scope to address this for all battery types, we are happy with the approach suggested.

We further note that the Plan submitted to date is in outline plan and the final version will be required to be submitted and approved before the facility is constructed.

We provide some comments below for information to take into account when preparing this:

Environmental considerations.

Particular attention should be applied to the impacts on groundwater and surface water from the escape of firewater and/or foam and any contaminants that it may contain. Suitable environmental protection measures should be provided including systems for containing and managing water run-off. Any firewater run-off should be contained and not drain to soakaway or directly into the ground. The applicant should ensure that there are multiple 'layers of protection' to prevent the source-pathway-receptor pollution route occurring.

Any smoke generated by a battery fire is likely to be very toxic and this scenario should be considered/assessed within the Development Consent Order process and the proximity of off-site receptors.

Further guidance on considering potential risks of BESS in planning applications is available online: Renewable and low carbon energy - GOV.UK (www.gov.uk).

Regulations for batteries and waste energy storage will play a significant role in the future of the UK energy sector. Effective storage solutions will benefit renewables generation, helping to ensure a more stable supply and give operators access to the Grid ancillary services market. The National Grid's Enhanced Frequency Response programme will provide a welcome catalyst for a significant level of battery storage deployment in the UK. Currently, DEFRA does not consider the need to regulate the operation of BESS facilities under the Environmental Permitting Regulations regime.

However, an important factor that can be overlooked by parties involved in new battery storage projects or investing in existing projects is that battery storage falls within the scope of the UK's producer responsibility regime for batteries and other waste legislation. This creates additional lifecycle liabilities which must be understood and factored into project costs, but on the positive side, the regime also creates opportunities for battery recyclers and related businesses. Operators of battery storage facilities should be aware of the Producer Responsibility Regulations.

Under the Regulations, industrial battery producers are obliged to: • take back waste industrial batteries from end users or waste disposal authorities free of charge and provide certain information for end users; • ensure all batteries taken back are delivered and accepted by an approved treatment and recycling operator; • keep a record of the amount of tonnes of batteries placed on the market and taken back; • register as a producer with the Secretary of State; • report to the Secretary of State on the weight of batteries placed on the market and collected in each compliance period (each 12 months starting from 1 January).

1.12.11 - Applicant/ Environment Agency. Environmental Permits.

Question: The Applicant /EA are asked to indicate their views on whether an Environmental Permit be required for any part of the Battery Storage System?

Environment Agency Answer: The Environment Agency does not regulate battery energy storage sites, although this is under review. Therefore, at the present time, the applicant is not required to apply for an Environmental Permitting Regulations Permit and the activity is not covered by Control of Major Accident hazards Regulations 2015 (COMAH). This may, however, change during the life of the project.

1.15.6 - Applicant/ Environment Agency. Filamentous Algae.

Question: The EA had requested in RR [RR-090] more information on the remedial actions suggested for filamentous algae in ditches to be able to comment. It states that it wishes to see the actions that would be undertaken at year 4 should it fail to reach moderate status. The SoCG [REP1-065] provides an update and the matter remains under discussion. The Applicant is asked to please provide a further update on progress, and, if necessary to share the data used to make the ditch assessment.

Environment Agency Answer:

We have asked the applicant's consultant about this and, on 21st December 2023, he has advised they have gathered the fertiliser input from the land covered by the West Burton scheme area and provides the information below:

	Nitrogen (N)	Phosphate (P2O5)	Potash (K2O)	Sulphur (SO3)	Calcium (Ca)	Magnesium (MgO)	Sodium (Na2O)
	kg						
Total	217,626	75,727	65,729	30,623		9,073	904

He added, that as previously stated, and discussed with the EA, the proposed scheme will change the existing use on the vast majority of the proposed area from active arable farmland to solar development which is improved with grassland planting.

He also added diffuse water pollution from agriculture and rural land use has been directly attributed to 28% of failures to meet the Water Framework Directive (WFD) standards in England (<https://post.parliament.uk/research-briefings/post-pn-478/>) .

Therefore, they consider that the change of use will result in the cessation of fertiliser usage within the scheme, regardless of continuation of use on neighbouring areas will help contribute towards achieving WFD targets.

We have considered this information and can advise, for WFD purposes, we agree that the West Burton solar farm will not cause a deterioration in status of the river network. Therefore, we have no concerns regarding that element.

However, our concerns were in terms of quantifying net gain under Biodiversity Net Gain (BNG) requirements and relying on the removal of only a certain element of fertilisers from the wider input to create habitat units and how quantifiable this is. Improvements in habitat units need to see on the ground changes, for example reduced filamentous algae presence.

At this stage, we are happy to proceed on the basis of no deterioration in WFD but that BNG requirements need quantifying through the metric calculator and more work on this is required from the applicant.

1.15.13 - Applicant & Environment Agency. Flood Risk Activity Permit.

Question: The Applicant and EA are asked to please provide an update on the position as regards the Flood Risk Activity Permit. Please also clarify whether an Environmental Permit will be required for flood risk and/or land drainage.

Environment Agency Answer:

The applicant has disapplied the Environmental Permitting Regulations for Flood Risk Activity permits, so they would not need a Flood Risk Activity Permit. However, this is subject to the agreement of the wording of the Protective Provisions in the Development Consent Order. This wording has not yet been agreed between us and the applicant, as per the latest Statement of Common Ground.

1.15.17 - Environment Agency and Applicant. Water Framework Directive.

Question: Please provide, or signpost to, commentary on the revised Water Framework Directive Assessment (REP1- 040).

Environment Agency Answer: We have asked the applicant's consultant about this and, in response, he has advised 'The main amendment to the report is contained within para 9.1.5 of **A Water Framework Directive Assessment - Revision A** [\[REP1-040 clean\]](#) and [\[REP1-041 tracked\]](#)

He adds that the following text was added to the assessment to address the EA's request to assess the potential impacts of the development on the hydromorphology of watercourses.

'No modification to the watercourse is proposed and the existing surface water discharge regime is proposed to be retained as existing. The proposed panelled area will also remove the existing agricultural activities. It is therefore considered there is negligible risk of physical impacts to rivers and their hydromorphological quality will be retained.'

We note this additional text and do not have any comments on the statement written by the applicant relating to the hydromorphology of the watercourse.

I hope these replies are of assistance.

Should you require any additional information, or wish to discuss these matters further, please do not hesitate to contact me on the details below.

Yours sincerely

Wayne Cattell
Planning Advisor

[Redacted signature]

[Redacted contact details]