Cottam Solar Project:
Applicant's Responses to ExA Second Written Questions, January 2024

Question 2.13.11: Electromagnetic Fields.
The Environment Agency's views are sought on the submitted 'Risk Assessment on EMF Impacts on Fish' document which is appended to the Applicant's Written Summary of the Applicant's Oral Submission and responses at Issue Specific Hearing 3 and Responses to Action Points [REP3- 034]. The Applicant is also asked to confirm whether this has the potential to have a bearing on the revised Information to Support a Habitats Regulations Assessment document [REP3-024] submitted at Deadline 3, as regards the sea and river lamprey.

Applicants Response
The Applicant has discussed this issue with the Environment Agency in January 2024, seeking their opinion following submission of the Risk Assessment document. The Applicant understands that the EA are satisfied with the conclusion that risks to fish from EMF associated with the cable crossing of the Trent are sufficiently low. The Applicant is updating the Statement of Common Ground with the EA to categorise this as an agreed matter, which will be submitted in due course. The Applicant understands that the EA will request that monitoring of the location of the river crossing for impacts on fish is undertaken pre and post construction. Consequently, the Applicant believes that the conclusions of the Information to Support a Habitats Regulations Assessment document [REP3-024] remain applicable and correct.

Environment Agency Answer:
As a regulator, the Environment Agency uses the best available evidence to make informed decisions. The potential impacts of Electro Magnetic Fields (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.

The EA suggests there has been little research on EMF, but this is not so. For almost 100 years there have been many research papers and referenced in submitted WR's in respect of the effect of EMF on Marine Life and specifically fish. The Applicant has also referenced these effects in their submissions.

What the Applicant has failed to do, is demonstrate that EMF can be stopped or mitigated from this application and the cumulative impact from all solar schemes sharing the same cable crossing of the River Trent.

This is relatively easy to do. All the Applicant needs to do is bury a length of prescribed high voltage cable to a depth of 5 metres and measure the strength of the EMF and then determine the accumulated impact from all solar scheme cables crossing the River Trent.

This must be addressed prior to any approval, or conditional approval of the project.

The EA request of undertaking monitoring pre and post construction is illogical. **What information and conclusion can be gathered pre construction? And what will happen if post construction information and conclusions indicate an effect of EMF on Marine Life and Fish? Will construction, and commissioning and operation be stopped?**

If any testing and monitoring is undertaken it must be seen to be independent.

The River Till and the other 30 or so number water course crossings need to be considered in any conclusions.

The Applicant has used many chosen words in submissions which do not have supported evidence.

It is noted that the Applicant has still not considered the Effect of EMF and Electric Fields on Flora and Fauna, Wildlife and Biodiversity.

The EA, ExA and the SOS will need to ensure they are protected from the legal requirements which protect the endangered, threatened and critically endangered species.

Roy Clegg