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This comment in respect of a number of items covered by deadline1.
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18.08.25
Comments ref. the following where OE is One Earth, EA is Environment Agency
EA and OE 2nd Virtual Meeting 27th Feb. 2024
OE estimates that 2% of their planned 1.5 million solar panels—about 30,000 units—could be submerged by 300-600mm. Following the January 2024 flood, OE asked the EA to clarify the return period for such flooding; EA responded they would investigate but no answer has yet been supplied. Having witnessed significant floods in 2000, 2013, and 2024, I question the forecasts, especially as the major event December 2013 Trent tidal surge was overlooked. Building on flood plains seems increasingly indefensible
At the 3rd Virtual Meeting (September 26, 2024), OE claimed upstands do not obstruct flow around panels, but this was based on consideration rather than scientific modelling. There appears to be no modelling for debris accumulation around the predicted seven pairs of upstands per panel. EA stressed maintaining unaltered flood routes—it's unclear if this advice was followed. OE requested further guidance from EA on modelling roughness patches; although OE later quantified upstand volume, EA asked to see the calculations and recommended flood flow directions be included in the model to add weight to the assessment. It remains uncertain whether these steps were completed.
Environment Agency: Comments on responses to WRs
Environment Agency Environmental Scoping Report 13th Nov 2023
Biodiversity.
The EA mention the mitigation measures within the WFD. The applicant confirms that a WFD compliance assessment will not be completed if the detailed assessment does not identify any likely significant effects. EA state, ` Depending on the methodology used the detailed assessment may not provide adequate evidence that the proposed development will not cause deterioration to the WFD status of any designated waterbodies, nor will it prevent the achievement of `Good` status. Applicant will need to clearly identify in their documentation the implications of the proposed development for the objectives of the WFD and relevant RBMP`s.` EA recommends the applicant reviews PINS advice note 18, to ensure that adequate assessment is carried out as part of their application. Where have they done this?
Land and Soils Table 8.1 states ` There are no recorded current or historical landfill sites within the site`. The EA states, ` Our records show that there are two historic landfills associated with the High Marnham Power Station present within the site boundary - waste was accepted there 1978-1994. These should be given some consideration`.
Have these potential sources of contamination been included elsewhere?
There are numerous comments from the EA regarding the inadequacies of the scoping report regarding water related issues such as ` The applicant does not appear to have considered the sensitivity of possible receptors within the local water environment` and `The applicant should complete a more thorough assessment of baseline conditions before assessing whether a detailed assessment of the impacts on the water environment is required`.
I realise this refers to the initial part of the procedure, but I feel this all points to either their desire to do the least possible work or they are not experienced /competent to deal with the installation of a solar farm on a floodplain. Did they do a more detailed base line assessment?
Worryingly they had to be told by the EA that `Consideration for water quality impacts to surface water and groundwater bodies within the Water Protected Area should be considered as part of a wider WFD assessment`. The EA reminds them that EA flood risk models are not necessarily suitable for 3rd party developments, and they should conduct and show details of any modelling they do for themselves. Where have they done this?
Consultation
In the Design Approach Document it states, `The project will engage in meaningful conversation with communities`. How does that statement square with what happened after the first consultation during which the sheer size of the project was a major upset for many attending. At the 2nd consultation we were met with not only an increase in size from 3500 acres to 4000 but an increase in duration from 40 to 60 yrs. Project Manager Dan Boyd even tried to say that was not true so I asked him to go and retrieve the first set of figures to prove the point! Immediately the applicant lost trust of the communities. How ill-prepared and insensitive when they needed to be neither. The instances of not responding, misrepresentation and no consideration of the impact the proposal would have on the community are well documented. The applicant is not acting altruistically but they are expecting that of the communities. What benefit is the addition of new fenced permissive paths and the retention of existing hedgerows when we already enjoy unfettered PROWs and open walks along the riverbank. The imposition of a solar farm of this size is a burden we should not have to bear.
Q12.0.1
I have tried to discover who is responsible for delineating the Functional Floodplain where the Trent is tidally influenced. Without accurate measurements there is room for manoeuvre. I have been passed from the EA to NCC back to the EA then to NSDC from whom I am currently awaiting a response. When I look at the NSDC`s SFRA it states ` The river Trent to the north of Cromwell Weir is tidally influenced and does not have a modelled functional floodplain outline. Where potential development falls within the flood zone 3a further modelling should be undertaken on a site-specific basis to determine the extent of the functional floodplain `. Has this been done? Otherwise, how has the applicant portrayed accurately the functional floodplain on Map Fig. 7.5 EN010159/APP/6.20?
Response to the examiner`s questions in general
Sir, please could the following be addressed?
How are flood flows safely managed and debris removed at the time of a flood?
How does any structure on a flood plain have no impact on flow, direction or speed?
What degree of incremental flooding would make the proposal unacceptable? Surely nil?
As stipulated in EN 5.8.36 has land been set aside for future flood management?
Living in a listed building I have been included in the landscape and visual mitigation. Where is the same mitigation for flood risk?
We move from an area at medium risk of flood now to an area of High risk from 2036. Has any account been taken of this?

During construction, operation and decommissioning water will be encountering the metal upstands, most likely galvanised steel. What is the allowance for the inevitable corrosion of these and needing to be replaced? What regard has been given to zinc polluting the environment, particularly the water supply and not leaving the land fit for purpose after 60yrs? What happens to the land when millions of these are pulled out and some break off?
Who verifies all the calculations?
REF a commission by The Welsh Government undertaken by RSK ADAS in response to a large number of large-scale solar PV applications on BMV land coming forward and evidence submitted (or lack of it) by applicants regarding soil/land quality impacts and reversibility. The work, under the Welsh Government's Soil Policy Evidence Programme SPEP 2021-22/03, is to inform Welsh Government and Natural England specialists when dealing with solar photovoltaic (PV) planning applications.
The key impact of solar PV sites on land and soil may be caused by compaction leading to soil structural damage resulting in reduced permeability to water and air and in turn increased surface runoff and erosion. The reversibility of soil compaction may take many years and in some cases compaction may be permanent.
Utility scale solar PV sites are land intensive and can have negative impacts, such as extensive landscape modifications that transform soil ecological functions, thereby impacting hydrologic, vegetative and carbon dynamics. Runoff from the panels can form rivulets or channels along the edges of the panels with ensuing soil erosion.
Maintenance activities can cause further compaction and pile removal may be complex with piles fracturing and requiring further work to dig them out. There is also the issue of pile corrosion, which is complicated and not entirely understood (Pritchard et al 2013) and potential loss of zinc from the galvanising coating on piles and contamination of the soil. Zinc levels in soils affects the soil biological activity (Moffett et al, 2003). (Piles on this site will be 1.5 mtrs - 3 mtrs deep)
Research work was undertaken at the Swiss Soil Observatory (Keller et al, 2021) to quantify and monitor short-term recovery after prescribed compaction. After 2 years bulk density and air permeability had not recovered to pre-compaction values. Various timescales for recovery are given in published papers with 30 years (Batey,2009) and Hakansson (1988) reporting that compaction can be persistent and permanent.
There is limited evidence specifically relating to solar PV sites to confirm the benefits to soil health but even in the most successful cases (of soil carbon capture, health and structure improvement) improvements are likely to be temporary and decrease with disruption at decommissioning,