GBEP Appendix B – Summary (WR6) on Risk to Human Life Animal Life and the Food Supply Chain Applicant Response to Roy Clegg Submission

Written Representation (WR6) on Risk to Human Life, Animal Life, and the Food Supply Chain

Questions REP-089

6. Risks to Human Life, Animal Life, and the Food Supply Chain

In this age of Net Zero, any solar scheme over 50 MW counts as a National Significant Infrastructure Project, or NSIP. This means the final decision is made, not by local people, but those in Whitehall. The worries of residents, who don't fancy living in an energy factory, count for little. The same goes for farmers who prefer the idea of potatoes under their land to solar panels above it.

Such cases matter since they are not isolated events. Sunnica is by no means the only organisation seeking to get the green light for plonking its profitable panels on to farmland.

There are similar schemes at Longfield near Chelmsford, and another at Mallard Pass near Stamford in Lincolnshire. Both schemes are opposed by locals. So why the push to put panels on farmland? To the argument that brownfield sites would work just as well, the response put forward is usually the same: that land is too dear, and the scheme might struggle to break even unless developers are empowered forcibly to buy up virgin fields at agricultural prices.

All this should worry anyone, wherever they live. For one thing, food security is a problem in an increasingly overcrowded country. Just how are we going to be able to satisfy the population expansion from 67,508,936 in 2022 to projected 70.49 million in 2030 and increase further to 74.08 million in 2050. These exclude the influx of migrants!

The decommissioned Cottam Power Station, a recognised industrial site has not been considered as a suitable site for locating the BESS, which begs the question, Why Not? The report on Cleve Hill solar farm report says that based on hydrogen fluoride being released from a fire for an hour concentration in the air 4.5km away could be 2,444 times

Applicants Response

Site selection The Applicant's site selection process is set out Chapter 3: Alternatives and Design Evolution [APP-012/3.1]. This consisted of a fourstage process: Stage 1 consisted of determining the search area for a site to accommodate the Scheme defined by the available grid connection at the NETS Cottam substation. Stage 2 consisted of a feasibility assessment within the search area to identify the presence/absence of key environmental and social constraints. At Stage 3, areas of land that were identified as potentially suitable to accommodate a proposed solar development following Stage 2 were further refined through analysis of topography, size and pattern of potential sites, access, suitable sites of brownfield land and a preference for a small number of willing landowners. At Stage 4, the Gate Burton site (the Order Limits) was identified as being suitable for solar PV development as it met all criteria and avoided those areas likely to lead to a policy requirement to consider whether alternative sites would be preferable. However, at all stages of design development and the Environmental **Impact Assessment process** alternatives have been considered to maximise benefits of the Scheme and minimise adverse environmental and social impacts.

Food security

It is agreed that some agricultural land will be taken out of arable production temporarily for 60 years. Land affected permanently by the development (such as construction of the substation) will be limited to small areas. Impacts to BMV have been avoided by siting permanent infrastructure outside of areas of good quality agricultural land. Chapter 12: Socio-economics and Land Use [APP 021/3.1] includes a breakdown of permanent and temporary losses for the different types of land use within the proposed development (including the Grid Connection Corridor), broken down by ALC area (ha) and percentage.

Response from Roy Clegg

The Site Selection process in /APP/3.1 shows the region has a significant amount of pre-existing transmission infrastructure, which would reduce the likelihood that any new overhead infrastructure would be required to connect the generator to the grid connection defined as NETS Cottam.

This now appears at odds with the Applicants decision to provide a project with a myriad of **underground** high voltage cables releasing Electromagnetic Fields which will significantly affect the Environment's Marine Life, Flora and Fauna and BioDiversity.

The sheer size and life span of 60 years of the scheme, consumes land comes with significant responsibility and requires thorough collective oversight especially when considered along with other solar developments in the planning process.

The applicant has failed to identify and determine the extent and grading of land, and this is disappointing and disturbing. Will the ExA now ensure that an independent survey be undertaken to ensure that the BMV land is not used?

Land is productive whether it be used for food, animal feed or energy crops and should not be displaced.

Food security is a problem in an increasingly overcrowded country and the applicant has not commented on how we are going to satisfy the population expansion not just in the next few years but in the next few decades.

higher than the derived domestic exposure limits and even 10km away, data modelling predicted readings 55 times higher.

The highly toxic potential emissions will significantly affect not just human life but also wildlife and farm animals and crops in the food supply chain. These effects have not been fully reported on by the developer.

The developer has a duty under Advice Notice Seventeen, requiring applicant to take account of the cumulative effects of other aspects which may influence the Examiner, and this something which is lacking. Again, this appears to be missing in the developer's submission.

There also appears to be little or no recognition of the impact of the project on Net Zero and the very nature of the project this should have been highlighted by the developer.

In the event of a fire and shut down of the solar farm will the developer be confident of continuing? and is there a risk of failure and closure of the solar farm permanently? The Nationally Significant Infrastructure Project procedures leave LPA's and their communities with little or no meaningful say in the decision-making process. It also leaves LPA's with the extremely difficult task of controlling and being responsible for almost all tasks, should a project be approved.

This is a total imbalance in planning and control of events, with LPA's carrying a heavy burden of control especially in the significant Solar Farms currently being proposed.

To ease the heavy burden of control on West Lindsey District Council and Lincolnshire County Council, we would suggest that in the event of a Solar Project be approved, and the project being subsequently decommissioned or failing for any reason, the incumbent landowners be made responsible for returning the land to its previous state.

Will the Examiner and the Secretary of State agree that the approval of

A large proportion of the land is farmed for crops used for industrial processes, alcohol production, bioethanol, fish pellets, fish food and biofuel and is not actually producing food for human consumption. The site itself represents approximately 0.1% of all the farmland in Lincolnshire but is capable of powering approximately 155,000 homes which is around one half of all the homes in Lincolnshire.

The Government's position is that "the UK has a large and highly resilient food supply chain. Our high degree of food security is built upon supply from diverse sources: strong domestic production as well as imports through stable trade routes" (Defra Press Release 6 December 2022.

The Government Food Strategy (2022) sets out objectives to "broadly maintain the current level of food we produce domestically". Overall, the UK produces about 60% by value of the food we eat, but that rises to about 74% of the food we can grow or rear in the UK, as shown below (graph taken from the UK Food Security Report 2021).

The reasons for the graph are many and varied. The UK remains largely self-sufficient in terms of cereals, meat, eggs, milk and many of the fruits and vegetables suited to our climate. Cottam Power Station as an alternative site The Cottam Power Station site is located partially in Flood Zone 2 and surrounded by Flood Zone 3 (see ES Figure 9.2 [AS-003/3.2]). The only areas that are not within the Flood Zone at the power station are the National Grid Substation, which is remaining in use, and two small areas between the cooling towers and the River Trent. The Gate Burton site is almost wholly in Flood Zone 1 so is sequentially preferred from a flood risk perspective.

Cottam Power Station is identified in the draft Bassetlaw Local Plan 2020-2038 as a Priority Regeneration Area and as a broad location for mixed use The Applicant states that the site itself represents approximately 0.1% of all the farmland in Lincolnshire but is capable of powering approximately 155,000 homes which is around one half of all the homes in Lincolnshire but fails to state how long it will provide the power to 155,000 homes. Will the ExA now ask for this information?

Does the Governments food strategy referred to as "broadly maintaining the current level of food we produce domestically" take account of the accelerating population growth including the influx of migrants?

this Solar Project be subject to a condition that the incumbent landowner be responsible for returning the land used in a Solar Project to its original state?

This will assist WLDC overcome the burden and any possible financial risk should the project fail for any reason during its lifetime.

regeneration under Policy ST6. The PRA is shown alongside the Order limits in ES Figure 3.6 [APP-040/3.2]. Policy ST6 states that the site will be safeguarded from development which would jeopardise the comprehensive remediation, reclamation and redevelopment of the whole site. Therefore, whilst the impact of the cable connection and access would have minimal impact on development of the PRA, placing large scale solar on the site would.

The whole PRA comprises 348 hectares of land and this includes areas of agricultural land and green/ blue infrastructure, so is not solely brownfield land.

As shown in ES Figure 3.6 [APP-040/3.2] a significant proportion of the site between the cooling towers and the River Trent is part of the Cottam Wetlands Local Wildlife Site and Trent Bank. Part of the southern boundary of the PRA forms the setting of the Fleet Plantation Scheduled Monument. The draft Bassetlaw Local Plan (paragraph 5.4.14) also states that 'The Site is being promoted by the land owner but has a legacy of contamination due to its historical uses associated with a coal fired power station and associated infrastructure. Although the Council supports the site's remediation and positive re-use, there is still a lot of work to do prior to the full remediation of the site.' Finally, some of the PRA remains in use, particularly the National Grid Substation.

Overall, the PRA associated with Cottam Power Station is significantly smaller than the Gate Burton site, with the developable area reduced further once constrained areas like the LWS and retained substation are removed. The flood risk associated with the site would also mean it is not preferred over the Gate Burton Site and the contamination issues could affect feasibility, speed of delivery and cost. Overall, it cannot provide a site that would generate the same amount of electricity and it is not a preferred site in environment or planning terms. Highly toxic potential emissions The Applicant disagrees that there is a significant and unacceptable dangers to health and indeed human life; as well as to farm animals and agricultural crops in the food chain.

The Applicant is identifying that the Cottam Power Station is Brownfield Site and not a preferred site, in Environment terms, implying that the Gate Burton Energy Farm Site is more acceptable. This has not been supported.

Health and Safety is a core principle for the Applicant whose group company is both an asset owner and operator. The Applicant has brought in Dr Paul Christensen from Newcastle University to advise on the latest worldwide safety protocols associated with Lithium-Ion technology, along with the Lincolnshire Fire and Rescue Service to advise on design and a safety management plan and to provide the emergency services with relevant information if requested. This will be refreshed prior to construction to ensure the highest safety standards are incorporated in the design and ensure minimal impact on the environment. The Applicant has had a virtual meeting with Lincolnshire's Fire and Rescue team and this engagement will continue throughout the development, construction and operation of the Scheme. The Applicant has embedded mitigation within the Scheme design and has included an Outline Battery Fire Safety Management Plan in its DCO application [APP-222/7.1]. This outline plan sets out how the Scheme proposes to mitigate and manage the potential fire risk posed by the BESS.

Cumulative effects

The Applicant has had regard to developments in the surrounding area in its cumulative assessment, which has been undertaken in each of the technical chapters of the ES and summarised in Chapter 16: Cumulative Effects and Interactions of the ES [APP-025/3.1].

Net Zero The UK Government's Powering Up Britain Strategy, Powering Up Britain: Energy Security Plan and Powering Up Britain: Net Zero Growth Plan sets out how the UK will achieve energy security, promote green growth and meet its net zero targets.

Powering Up Britain was published in March 2023 to presents the most up to date information on the Government's energy strategy. It recognises the huge potential solar generation can have in decarbonisation and emphasises the need to maximise the deployment of ground-mounted solar. This strategy (p20) states the UK government 'seeks large scale solar deployment across the UK, looking for development mainly on brownfield, industrial and low/medium grade agricultural land.' The document reiterates the target set

There appears to be no input from the Applicants adviser which is disappointing and noted at this stage.

Government Policy states that electricity supply is likely to be composed predominantly from wind and solar. However, the issues of intermittency and mismatch between demand and when solar provides power both serve to limit the contribution the proposed scheme can make. It is misleading to state that the proposed scheme can power a number of homes without stating for how long.

The inherent variability of solar and wind are not complementary and do not combine to provide a secure supply. the Applicant fails to acknowledge that the timing of energy provided by wind is typically more valuable than energy provided by solar, owing to the higher probability of it providing power in winter and during evenings.

out in the British Energy Security Strategy (2022) to increase solar fivefold by 2035, up to 70 GW, providing further certainty for support for solar. Powering up Britain emphasises that ground mounted solar is one of the cheapest forms of electricity generation and is readily deployable at scale.

Decommissioning

The Applicant has committed to decommission the Scheme after a period of 60 years from final commissioning of the authorised development and this is secured by Requirement 19 of the draft DCO. The Requirement to decommission the Scheme requires a decommissioning and environmental management plan (DEMP) to be submitted and approved by the relevant planning authorities in advance of decommissioning commencing. That plan must be in accordance with the Framework DEMP submitted with the application [APP-226/7.3].

If the undertaker does not comply with the terms of the DCO then there are enforcement provisions included in the Planning Act 2008 which would enable the relevant planning authorities to secure compliance. A separate WR on Decommissioning is to be submitted shortly.