Laxton and Moorhouse Solar Concerns - Open Meeting

Presentation Text

I represent Laxton and Moorhouse Solar Concerns, a group of individuals from our locale that is affected by part of the proposed solar array.

There is much to be concerned from a strategic level, not least the lack of national strategy for wind and solar array locations, resulting in a wild west gold rush as big businesses descend on areas, and left to locals to defend, rather than a national assessment of which areas and by what criteria solar might be acceptably deployed.

Equally, the technology itself is unsuitable for renewable energy generation in the UK, with first tier research contending that the use of solar panels above the 45deg latitude will not generate as much electricity in their lifetime as was used to build and deploy them. In short, if we wish to limit climate change, do not use solar panels above these latitudes. We are at 52deg!

GNR Solar Park's size is significant, causing different and common problems across a wide area and 20 parishes, and there is much I could discuss and argue, but will limit myself to issues that are particular to L&M

I'd like to draw your attention to flooding problems in the area, but will also use this to example a higher level and more fundamental failure in this proposal.

Laxton and Moorhouse suffer from flooding, as evidenced in my submissions to you and from the Parish Council's 2023 flood report.

Incidentally, in medieval times Moorhouse was known as 'Moorhouse in the Bog', but the digging of several drainage becks in the mid 1800's largely alleviated this problem, allowing the rich soil to be developed for agriculture.

Current issues are predominantly temporal caused by the inability of the becks to drain the water way to the Trent fast enough. Inland Drainage has responsibility for keeping the becks clear but anything that prevents outflow from the area is critical.

The area and housing within the villages remain sensitive to this problem and this was raised with Elements Green, both in written submission and at public meetings at both Laxton and later, Moorhouse.

Unfortunately, the fields adjacent to the beck downstream of the villages are all earmarked for solar panel arrays. (Fields N1 – N7).

Empirical research (Hydrological Processes – Q1) has shown that solar panel run-off rate can be 11 times greater than bare soil, much less the current wheat fields. This research was carried out in a sub-tropical climate (Sicily) more equivalent to our own temperate climate than the research used by Elements Green to counter this which is derived from arid US area studies. Meta analysis on this topic acknowledges this (Environmental Research Infrastructure and Sustainability).

Thus the concern is that at periods of heavy rain, the flow of water from Moorhouse area will be directly impeded by the increased rapidity of flow into the downstream beck from the solar panel fields which will rapidly overcome the beck's capacity, backing up into the village.

This was raised with Elements Green, who disagreed with the contentions, but in their final submission, they have reduced the solar panelling adjacent to the outflowing beck and replaced it with riparian land. Bewilderingly, this will potentially exacerbate the problem for the villages by impeding waterflow away from the villages in periods of heavy rain.

But this has not been considered by their flood assessment for the area, simply assuring that EG's solar equipment will be protected by this change.

In fact, all their flood risk assessments limit their scope to effects on the solar plant, giving no consideration to effects on local inhabitants or environment. Notably this has resulted in the removal of a large number of panels in the Muskham area.

Equally, it should be recognised that it takes approximately 400,000ltr of water to grow an acre of wheat, equating to approximately 75m ltr of water to grow the wheat currently immediately around the downstream beck.

The local land is spongiform, hence the term 'Moorhouse in the bog'. It drains throughout the growing period, physically changing shape, recharging in the rainy months and providing a resilience to the flood risk.

Solar panels will not allow cropping or even natural evaporation under their shade and thus the spongiform land will loose its ability to moderate rainwater flow into the beck.

What is clear in consideration of this flooding issue is there has been no risk based approach to this project.

Why do I say this? There are 22 documents in the 300 submitted by EG which deal with flood risk. What is immediately of concern is that there is no hierarchy, no safety case with supporting documentation. No compelling arguments that all hazards have been identified and mitigated to the lowest practicable level. Instead there is simply some safety evidence.

And the evidence is weak: It is desktop (they haven't visited the areas) and is provided in the form of Preliminary Risk Assessment. Actually, they should first have carried out Preliminary Hazard Identification and then they could assess the risk associated with each hazard identified. From this they could start to generate a Preliminary Safety Case. But there is no evidence of this. And if there were, it would not be complete, as it would only consider the flood hazards. And a Preliminary Safety Case (with supportive PHI and PRA) is carried out at the concept phase of a project's development. The Design, Development, Manufacture Operation and Decommissioning aspects come after this, and all the assurance and evidence for these phases are all missing.

Even these preliminary investigations are limited to only the project hardware. In Environmental Statement Project Reference EN010162 TA9.1.2.2.2 conceptually considers flooding of Moorhouse Beck, but only assures that it will not affect electrically sensitive project equipment.

There is simply no safety assurance that all hazards associated with the project have been identified and credibly reduced to as low as reasonably practicable. In essence, the effects of this project's implementation are unknown.

The flooding issues around Moorhouse and Laxton are but a single example of the failure to fully consider and mitigate the risk implications of this project particularly to inhabitants and environment.

This lack of a risk based approach has prevented Elements Green from focusing on those areas most affected by this project, preferring instead to hold local consultations (not wrong) and defend with vague promises not evidenced in the submitted documentation.

We therefore oppose this project, because it will do nothing to avert climate change, it will do nothing to reduce electricity costs and the risks it poses to the inhabitants and environment of this area has not been assessed or mitigated.

Consideration is tightly bounded to Elements Green's assets and even then the assessments are rudimentary and largely incomplete. The project is therefore a significant risk to the area, it's inhabitants, environment and current food provision role.

I thank you for this opportunity to express our viewpoint.