**OFH – East Park Energy's contribution to national electricity demand and the planning balance**

*The following is what I had planned to present as my oral representation at the Open Floor Hearing. The number of Interested Parties registered to speak and consequent time constraints meant that I was unable to present this representation and I am therefore submitting it as a post-hearing submission as suggested by the Planning Inspector.*

Good afternoon, and thank you for the opportunity to speak.

I have a number of concerns with the proposed East Park Energy scheme but today would like to focus on the issue of proportionality. It is legitimate to ask whether a development of this scale is justified when its real contribution to national electricity demand would be extremely small, particularly when at least 74 percent of the target site is Best and Most Versatile agricultural land.

I'd like to start with a quote from renewable energy specialist [redacted] from the Department of Civil Engineering and Management at the University of Manchester:

> "Net Zero is not about how much capacity, how many gigawatts we install. It is how much electricity we can produce."

The East Park scheme proposes 400 megawatts of installed solar capacity. But installed capacity is simply the maximum theoretical output under ideal test conditions. It does not represent the electricity that will actually be generated over time.

A recent report by [redacted], Visiting Professor of Energy in the Built Environment at London South Bank University, examined the contribution of large grid-scale solar installations to the UK electricity system.

His modelling explains why capacity figures alone can be misleading. Solar output depends on solar irradiance, which varies with time of day, season, cloud cover and atmospheric conditions. Peak output occurs only when irradiance reaches around 1,000 watts per square metre, which is rarely sustained in the UK climate. As a result, annual solar capacity factors are typically only about 9.5 to 11 percent.

Solar generation is inherently variable, weather-dependent and strongly seasonal, with its weakest output in winter when electricity demand is highest.

To place East Park in context, UK electricity demand is around 270 terawatt-hours per year. The developer claims that its site would produce, on a so-called “conservative” basis, 433.2 gigawatt-hours of electricity in its first year.

But operating at typical UK performance levels, as established by Department for Energy Security and Net Zero data, a 400-megawatt solar scheme would fall well below this claim, generating around 350 to 380 gigawatt-hours annually. Performance from a local solar site suggests even lower capacity factors.

So, using government figures, East Park’s generation would equate to roughly 0.13 to 0.14 percent of national electricity demand.

In short, the scheme would contribute around one-seventh of one percent of the UK’s electricity needs, on a highly intermittent basis, with extreme seasonal output swings. It cannot genuinely be characterised as “nationally significant”, or, for that matter, “reliable” as national energy policy statement EN-1 calls for.

[redacted] modelling also examines scenarios aligned with the government’s target of around 75 gigawatts of installed solar capacity by 2035. Even at that very high national level of deployment, solar would contribute only around 12.9 percent of annual electricity demand, rising to around 16.4 percent with battery storage to manage curtailment during summer months. In the winter months, the national solar fleet contribution to demand would collapse to as low as two to three percent.

The modelling also highlights a fundamental mismatch. Solar generation peaks in summer when electricity demand is lowest, while winter demand – when solar output is weakest – is expected to increase as more and more heating and transport become electrified. Short-duration battery storage can shift electricity by a few hours, but it cannot resolve that seasonal imbalance.

Indeed, East Park’s grid-scale battery system will partly be used to avoid limited summer curtailment – but its primary purpose will be quite different. The 100-megawatt battery array is a crucial commercial component of Brockwell Storage and Solar’s scheme and will enable the scheme owner to operate highly lucrative energy arbitrage and grid services, rather than to store solar electricity over meaningful timescales.

The planning balance therefore becomes critical.

This proposal would place extensive solar infrastructure across land that is at least 74 percent BMV farmland – a nationally important and finite resource. It would add to solar development already operational or consented in the area, cumulatively taking out 2,800 acres of farmland.

And although all such schemes are typically described as ‘temporary’, planning policy supports the life-extension or repowering of renewable energy sites, meaning developments like this are unlikely to be removed once their initial consent period ends. A local solar site that would effectively become part of East Park has already extended its operational lifetime.

In reality, there is a strong prospect of a long-term – perhaps permanent – loss of productive agricultural land.

Taken together, this proposal would commit a very large area of predominantly BMV farmland to a development whose contribution to national electricity demand would be extremely small and inherently intermittent.

There are many issues with the East Park proposal, set out both in my own Relevant Representation and in the hundreds of others submitted. The points I have outlined today are part of the picture – but fundamental. When a development would commit such a large area of productive farmland to a scheme whose national contribution would be measured in fractions of a percent, the planning balance becomes very difficult to justify. For that reason, I respectfully submit that the planning balance weighs emphatically against this proposal.

Thank you.