

Dear Mr. Stone.

These are my replies (in bold) to the Applicant Responses to Written Representations EN010131/APP/8.19

2.1 "Solar Panel Efficiency: Installed Capacity and Electricity Generated In terms of efficiency of output, some representations have suggested that solar panels are 'inefficient' because the amount of electricity generated is a low percentage of a panel's installed capacity and that this is leading to the developer over-estimating the benefits of the Scheme. The installed capacity of a solar park indicates its nominal power output under Standard Test Conditions. Installed capacity does not describe how much electricity is produced at a particular solar park in a specified period because the key drivers of output at any time, are prevailing weather conditions and the time of day / seasonality. Therefore, the Applicant discusses the benefits of the Scheme in relation to the expected annual generation of the Scheme, not installed capacity."

The GBEP has an installed capacity of 500MW, this 500MW is achieved in test conditions as the Applicant states, but these same conditions would be very rarely achievable in the UK and therefore as stated by many, and backed up by DUKES, electrical output is on average just 10% of 500MW. So, it is indeed an average of 50MW over the year, more on summer days, less on winter days and nothing at night, but nevertheless it would average out at 50MW over a yearly cycle, generating a contextually small 0.44TWh, which is only 0.15% of the current UK needs of 300TWh. National demand expected to rise significantly in future years along with the summer curtailment forecasts, means that solar's net contribution would diminish to an infinitesimal level.

If all the spare 400KV grid connections were used up by low output solar, as seems to be happening after looking through the NGC TEC register, then moving into the next decade we will be judged by energy decisions made today for any energy shortages. Solar limitations need to be realised and the solar steamroller halted.

The point being made is that power yield from solar is too low and seasonally out of sync with demand to have any meaningful impact, especially on winter security of supply issues. The electricity generation sector being responsible for 20% of all greenhouse gas emissions means that the negligible carbon savings from this small amount of electricity covering such a large amount of farmland simply has no symbiosis with the transition of the other much larger 80%.

"The GBEP is clearly not in the nation's best interests."

"It is not true that all apparatus will be replaced on a 15 year cycle. The Waste chapter within Chapter 15: Other Environmental Topics [APP-024/3.1] summarises the anticipated design life and replacement frequency for the main elements of the Scheme. For example, the PV Modules are expected to be

replaced after 30 years of operation. Calculations of the benefits of the Scheme have been undertaken considering all factors mentioned here, including expected solar irradiation incident at the site, degradation rate of panels over time, seasonal factors and weather. To help visualise the significant benefits brought forwards by the scheme, the annual electricity output of the scheme has also been converted into an equivalent number of properties, the annual energy demands of which could be generated by the Scheme.”

If the solar panels are to be all replaced at year 30 then this should trigger the time for decommissioning and not the triggering mechanism for wholesale new installation and therefore creation of a brand-new solar farm and all the associated disruption to the same communities over again.

I very much doubt that the BESS would have this proposed lifetime. With the charging cycles anticipated from this primary income stream, their life is likely to be sub decade and therefore replacement more regular and be of more harm.

2.4 “The statement that wind requires less land than solar is not correct (see Statement of Need Section 7.6 [APP-004/2.1]). Solar farms also allow for some continued agricultural use.”

A wind farm may span a larger gross area than a solar farm but the turbines having a small footprint of less than 2% of the total, means significant land savings in comparison to Solar’s huge coverage. Wind generation being factored at 3-4x higher means that the power density from wind is also in another league. Meaning much more generation from the installed capacity.

Wind turbines do cover less land than solar panels and with the site maintaining a 98% land usability means that all agriculture would continue.

The proof is out there for everyone to see.

Compare this to the same old sheep grazing scenario offered by solar.

As discussed through written submissions and at the ISH, sheep grazing is not realistically happening at the GBEP.