

OFH script 8<sup>th</sup> Nov 2023

(Calculations in red)

Simon Skelton, resident.

IGP will have heard all this at the Cottam OFH!

I have spent 37 years in the UK power industry.

I would like to mention a few things about ground mounted solar in this country.

To generate **100%** of the UKs power from nuclear or even gas for that matter would only consume around 3000 acres of land.

$3.2 \text{ GW@80\% yield} = 2.56\text{GW} \times 8760 = 22,425\text{GWh or } 22\text{TWh. } 300\text{TWh div } 22\text{TWh} = 13.6 \times 200 \text{ acres (nominal site size)} = 2700 \text{ acres.}$

Yet the West Burton Solar Project would cover over 2000 acres and generate **only 0.14%** of the UKs electricity (300TWh) and arguably at the wrong time of day and year.

$480\text{MW@10\%yield} = 48\text{MW} \times 8760 = 420,000\text{MWh or } 0.42\text{TWh is } 0.14\% \text{ of } 300\text{TWh}$

Stating that solar schemes would produce **large** amounts of low carbon electricity is misleading and without context and therefore **wrong**.

For context, Sizewell C in Suffolk will produce **7%** of the UKs power and only cover **170 acres**.

$3.2 \text{ GW@80\% yield} = 2.56\text{GW} \times 8760 = 22,425\text{GWh. } 22.425\text{twh is } 7.4\% \text{ of } 300 \text{ TWh.}$

In relation to national need, the WBSP would **not** produce large amounts of low carbon electricity, but it would consume large and unproportionate amounts of farmland in the process.

To further highlight Solar's extremely low power density, (just to make a point.)

Solar would need to cover around 1.7 million acres of land to generate the current UKs annual 300TWh demand, and again its supply would be totally out of sync with demand, providing nothing when Grid urgently needs generation such as during the dark Winter morning and evening peaks.

$500\text{mw@10\% yield} = 50\text{mw} \times 8760 = 438,000\text{mwh or } 0.438\text{twh. } 300\text{TWh div } 0.438\text{twh} = 684 \times 2500 \text{ acres (nominal } 500\text{MW site size)} = 1700,000 \text{ acres.}$

Solar is not helping our electricity shortfall predicament. With its limited generation curve and peaking at midday, this cannot be relied on as a primary national generator. Wind is many times more robust and a far higher yielding green option allowing agriculture to continue.

Solar is far better suited to rooftop mounting where it has an undeniably efficient, and important role to play.

Ground mounted solar is a criminal mismanagement of farmland, it is unnecessary and cannot be justified.

These intolerable inefficiencies are clearly **not** in the nation's best interests.

The visual impact of this and the other 3 ill-conceived projects around here is significant.

The devastation on the landscape, and the harm pushed onto rural communities of which I am proudly part of, will not be tolerated for such **little** energy gain.

Thank you.