

From: Deborah Patrick [REDACTED]
Sent: 29 August 2022 23:58
To: Section 62A Applications <section62a@planninginspectorate.gov.uk>
Subject: BERDEN HALL SOLAR FARM - S62A/22/0006 (and UTT/22/2046/PINS)

I am writing to object to the proposal by Statera to construct a solar farm on 177 acres of land at Berden Hall Farm.

My name is Peter Patrick
[REDACTED]

The reason for my objection is as follows:

Ten good reasons for **NOT** approving a solar farm

- As a general rule, it takes about 200 acres to generate the same electricity by solar panels as **ONE** North Sea wind turbine. This represents a grossly inefficient use of precious land, whatever its quality.
- Berden Hall Solar Farm will use 177 acres of fertile farmland thereby reducing the UK's valuable food production capacity and exacerbating food insecurity (now also critically affected by the ongoing war in Ukraine). This issue alone is sufficient reason to ban solar farms on fertile farmland.
- Solar farms generate 'ragged' electricity because of the random incidence of clouds or overcast skies which restrict electricity generation from the panels. In addition the panels only work by day whereas demand for domestic electricity goes on for 24 hours. Hence the necessity for expensive battery storage which has very limited storage duration, as well as a propensity to burst into flames.
- With hardly any electricity generated during the winter months, the average energy produced by a solar farm is only 11% of the installed capacity of the panels. Another gross inefficiency. In comparison, a wind turbine generates over 40% of its rated output throughout the year.
- Being renewable does not mean being zero carbon. The embedded carbon footprint (ECF) of a solar panel is 50 gms of CO2 per kWh generated, while the ECF of a wind turbine is 7.5 gms per kWh. 50 gms is much further away from nett zero than 7.5 gms.
- Solar farms produce their maximum electricity in the summer when demand for electricity is at its lowest. Wind turbines produce their maximum electricity in mid winter when demand for electricity is at its peak.
- The National Grid forecasts that East Anglia will be exporting North Sea wind generated electricity to the rest of the UK sometime soon. So East Anglia has an expectation of surplus renewable North Sea electricity

and does not need any more from solar farms. In particular, in this future, there will be no need to generate solar energy at Pelham Sub-Station.

- Solar farms have no connectivity with the National Grid because they 'hook in' to the low voltage regional distribution network. In contrast, North Sea wind turbines have as many as two high voltage cables connecting with Norway's hydro electric system; two cables connecting with the French grid (which is mainly nuclear); one high voltage cable between a) wind farms in the northern part of the North Sea and b) those in the southern part of the North Sea to instantly balance UK supply and demand in the event of outages; the Belgian Nautilus project, conveniently located on Dogger Bank so as to redirect electricity from Belgium to any outage in the South East of England; and there are similar hi-voltage connections with Denmark, Ireland, the Netherlands and Germany.
- The Government has already indicated its support for North Sea wind and its lack of support of solar farms by offering £225m of incentives for North Sea wind compared with £3.3m for solar at the recent Contract for Difference (CFD) auction. This indicates that Government is 7 times more confident in using wind power to meet zero carbon by 2050.
- Wind power expansion has been constrained so far by the depth of the North Sea. The recently announced SeaGreen project, just off the Scottish coast, set a world record for the length of the legs under their new wind turbines. Now that **floating** wind turbines have been introduced, this opens up the whole of the North Sea for future wind turbine development. In comparison, the development of solar farms is seriously restricted by their profligate use of our scarce countryside. **WIND POWER** is the future.

**IN ESSENCE, THERE IS NO JUSTIFIABLE REASON FOR
CONSTRUCTING SOLAR FARMS ON PRIME FERTILE FARM
LAND. FOOD SECURITY IS PARAMOUNT**