My Interest in the planning application: My wife and I own

Solar farms are a bad option for electricity supply in Britain and especially in Lincolnshire, because:

- 1. Output is lowest in winter when demand is highest. The difference between the summer and winter solstices is 10:1 (Chart 1).
- 2. Output is zero for 12 hours in spring and summer and for up to 16 hours in the 6 months from 21 September to 21 March. (Chart 2). As a result, battery storage is required to supply surplus power on spring and summer evenings, but this is of little use in winter.
- 3. In summer, the surge in solar power when demand is lowest, threatens to throw Britain's national grid off balance (The Times, 16 April 2025, p33). The recent power outage in Spain is a warning of what can happen when the national grid lacks inertia and cannot handle massive surges of solar power. This problem can be even more acute on a local level. If the sun suddenly comes out on the approximately 10,000 ha (that's 40 square miles) of solar farms approved and proposed in Lincolnshire, the generated 3-4 GW of power will completely overwhelm the local grid network.
- 4. The Springwell Design Approach Document says: "Solar panels don't need direct sunlight to work and can produce power all year round. Even in winter, solar technology is powerful and effective. At one point in February 2022, solar provided more than 20% of the UK's electricity". This is true, but wilfully misleading. It is true that on a clear, sunny day in February solar panels can produce electricity, but still (Chart 1) only 20% of the summer peak and that assumes a sunny day. But what about the far more common cloudy days when the panels will produce only 5-10% of their nominal output, as I know from experience with the solar panels on our house?
- 5. Most solar panels and batteries are made in China and imported, thus adding to the UK's trade deficit and loss of manufacturing jobs.

In contrast, wind turbines are the best type of renewable energy in the UK, because:

- 1. Potentially they can generate electricity 24 hours a day for 365 days a year. As a result, wind turbines generate about 30% of their nominal MW capacity compared with only 12% for solar panels; and because of the 24h/365day output, battery storage is not needed.
- 2. On-shore wind turbines on arable or pasture land mean that abut 95% of the area can still be used for agriculture a wind turbine is like a pylon, farmers can easily work round it.
- 3. Wind turbines are made in the UK on Humberside and in the Isle of Wight, so benefiting UK manufacturing jobs and the trade balance. It is illogical for the government to subsidise British Steel at Scunthorpe and remove the Chinese owners, and then import solar panels from China instead of using wind turbines made in the UK using British steel.
- 4. My opinion, especially after talking to Springwell Solar and EDF staff at a Phase One Consultation public meeting, is that EDF are only proposing solar panels instead of wind turbines, because the previous Conservative governments made it almost impossible to get planning permission for on-shore wind turbines. However, the current Labour government has made a priority of changing the planning system to make on-shore wind turbines possible again. Thus it is now logical to install wind turbines instead of solar panels. Therefore this Application should be rejected and EDF Renewables UK asked to resubmit the application based on wind turbines.

Conclusions

The Examination should take into account that:

- 1. Solar panels are an inefficient method of supplying renewable electricity in Lincolnshire compared with on-shore wind turbines .
- 2. There is a strong likelihood that the huge area of solar farms proposed in Lincolnshire will completely overwhelm the local grid causing severe power outages in the local area and

Chart 1 from: https://www.pveducation.org/pvcdrom/properties-of-sunlight/average-solar-radiation#

Average Daily Solar Radiation in London throughout the year

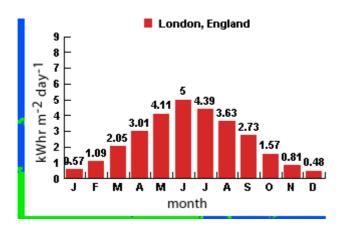
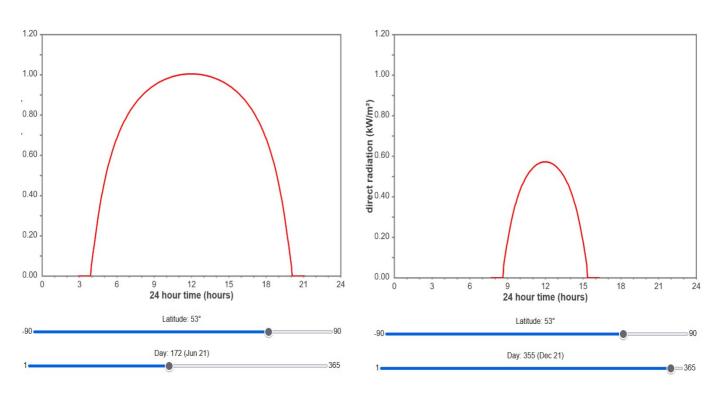


Chart 2 from: https://www.pveducation.org/pvcdrom/properties-of-sunlight/calculation-of-solar-insolation

Maximum amount of solar insolation on surface in summer and winter at 53° latitude – this assumes clear skies with no clouds, less likely in winter than in summer



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- 1. My wife and I own which we have leased to the Lincolnshire Wildlife Trust to be managed by them as a nature reserve.
- 2. We are concerned about the damaging environmental and visual effect of large solar panels and a battery complex right up against the Long Plantation part of the wood. The main car park and entrance path a public right of way is used regularly. The views to the west, currently typical Lincolnshire arable fields, would be replaced by a wall of industrial container-like storage batteries.
- 3. Contrary to the Applicants' 'net gain' in biodiversity argument there will be a significant adverse effect on Bloxholm Wood, the best bit of biodiversity in the area.
- 4. The idea that a 25-40 years fallow period will be of benefit to farming is farcical, especially as there is every reason to expect that after 25-40 years the panels will simply be replaced with new panels.