From: jeff summers
To: Tillbridge Solar Project
Subject: TILLBRIDGE SOLAR REF. ENO10142
Date: 24 December 2024 16:37:31

From: Jeffrey Summers.
Reference no. 20049433.
Subject: Objection to the proposed TILLBRIDGE SOLAR FARM APP. NO. ENO10142 adjacent to the A631 between Harpswell and Gainsborough.
I am writing to object to the application to construct a solar farm comprising ground mounted solar arrays together with (among other things) battery storage, inverter cabins, a substation, fencing and CCTV cameras on land near villages, Harpswell, Glenworth, Upton, Kexby, Heapham Springthorpe and Corringham.
The reasons for my objection are as follows:
1. As a general rule, it takes about 200 acres (80 hectares) to generate the same annual electricity energy through a solar farms irradiation as just ONE OFFSHORE wind turbine. This represents a grossly inefficient use of precious food producing land, whatever its quality. But it does mean that we could replace a proposed solar farm by using wind power located in the North Sea and still claim the offsetting of existing carbon rich electricity generation, identified as a benefit by Tillbridge solar, but without suffering the inefficiencies of solar farms described in their spurious application. The ready availability of surplus North Sea wind power will be introduced and explained. THEREFORE, APROX 18 TURBINES COVERING 100 ACRES (40 hectares) WOULD BE A MORE SENSIBLE ALTERNATIVE TO 3,500 ACRES (1,416 hectares)OF PANELS ,AS A LAST RESORT.
2. TILLBRIDGE SOLAR FARM will use 3,500 acres of fertile farmland thereby reducing the UK's valuable food production capacity for aprox. fifty years and exacerbating food insecurity (now also critically affected by the ongoing waring conflicts around the world). This issue alone is a sufficient reason to ban solar farms automatically on fertile farmland. However, the applicant insists this farm should be located close to WEST BURTON POWER STATION SITE with an existing connection to the grid, without any consideration for the level of disruption, upheaval, environmental and human anxiety it will cause. In justifying their choice of site TILLBRIDGE SOLAR ARE USING a "cheap connection to the grid" by which to justify the creation of a SOLAR ARRAY which is easily demonstrated as a poor site for solar due to the oceanic temperate climate of the UK . Electricity production through irradiation panels in the UK is aprox 1/5th of other countries in the world with FAR HIGHER establishment costs For the uk. The method of accessing the land through compulsory purchase and ridiculously high rents being offered, importing the panels, hundreds of thousands of tonnes of steel, higher labour costs and no FINANCIAL benefits to the end user. ONLY HIGHER ELECTRICITY PRICES AND AN INCREASE IN IMPORTED FOOD! For a country attempting to increase growth. This is ludicrous! UK INDUSTRY will not be competitive on highly overpriced electricity.
3. Solar farms generate 'inconsistent supplies of electricity' because of the random incidence of clouds or overcast skies which restrict electricity generation from the panels. In addition the panels only work during daylight whereas demand for electricity is continuous for 24 hours. Hence, there is a necessity for expensive "short term" battery storage to concentrate the electricity before it can be input into the grids. No consumers would tolerate low voltage/dim lights while they waited for the sun to start shining. On frosty nights in the winter with no wind the grid will collapse !!
4. 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 North Sea wind turbine generates over 40% of its rated output on average throughout the year. Although this proposal is for a solar energy farm,

the comparison with North Sea wind power is very relevant because wind power is landed at Sizewell in Suffolk plus other sites along the east coast. WEST BURTON AND COTTAM grid connections are established to have new technology systems installed within the site perimeters.

5. Solar farms produce their maximum electricity in the summer when demand for electricity is at its lowest, leading to high energy wastage because unused electricity cannot be indefinitely stored like gas - it leaks away. Wind turbines produce their maximum electricity in mid winter when demand for electricity is at its peak which points to, much less wastage with wind power. Wind turbines at sea also experience a greater volume and frequency of wind for consistent generation.

6. North Sea offshore wind turbines hook directly into the National Grid through onshore sub-stations, mostly, at this stage, located on the east coast. This enhances the UK's international high voltage security connectivity with Norway, France, Belgium, Denmark, Ireland, the Netherlands and Germany. In addition, wind farms in the North Sea are connected North and South by a high voltage cable to instantly balance UK supply and demand in the event of particularly serious outages.

7. The Government has already indicated strong support for offshore wind, and its lack of support for solar farms by offering £225.0m of incentives for offshore wind compared with just £3.3m for solar at the recent Contract for Difference (CFD) auction. This indicates that Government is 7 times more supportive in using wind power to meet zero carbon by 2050, rather than inefficient solar power. THEN WHY is the government allowing these very low performance proposals to go through the PINS system when they have recognised how inefficient they will be in our temperate climate. It is now widely believed to be a Labour Government way of attacking CONSERVATIVE strongholds on the political map.

8. Wind power expansion has been constrained so far by the lack of shallows in the North Sea. For example, the recently announced SeaGreen project, just off the Scottish coast, had to set a world record for the length of the legs supporting their new wind turbines. But, now that floating wind turbines have been introduced, this opens up the whole of the North Sea for future wind turbine investment. In comparison, the development of solar farms is seriously restricted by their already profligate use of our scarce countryside.

9. It should be emphasised that being "renewable" does not mean "zero" carbon. Certainly the generation of electricity by wind turbines or solar power is carbon free, but the manufacturing and installation of such farms can incur much CO2 release. This can be measured by a statistic called Embodied Carbon Footprint (ECF) defined by the weight of carbon dioxide released during the introduction of these farms, and then divided by the number of kwhs of electricity expected to be generated during the lifetime of the installation. Presently, this is about 50 gms CO2 per kwh for solar and 7.5 gms CO2 per kwh for wind turbines. If the reader thinks that anything which can be measured in gms must be irrelevant, they should look at the following calculations for solar farms. The total weight of CO2 by the introduction of a solar farm is 50 gms multiplied by the estimated kwhs in the farm's lifetime Equals 50 x 11% efficiency x 50,000 kwhs installed capacity x 40 years lifetime Equals 50 x 0.11 x 50,000 x 24 hours x 365 days x 40 years / 1,000,000 for tonnes Approximately equals 96,000 metric tonnes of CO2 Now, 96,000 tonnes of CO2 is a massive amount of carbon and way off the scale for a zero carbon target. The next paragraph discusses how this should be avoided.

10.The National Grid has recently announced that there are so many wind turbines planned for the North Sea that East Anglia will be exporting energy to the rest of the UK sometime soon. So, there is an expectation of surplus efficient wind power being networked westward from the East Coast by the grid. So there is NO NEED TO APPROVE Solar Farms throughout the eastern seaboard as this can be totally replaced by wind turbines located in the North Sea, thereby improving efficiency of local renewables and reducing the release of CO2 from local carbon emissions from 96,000 tonnes to 15,000 tonnes (as calculated using 7.5 gms CO2 per kwhs). CONCLUSIONS IN ESSENCE, THERE IS NO JUSTIFIABLE REASON FOR CONSTRUCTING SOLAR FARMS ON FERTILE

FARM LAND BECAUSE FOOD SECURITY MUST REMAIN PARAMOUNT, FOR EVER. SOLAR FARM ENERGY IS HIGHLY INEFFICIENT AND CAN BE REPLACED BY THE SURPLUS WIND ENERGY ANTICIPATED FROM THE NORTH SEA. IN PARTICULAR SOLAR FARMS SHOULD NOT BE APPROVED ALONG THE EASTERN SEABOARD AT ALL BECAUSE OF THE SURPLUS WINDPOWER WHICH WILL BE AVAILABLE. Offshore wind power is now recognised by Government as the future for large scale renewables in the UK, but solar panels should also be encouraged for millions of existing and future rooves and wasteland.

Kind Regards

J. J. Summers