

## WRITTEN REPRESENTATION

Solar power is a useful source of green electricity, and when implemented correctly it is undoubtedly a useful asset. However, the low power density of solar means that only small amounts of energy are produced from unproportionally large areas of land.

This extreme inefficiency means that solar panels should be mounted on brownfields, contaminated land or rooftops, as suggested in planning policy.

Decarbonising electricity generation is only one part of achieving net zero, with 80% of greenhouse gasses being generated elsewhere.

Our current energy security issues are during the winter peaks of 40GW+. This is a time when solar panels generate nothing at all.

Ground mounted solar is not a sound proposition.

When the true facts are known, it is clearly the last thing anyone would want to displace good land with.

Solar power has a generation factor of around 10% of its installed capacity, new wind at around 40% and new nuclear at around 90%. Therefore.

A new 500MW solar farm offers a 50MW output on average.

A new 500MW wind farm offers a 200MW output on average.

A new 500MW nuclear unit offers a 450MW output on average.

This solar proposal, based on average output does not really fulfil the NSIP threshold of being greater than 50MW.

Due to the 10% yield of the installed capacity and it being split over so many separate generating sites. Each site would fall far short of the 50MW threshold?

A 600MW solar farm such as this would provide a miniscule 0.17% contribution to our annual electricity needs but would displace a massive 3,000 acres of farmland.

A statement that you would never hear the applicant make.

The nuclear power station at Hinkley Point C will occupy a 400 acre site, and Sizewell C nuclear power station a mere 170 acre site. Each one providing around 7% of the nation's needs.

These power plants would be rated at 3,200MW.

Solar would need a site of at least 130,000 acres to generate the same amount of power as just one of these, and that would arguably be out of line with demand.

This illustrates the vast amounts of land required for solar compared to the small amount of inflexible generation produced.

The 70GW peak figure for solar in the UK could consume a further 300,000 acres of land due to lack of developer appetite for rooftop and brownfield developments.

Land competition is massive in the UK, with housing, transport and other infrastructure projects that can only be built on land.

Another giant solar farm proposal in Lincolnshire had to make significant changes to their plans due to a clash with a reservoir proposal, highlighting this issue perfectly.

There are vast amounts of redundant space available on warehouse roofing that could be used for solar and thus directly reducing the demand on the Grid, this should have been looked into long ago, and there is still no requirement for solar on new builds.

Therefore, is this rush for solar on farmland really a national 'must have' or has it been promoted on the back of Net Zero alarmism and a general lack of understanding of solar performance?

Should we be instead promoting the use of rooftops that offer this ideal secondary function?

After all, at home would you put solar panels in your garden or on your roof?

Using valuable 400KV Grid connections for solar farms seems wasteful to say the least as almost all other solar farms currently tap into lower voltage local networks.

Using up all these important 400KV connections on solar, that would never or rarely achieve their full output would seriously hamper our Net Zero transition. Decarbonising the nation will require large amounts of electricity not the small amounts provided by solar.

It would be short sighted to allow the growing plethora of solar schemes to hijack our spare Grid connections.

With a generating profile that ranges from zero, ramping up to a brief peak (weather and season dependant) and then ramping back down to zero for 50% of the time is not an effective or land efficient option and I think the sooner we wake up to this the better.

With a shameful winter time average output of just 2% of the installed capacity means that solar plants of this scale are an ill-conceived element for an energy/land use strategy and this blind rush for large scale solar is not the answer for a small country with low solar irradiation.

Panel height should be capped at 2 metres. The UK solar industry say ground mounted solar is easily screened and use low level inconspicuous solar panels.

These guidelines have been broken on this proposal with monstrous apparatus proposed on an open and far from flat landscape.

Solar of this magnitude with its inevitable glint and glare issues, with localised ambient heat increases and the possible compounded effects of EMI and EMFs, not to mention the associated fire risks means the siting of such developments so close to private property is a reckless proposition and shows no regard for the safety and wellbeing of the British public.

This consideration has probably not been needed for the more usual locations abroad, where this Applicant appears to have more experience.

Chinese manufacturing using unscrupulous labour sources must not be encouraged and the replacement of panels and batteries during the proposed lifetime cannot be anywhere close to carbon neutral or ecofriendly and these so called maintenance events would continue to impact the same communities for generations to come.

Solar farms offer almost zero employment to the area compared to the vast local employment chains from the river Trent power stations. These vast solar proposals we are now faced with are already damaging rural communities. The socio-economic balance has been lost.

Any power produced would be distributed via the National Grid, to be used elsewhere in the country. So local communities would get nothing but the blackening of their landscape and their hearts.

I am sure it is agreed that the need for renewable or low carbon energy does not automatically override all other environmental and humanitarian protections.

Large Scale Ground Mounted Solar is just not a good enough a proposition for this country. It produces the least amount of power, covering the largest amount of land than any other form of electricity generation we have available.

There is vast opposition by people who know the true limitations of photovoltaics on farmland and are not buying into this solar propaganda.

If this was really part of the answer and solar could efficiently deliver for the nation, then I would be the first to back it... But it is not!

Crop failures from extreme weather conditions abroad and grain shortages from war means our temperate farmland may soon become the most important in the world.

Please let us ensure that it is preserved and not carelessly wasted.

The Developer states that much of the land being taken falls below the 3a BMV threshold.

Not surprisingly their reports show mainly 3b?

Whatever the analysis shows, this strong land is of national importance for growing cereals. It does not have to be Best or Most Versatile to be perfectly suited to this important food producing role.

As farmers around here state "This is 3 1/2 ton per acre Wheat growing land".

Please listen to the people that live and work here.