Dear Secretary of State,

In response to the replies to your questions and updated background information for your consideration.

The potential EMF issues compounded by 4 huge solar farms in one area would be catastrophic to the health of both humans and the natural world.

This topic has not been taken seriously by the Developer.

PV infrastructure and electrical cabling should not be in such close proximity to lifeform and private property.

This scheme covers some 3,000 acres of farmland. There is enough space to act responsibly and fairly concerning this important matter. It should not be all take; the Developer has fallen short in listening to communities and the most affected and concerns over the natural world have been ignored.

I feel the District Council's task in processing and policing just one solar farm of this size would be extremely onerous, but 4 or 5 would be practically impossible to conduct professionally and on budget.

There also continues to be some concern about land ownership transactions with full clarity not yet being established.

There are issues around accessing the ex-Cottam power station site with IGP seeking provisions to promote their project in preference to EDFs interests on their own site, of which are demonstrably far more important to the country.

This deprived area of Gainsborough would be significantly burdened by excessive industrial solar development that would provide practically zero employment, offering just transient semi-skilled construction work. The agricultural workforce, no matter how small would disappear forever.

This 13,000 acre "Solar Industrialised Zone" in rural Lincolnshire, if allowed to go ahead would be considered gross land mismanagement with the largest loss of farmland in planning history. A single area would be unfairly decimated for such a modest amount of electrical generation.

Due to the UKs low solar irradiance these solar panels would become some of the lowest yielding in the world smothering some of the highest yielding farmland in the world!

The Cottam solar project is one of five solar NSIP proposals in Lincolnshire, they are all within a 6-mile radius and total around 13,000 acres, all of which are on vital farmland. The cumulative impact would be a catastrophic and an unnecessary and unfair burden for the local population.

We already have 3 solar NSIPs either built or consented to in Lincolnshire.

- Little Crow
- Mallard Pass
- Gate Burton (one of the 5 NSIPs in the area)

Land use pressures in the UK are immense.

DEFRA states that "croppable" UK farmland is around 15 million acres. These schemes all consume croppable farmland.

There are 600,000 acres of solar schemes on the National Grid TEC register, so this figure could be 4% of this valuable farmland. Ironically there are also 600,000 acres of untouched warehouse roofing in the UK.

For context, the whole of the UK's potato crops accounts for only 1% of croppable farmland. Therefore 4% is a significant land loss that is largely unnecessary. The solar industry is playing down this scale of land mismanagement by quoting inaccurate tiny percentages of the whole UK land mass, rather than croppable farmland, their figures are inaccurate and misleading to all.

With 35 NSIP sized solar schemes on the TEC register for Lincolnshire alone, this farmland loss could be as high as 30% in this county. If allowed to happen this would be seen as a reckless act against regional public interest and national food security.

There is no urgency or necessity for a power plant installation of these proportions on productive farmland that would only generate 11% of its installed capacity and contribute less than 0.2% to national requirements. The land inefficiency and harm caused by these behemoths is clearly unacceptable and we have 5 of them in a very small area. These must not be forced on local communities at this scale and intensity.

Renewables are not all of equal worth to the nation. Studying UK electricity generation figures, I see that solar during daylight hours often generates between 2 and 10% of the installed capacity, meaning that if consented the Cottam scheme would only provide between 10 and 60MW! With peak generation only occurring briefly in optimal summertime conditions.

The 600MW Grid connection would be in effect sterilized by just a few Mega Watts of power around midday. A criminal waste of vital infrastructure for 60 years hampering our need for increased electrical generation to achieve Net Zero. The loss of crop growing land and the industrial blight for a disproportionately small amount of electrical energy must not be allowed to happen. Solar is only fit for rooftops and brownfield sites.

On a national level it is not a substantive nor reliable electrical generator.

The UK is a small windy island not a large sunny one, solar cannot and is not a primary generator here. Yet it is being promoted as such.

The Increase in CO2 emissions from increased imports and from a scheme mainly manufactured by dubious Chinese labour and coal fired power generation, are inevitable. Panel and battery replacement every 25 and 10 years respectively would make this simply tomorrow's, not so green energy folly.

Wind has a generation yield of up to 50% and Nuclear 90%. Solar delivering only 11% cannot be allowed to consume more land than any other type of development, this current trend would be the largest loss of farmland in history, and for what? There would undoubtably be a public outcry over a 13,000 acre solar desert around Gainsborough!

Due to our climate and geography, Solar can never be a major player in the UK. It does, however, have a role to play on rooftops giving them an important secondary function. Developers aiming purely for farmland must not be pandered to.

The lobbyists are leading us down a ruinous path, with the important "rooftop revolution" for solar effectively being bypassed.

Large scale solar on farmland is currently the "Emperor's new clothes" of electricity generation.

The Cottam scheme would only contribute a maximum of 0.17% to the UKs current annual 300 TWh of electrical consumption, meaning a correspondingly low carbon saving, diminishing over time due to inevitable curtailment caused by mass solar development. This project's effectiveness is further hampered by its unprecedented 20km distance from the Grid, this should position it far down the order of merit for consent. This is clearly a poorly planned scheme.

National Grid expects solar to make modest contributions by 2050 of around 8% of UK electricity demand. By then a 500MW solar scheme would contribute only 0.05% of the UK's annual demand! This cannot be considered a quantifiable contribution to the energy system to warrant the harms associated with ground-mounted solar development of this scale.

Despite what the solar industry says, the amount of land required for this would be far greater than that of golf courses and Christmas tree plantations. Putting Solar panels on farmland is largely avoidable... Golf courses, Christmas trees and cereal crops on rooftops would be absurd... these applications are absurd and out of control, the brakes must be applied.

The mis-sold propaganda of powering 100,000+ homes is impossible for a solar scheme to do in practice as they generate nothing at all when it is dark. All this claim actually means is that the total generation in MWh is the equivalent to the energy consumption of 100,000+ homes. Theory and practice are very different things. Solar capabilities are being criminally mis-sold.

This claim also requires some context. There are a further 30 million homes in the UK, so again this would only contribute a tiny fraction to this number of properties. It just would not deliver at a national level and would always need equivalent capacity of back up generation. Electricity costs will inevitably rise due to this doubling up. Solar is cheap for the Operator only!

There is little need for ground mounted solar and no need for it on this scale. These schemes would cover hundreds of times more land than any other energy generator and still wouldn't deliver power in the right quantity or at the right time. I can only see harm.

The damaging nature of the Cottam solar project outweighs its limited benefit many times over.

- Part of one of the largest solar industrialised zones in the world; 13,000 acres.
- The electrical output is very low and problematic.
- Decarbonisation effect is correspondingly very low.
- Inefficient use of farmland for 60 years.
- The visual impact and effects on the landscape would be significant.
- Resident's mental health and wellbeing are at significant risk.
- Vast local opposition.
- A failure to prioritise and utilise Rooftop and brownfield sites.
- Socioeconomic loss for an already deprived area.

This Solar Project's electricity generation contribution has been shown many times to be a mere drop in the ocean at a national level, yet its associated land loss would cause so many other harms and net zero hinderances that it must not be consented.

Please consider the	e points raised	l before	making	your	final	decision.

Kate Skelton.

Please see the map below.

## <u>9/10 Solar NSIPs include the 5 creating a 13,000-acre Solar Industrialised Zone around Gainsborough.</u>

