Cottam Solar Project 600MW peak

By their very nature solar panels produce zero electricity for half their life and only achieve anything close to their installed capacity for a few hours a day in the best summertime conditions, and because of this the real output is only about 10% of the installed or peak capacity, so this would be on average a 60MW generator.
This low electrical output generated on a massive amount of land is not providing energy security nor does it provide the power when we most need it. The predicted and costly curtailment of excess energy would bring this paltry generation figure down even further.
Dubious batteries of unproven size are not the panacea and will do little apart from boost developer profits. The consumer would never see electricity prices drop.
I believe that batteries should be sited at the 400kv Grid, brownfield site, as the Grid is where much of the charging power would come from and there would be onsite water supplies to deal with potential thermal runaway.
Safety should be the primary concern.

Winter battery charging from the solar arrays would take many days to achieve due to Solar's extremely low winter output and is therefore impractical, the batteries would inevitably take charging power from the Grid. They would then sell electricity back for a huge profit in periods of high demand.
The BESS is therefore an independent entity to the photovoltaics and should be treated as such.

The developer's misleading and exaggerated generation claims used on their consultation paperwork and on their website misled the public.

The Cottam Solar Project would in fact only replace 30% of the installed capacity, not the **generation** capacity of the old Cottam power station. There is a massive difference, and the Developer knows this!

With solar power having an average yield of only 10% of the installed capacity, then the true **generation** capacity is nowhere near the claimed 30% of Cottam power station. In fact, it is closer to 3%!

Solar is not comparable to conventional thermal generators with their huge continual outputs and important flexibility.
We were deceived by Island Green Power during consultation.

It is for this reason that I am vehemently against solar generation on farmland. This model of 3,000 acres to produce an average 60MW is a weak proposal and has been promoted by public deception.

Our rapidly expanding population and constant global food concerns, which are often affected by unpredictable weather,

make it even more important to protect our stable but finite food producing land.

As a comparison, wind could generate over 4x more power than equivalent solar, and if land mounted agriculture and therefore food production would continue.

3,000 acres of farmland taken out of production for around 0.17% of the UKs energy needs is totally unacceptable.

Compare this to the latest nuclear NSIP, whose energy contribution would be 40x this on just 170 acres of land. This is a real energy solution.

Solar panels should be mounted on rooftops. We have enough in the UK to achieve our solar goals.

This solar farm proposal and its quite independent BESS are purely a commercial enterprise, providing very little energy and using Net Zero as a smoke screen to make huge profits.
Net zero is not purely about decarbonising the electricity sector. In fact, electrical generation accounts for less than 20% of our total emissions.

Very low employment generated by this scheme means little Socioeconomic benefit.

I hope you will fully consider these facts and that your ultimate decision will help the solar industry focus on a more sensible deployment strategy that would benefit many not just a few.

One purpose of this written representation is to bring to the attention of the Examining Authority the massive contribution to the UK energy market this area has historically and currently makes.

The current indiscriminate dash for solar on farmland in this area is an unnecessary burden on land use and on the many rural communities involved.
The Developer reciting Net Zero threats and cherry-picking national policy is extremely sickening for informed citizens who know the capabilities of solar and the other considerations required to achieve Net Zero.
The misinformation around solar generation capacity, selling BESS as a fix all solution, and highlighting Biodiversity claims as if it was the developer's primary goal are all just solar industry propaganda.

The NGESO TEC license register shows 35 solar NSIP scale proposals in Lincolnshire. This would tie up many Grid connections for minute generating capacity and would displace 70,000 acres of land in this county alone!
Nationally, solar TEC is at 130GW, which is almost twice as much as aimed for, and this could cover around 600,000 acres, which would be around 4% of the UKs crop growing land!
I do not believe it is fully realised how much land could be lost to such an inadequate electrical generator.
For size comparison, Greater London covers around 380,000 acres!

Ground mounted solar appears to be an unregulated free for all in this country and is selfishly consuming all available Grid connections and massive amounts of farmland. The UK has clearly been fooled by the solar industry.
This technology is not being marketed in a responsible way or in a manner that would enable us to reach our other decarbonising goals. It is a purely financial operation and will in the long run be at the nation's expense.

I am frustrated that these limited electricity generating schemes are being promoted in such an inordinate way.

Solar deployment, even at this massive scale is still a mere 'drop in the ocean' when it comes to actual electrical output and because of this, it has historically been avoided in the UK, but with the drive to Net Zero, the solar inefficiencies have been all but forgotten, with the solar industry lobbying hard and promoting photovoltaics on farmland as a replacement for fossil fuels, of which they are not.
The pursuance of this would be ruinous. We have so many other priorities for our limited land resource that the potential loss to solar would have massive repercussions on our Net Zero progress.

I am quite aware of the potential availability of Grid connections at both the Cottam and West Burton 400KV substations, but I am concerned that the tying up of these valuable infrastructure assets for 40+ years would be strategically unwise, with more robust generating options available that would benefit these important connections, such as modular nuclear and wind, rated at 9x and 4x more power factor than solar. These generators would be worthy of securing such nationally strategic infrastructure.
The Cottam SP would also not be able to connect to Grid until the end of the decade.

The cable capacity on this solar application must be capped to prevent any future expansion of the scheme. I feel if the solar industry carries on in this unquestioned way, that in coming years when we will become increasingly desperate for electricity capacity the extension of what we already have will become an easy planning option.

The Cottam SP is a ridiculous 20KM from Grid.
Photovoltaics have a low voltage primary generation that is better suited to connect into the local distribution networks, as indeed most do. Allocating these scarce 400KV connections to stepped up solar that could only achieve anything close to their installed capacity a few hours a day and only in summer, is nonsensical!

POWER FROM OUR AREA

Ex Coal fired power stations totalling 5,000 MW.

HIGH MARNHAM, demolished 2012.

COTTAM, in demolition.

WEST BURTON, in decommissioning.

Current Combined Cycle Gas Turbine power stations totalling 1,800 MW:

WEST BURTON "B".

COTTAM DEVELOPMENT CENTRE.

WEST BURTON "C" – 50MW BESS

Current Solar farms totalling around 400 MW(p):

WEST END FARM SOLAR. 16MW

STOW SOLAR FARM. 11MW.

STOW PARK SOLAR FARM. 35MW on 160 acres.

BUMBLEBEE SOLAR. on 370 acres.

WOOD LANE SOLAR. on 230 acres.

RAVENTHORPE SOLAR FARM. 32MW on 200 acres.

LITTLE CROW SOLAR FARM. NSIP. 150MW on 600 acres.

And the **WEST BURTON NUCLEAR FUSION PROJECT.**

Now we find ourselves in this almost surreal situation where our farmland and landscape are under inconceivable threat from a second grade and very inefficient form of power generation.
The large ground mounted solar farm.

We now have at least 11 solar NSIP proposals at various stages of the planning process in Lincolnshire, covering 26,000 acres of farmland with potentially many more listed on the TEC register.

- Cottam Solar Project. NSIP
- West Burton Solar Project. NSIP
- Gate Burton Energy Park. NSIP
- Tillbridge Solar. NSIP
- Mallard Pass. solar farm NSIP
- Beacon Fen. Energy Park NSIP
- Heckington Fen. Solar Park NSIP
- Springwell Solar. Farm NSIP
- Fosse Green. Energy NSIP
- Temple oaks. NSIP
- One Earth Solar. NSIP

Plus.

Stow Park, (non NSIP) which is in effect a West Burton 3 extension as the land is connected...

Hatton Solar Farm (non NSIP)

Little Crow solar NSIP in Scunthorpe has just applied for life extension to 45 years.

GENERATION SUMMARY.

- 5,000MW coal fired power generation legacy.
- 400MW of embedded solar farms, including one NSIP site.
- 1,800MW of CCGT's
- A Nationally important nuclear fusion development site
- 4 solar NSIP proposals in West Lindsey and falling within a 6 mile radius
- 11 solar NSIP proposals in the county of Lincolnshire

As illustrated the locality has and still does provide substantial amounts of power for the UK.

Solar at this scale and in one area would be a strategically unwise path to take.

Solar offers virtually no employment for the area, unlike the old power stations they are supposed to replace.

Cottam, West Burton and High Marnham provided thousands of skilled and well paid jobs. Not just on site but across the region and further afield.

These devastating solar plants littering the countryside would bring only transient construction work, and the semi-skilled and shared maintenance contractors would be few.

All this combined with the rising crime reported due to theft from such projects, means I cannot help but think this would push this area further into the socioeconomic wilderness.