7000 Acres

7000 Acres Reply to Cottam ExA First Questions

Deadline 2 Submission – 21st November 2023

The draft Development Consent Order and other consents

Q1.1.24

'Please comment on the concerns raised by EDF Energy (Thermal Generation) Limited in its Written Representation (WR) (paragraph 3.3 and 3.4) [REP-092] that the cable route poses a risk to the regeneration of the Cottam Power Station site and its proposed additional requirement.'

EDF Energy (Thermal Generation) Written Representation (paragraph 3.3 and 3.4) [REP-092].

3.3

'EDF wish to ensure that the regeneration of the Station and the wider area is facilitated in line with the Council's requirements and ambitions. It is therefore imperative that the proposed cable route of the Proposed Development does not sterilise development land or detract from future development plans.'

3.4

'To ensure that the proposed cable route of the Proposed Development does not impact on future development at the Station, EDF considers that a requirement should be imposed within the draft Development Consent Order ("dDCO") requiring the subsequent approval of the final cable routing by Bassetlaw District Council with EDF as a named consultee in respect of such an approval.'

7000 Acres Response to EXQ1 Q1.1.24

We would like to draw to the Examining Authority's attention the Change Request Application made by the Applicant for the Gate Burton Energy Park Ltd on 3rd October 2023, (Gate Burton Energy Park Change Request and Consultation Report Volume 8, Document: 8.24).

The Applicant has made the Change Request on the grounds of discussions with landowners and stakeholders citing the Bassetlaw Local Plan's 'Priority Regeneration Area' and EDF Energy (Thermal Generation) Limited plans for redevelopment of the site.

The Applicant (Low Carbon) has stated they are 'committed to fair and meaningful engagement with stakeholders for the Scheme' (Gate Burton Energy Park Change Request and Consultation Report Volume 8, Document: 8.24, 1.1.4).

Extract from 7000 Acres Written Representation GBEP Change Request

'The 7000 Acres group considers this statement at odds with the current Change Request to the Application. If indeed such engagement was carried out, this need for a Change would not have arisen. It is an obvious element to this Nationally Significant Infrastructure Project that establishing the correct corridor route and connection point is a fundamental design element and therefore, should have been secured and scrutinised in the first instance.

Likewise, the details of the draft Bassetlaw Local Plan, showing the Cottam Power Station site as a 'Priority Regeneration Area' would equally have been known about by the Applicant prior to the submission of the Application in January 2023. Also, redevelopment of the site by EDF is common knowledge. In fact the 7000 Acres Group contacted the Mr Powell, Head of Thermal Generation at EDF, August 2022 to establish whether any Company or Solar representatives thereof, had

approached EDF to enquire about utilising the brownfield site for their solar proposals, he wrote that;

'There is still no sale agreed at Cottam and we have had no approach for land by any solar companies.' (August 2022)

This statement suggests that the Applicant has failed in their assertions that they are, 'committed to fair and meaningful engagement with stakeholders for the Scheme' (Gate Burton Energy Park Change Request and Consultation Report Volume 8, Document: 8.24, 1.1.4).

It is evident that this Change Request to the Application is a symptom of this failure.'

The above information shows that the issues relating to the concerns raised by EDF Energy for the Cottam Solar Project are in line with the concerns and issues raised for the Gate Burton Project. The 7000 acres group argues that these issues are fundamental design issues and are not refinements of design or evolvement of design and so it is apparent that the Applicant for Cottam Solar Project have not engaged and consulted in an adequate manner with EDF Energy and Bassetlaw District Council for these issues to be raised at this late stage by EDF Energy.

The 7000 Acres Group is concerned that the Cottam Solar Project will now also make a Change Request Application to the Examining Authority. It is noted that such Change Requests are expected to occur once any consent/approval is given for a DCO Application and therefore not during an existing Examination.

1.2.9 Failure to consider Neighbourhood Plans, can you please explain this in this in the context of Appendix 4 of the revised Planning Statement [REP-047]

REP 047 Appendix 4 provides a detailed cross-referencing exercise but does not address the fundamentals of the planning requirements and objectives that have been set out at a high-level, covering themes of economic development, particularly in the Central Lincolnshire Local Plan (CLLP) (April 2023) and the Local Industrial Strategy (LIS) (2021). The LIS is not considered at all in REP 047. Extensive large-scale solar would undermine regional objectives for the agrifood and visitor sectors. With regard to renewable energy, the key areas of focus for the region are the stated as being the development of offshore wind, as well as carbon capture and storage to support decarbonisation of gas infrastructure. These have been described in more detail in REP 118, Section 6.

1.2.13 Why does the Applicant consider that National Policy Statement (NPS) EN-3 is important and relevant to the determination of the application as solar generation is not covered by that NPS (see paragraph 5.4.9 of the revised Planning Statement [REP-047]). Please refer to the findings of the Examining Authority's Recommendation Report into the Little Crow Solar Park and Longfield Solar Farm projects and the Secretary of State's Decision Letters in that regard.

The 7000 Acres Group does not consider the (NPS) EN-3 is relevant to the Application. In the Applicant's Planning Statement [Rep-047] they state at (5.4.9) 'The Energy NPSs were prepared specifically to address the particular balance of impacts and benefits likely to emerge from energy projects that are of such a scale that their contribution to meeting the government's energy objectives is of national significance. As such, the Applicant considers NPS EN-1, NPS EN-3 and NPS EN-5 to be important and relevant to the determination of the Application, and to form the primary decision-making framework for the Scheme.'

The 7000 Acres Group disagrees with the Applicants assertions here. Please see the 7000 Acres Group WR [REP-117] for information examining how the Cottam Solar Project does not meet national needs and therefore is not of national significance.

1.2.27 Fixed v Tracking panels

7000Acres have assessed that the yield of a fixed panel within the region would deliver around 10.8% of rated capacity, using data from Global Solar Atlas.

Within the ES the Applicant has stated that the tracker panels could increase the output of the scheme by between 10% - 30%. Taking 20% as a mid-point between the 10% to 30% range, 7000Acres would expect the yield to increase to 12.9%.

The recently approved Longfield Solar scheme is further south in the UK, and has a higher locational solar gain than the Cottam site by c. 7.5%. However even this is significantly lower than the yield from countries more suited to solar power. It is perhaps to be expected that the largest solar plant in Europe is in southern Spain.

	kWh/m2	**MWh/yr**	**Load Factor**
UK Average (fixed)			10.5%
Cottam (fixed)	1168	945	10.8%
Longfield (fixed)	1246	1014	11.6%
Cottam (tracker)		1134*	12.9%
Extremadura/Spain (fixed)		1653	18.9%
Extremadura/Spain (tracker)		1983*	22.6%

**Calculated from (fixed) data + 20% (mid point of 10-30%)*

The above shows the relatively minor advantage the Cottam site has over the UK average yield, and the larger advantage of Longfield has as a location for solar in the UK, thus showing the importance of locational factors in site selection. More starkly, all UK installations have much reduced outputs in comparison to (for instance) the Núñez de Balboa plant in Extremadura, Spain, which produces 82% more power than an equivalent capacity scheme in the UK. While the deployment of Tracking panels at Cottam raises the yield to above that of a fixed panel at Longfield, it does not approach that of Spain, and effectively secures the same solar gain as locating the panels on the Isle of Wight, but only at the cost of significantly increasing the height of the installation and its impacts.

The Applicant is unclear as to whether tracking panes will be deployed at the Cottam scheme, and seeks to reserve the option for their use. The Applicant's ES describes the difference between fixed panels at a maximum of 3.5m height and tracker panels having a height of 4.5m. This is clearly a material difference to the visual impact of the scheme and the capacity of natural screening to be effectively deployed.

The Applicant asserted that the scheme would have a higher load factor than other schemes brought forward to date, but this would clearly only be the case should tracker panels be deployed, which would have a significantly adverse impact on landscape and visual aspect.

Overall, therefore, the site for the Cottam project has a demonstrably low solar yield, and this fact must be given significant weight when considering the potential benefits it may deliver, and therefore the potential harms the scheme may be able to overcome. Attempts to increase the yield through use of tracking panels will also increase panel height, and also, therefore the potential adverse impacts arising from the installation.

1.2.28 Efficient use of land

There is a clear hierarchy for land use is explicit within the NPS suite, to first use previously developed land brownfield land contaminated land and industrial land. The NPS continues to state where the proposed use of agricultural land has been shown to be necessary… it may be used. The Applicant has not made use of any other land classes but agricultural land and not made a case for its use to be necessary. A further principle highlighted was that of "good design", which includes sensitivity to place and efficient land use.

It should also be noted that the Government has committed to produce a Land Use Framework, having recognised the pressure the pressure on land from various demands – including decarbonization.

It is also noted that the Draft EN3 considers temporary land use, and that inspectors have rejected the Lullington Solar project on the basis that 40 years is not considered to be temporary.

This topic is described in more detail in REP 117, Section 1.

1.3.1 Comments on the Applicant's needs case, following Draft NPS and Powering Up Britain

The 7000Acres WR [REP-117] describes, in Sections 1.2 and 1.3, the key points relating to the NPS landscape and Government strategy announcements that are most relevant to solar development, in particular:

1. Solar is not part of the of the UK Government's Ten Point decarbonisation plan.
2. The policy framework regarding solar has been a shifting landscape in recent years and continues to evolve.
3. While the ambition for solar development has grown to 70GW of capacity, there is no explicit target for large-scale ground-mounted solar development in the UK.
4. Significant challenges to large-scale ground-mounted solar development are acknowledged, including efficiency of land use, community impacts and environmental impacts. (None of these downsides arise for rooftop solar installations.)
5. Land use is increasingly recognised as being a key challenge and is subject to current Government work to develop a Land Use Framework.
6. The current NPS framework does not include solar.
7. The draft NPS framework (2023) does not foresee ground mounted solar of the scale proposed by CSP.
8. The NPS advocates "good design", including the importance of the functionality of the development. This WR will describe the constraints around the functional contribution solar

can make to energy and decarbonisation, which are limited to the point where the benefits do not outweigh the harms arising from ground mounted solar installation at such a large scale.

What is equally important to consider is the publication of three major reports this year that assess the decarbonization of the power sector in the UK and current progress towards delivering on that goal. In doing so, they describe the main challenges and the extent to which solar plays a role. These reports are:

- Delivering a reliable decarbonised power system, by the UK Climate Change Committee (CCC), March 2023
- Decarbonising the power sector, by the National Audit Office (NAO), March 2023
- Decarbonisation of the power sector, by the Business, Energy and Industrial Strategy Committee (BEIS), April 2023 – **Note:** *the energy portfolio of this department is now the responsibility of the Department for Energy and Net Zero (DESNZ)*

Their most pressing findings are:

- The need for overall co-ordination and planning of the energy system
- The resolution of grid connectivity issues – especially to deliver offshore wind generation
- Inadequate pace of deployment of wind and nuclear power generation
- The need to manage energy flexibility and intermittency of renewable energy sources

While solar has its part to play, it features very little in the landscape of key challenges identified by these reports, that must be overcome for the UK to make a success of decarbonising the power sector. Furthermore, existing rates of deployment quoted by the Climate Change Committee do not appear to be a concern, thereby undermining the call by Applicants for extensive acceleration of solar deployment through large-scale ground mounted solar.

1.3.2 Implications should the Proposed Development not be implemented

The key underlying point, should the proposed development not be implemented, is that there remains a clear path by which the UK Government can achieve its 70GW ambition for solar capacity.

The 7000Acres WR [REP-117] describes in Section 3 the potential for rooftop solar to provide the predominant volume of capacity, through only considering a subset of domestic and commercial rooftops, as identified in reports by the UK Warehouse Association and Ecotricity.

The WR also describes the volume of solar schemes that are either included in the UK Government's Renewable Energy Planning Database (REPD) or the National Grid TEC register – which includes a queue of schemes with a combined capacity of over 130GW. Such a pipeline does not include any prospective rooftop solar, so it is clear that uncontrolled deployment of ground mounted solar would simply render rooftop solar unnecessary – leaving rooftop space unoccupied, and land consumed by solar which may well have been better used for other direct decarbonization measures or to meet other demands that similarly have no rooftop alternative, such as food production, housing, commercial development, reservoirs or recreation and green space.

Not approving such large-scale schemes will have the effect of discouraging extremely large-scale ground mounted solar developments, and in so doing provide time for the evolution of greater co-ordination and planning of the energy system as well as greater certainty over the role land will play

in the decarbonisation journey – including how the country would deliver the 30-70,000hectares of trees per year, called for by the UK Climate Change Committee.

Crucially, the UK CCC report ("Delivering a reliable decarbonised power system, Climate Change Committee", March 2023) notes that build rates for solar remain "close to historical peak". It describes the estimated installation rates to meet the 70GW ambition by 2035 as requiring 4.3 GW per year of solar and "4.1 GW of solar having been achieved historically".

The current economics of energy and solar panels is making rooftop solar an attractive proposition once again, after a lean period following the removal of Government support for installation of rooftop solar (see "Home solar panel installations fall by 94% as subsidies cut", Guardian article, 5th June 2019). Rates of rooftop deployment are now rising again.

Not approving the proposed development simply avoids a situation of committing to consent one of many developments that may only serve to use land inefficiently and be a cause for regret. Given that rates of solar deployment are already healthy, the Government ambition for 70GW of solar can be achieved without the need for such large-scale ground mounted solar schemes, or the associated increase in rate of solar deployment that is advocated by the Applicant.

1.3.3 Comments following "Mission Zero Independent Review of Net Zero" (Skidmore Review)

The 7000Acres WR [REP-117] describes in Section 1.4 the key points relating to the Skidmore Review that are most relevant to solar development. In summary these are that the "Skidmore Review":

1. Acknowledges the need for a "Mission for Rooftop Solar",
2. Recognises the increasing importance of managing land use as a part of decarbonisation – and the need for a clear plan on how we manage competing demands on land.
3. Asserts that near communities, solar should not be "imposed on communities", instead being consented through a process of Local Area Energy Planning.
4. Recognises the increasing importance of managing system flexibility – particularly in periods of low wind and solar.

This topic is described in more detail in REP 117, Section 1.

1.3.4 Policy case for large scale ground mounted solar, in light of dNPS EN-1, 3.3.58

Probably the first observation with regard to the revised draft NPS-EN1 2023, versus the 2021 version is that the landscape is constantly evolving as we understand more about the urgency of climate change, what continues not to be done, and how we best decarbonize the electricity sector.

Clearly, there is the relatively recent Government ambition for 70GW of solar (first published in 2022), but there is also the economic circumstance of high energy prices and low solar prices, coupled with the troubled economics of farming which makes the proposition of large-scale ground-mounted solar financially lucrative.

With investors keen to see bankable green investment opportunities, developers are keen to reinforce the message of "urgency" around deployment of large-scale ground mounted solar, in pursuit of their objectives to deliver such projects, regardless of whether their schemes are genuinely effective in terms of sustainability and decarbonization.

For instance, Pinsent Masons act across all the live NSIP solar projects in West Lindsey, amongst many others, some of the partners involved in these schemes are also involved in lobbying the Government to influence the draft National Policy Statements, which goes some way to explain the incremental shift in the development of the draft NPS, i.e. there is clearly developer interest involved in the evolution of the draft NPS.

While we may therefore congratulate the Applicant and their representatives on their work in influencing this latest draft, such lobbying does not occur in a vacuum. Around the same time as the draft NPS suite was being published, further reviews of the UK's progress towards decarbonization were published, notably the Skidmore Review (above) and reports from the UK Climate Change Committee, the National Audit Office and the Business, Energy and Industrial Strategy (BEIS) Committee.

The messages from all four reports are consistent, calling for greater coordination and planning of energy infrastructure, with priorities being for deployment of offshore wind and associated grid infrastructure, as well as technologies to manage energy flexibility that arise from intermittent renewable energy, specifically storage and clean dispatchable power generation. Across the four reports, the only clear action regarding solar is for a "rooftop solar revolution". In addition, there is an increasing level of understanding as to the important role that land use will play in decarbonization, and a growing call for efficient land use within a coordinated land-use framework.

The Examining Authority may note that there has been the opportunity for comment on the draft NPS, and that the position taken by the developers in the hearings is that they are supportive of rooftop solar, in principle presumably, as long as they don't actually have to deliver any. What is clear is that, with 130GW of proposed ground-mounted solar schemes with connections in the National Grid TEC register, even if less than half of this is delivered, it will make redundant the need for rooftop solar development.

It is therefore increasingly understandable that the developer calls for "urgency", to secure approvals of consents for their schemes before the policy and planning framework catches up and creates the much called-for coordination of energy projects and efficient land use protocols which would puth their schemes under much greater scrutiny.

The draft NPS therefore simply captures a moment in time. For instance, it highlights the success of Contracts for Difference in delivering Offshore Wind, having been published before the outturn of the year's CfD round, in which the clearing price was too low to support any new offshore wind projects.

With regard to the specific question around section 3.3.58, this must be read in conjunction with section 3.3.57, which lists a range of 12 technologies which are included in the scope of the NPS and which includes solar. While section 3.3.58 states that "the need for all these types of infrastructure… is urgent", in section 3.3.59, the dNPS states there is a "critical national priority (CNP) for the provision of… offshore wind infrastructure… and network infrastructure". This is the only technology to be highlighted in this way.

This clearly reinforces a key finding of all four reviews referred to earlier, i.e. the need to accelerate offshore wind and supporting network infrastructure.

Within the dNPS there is no differentiation between the other 11 technology types, despite their very different levels of potential contribution to energy, to decarbonization or their level of technology maturity. For instance, Hydrogen and CCS (Carbon Capture and Storage) are central to the

Government's approach to delivering energy flexibility, but both technologies are in their infancy but are absolutely critical to the success of decarbonization. Wave and tidal technologies have always shown promise, but are not foreseen to make a significant contribution to the energy system, only between 1-4% by 2050, according to National Grid (FES 2023). For context, solar is expected to deliver between 7-10% of UK power by 2050, and wind is expected to deliver around 70%. In other words, while the blanket call is for "urgency", some technologies are clearly more valuable – and therefore urgent than others in the pursuit of decarbonization objectives.

In terms of the overall policy case therefore, the inclusion of solar in the dNPS must be considered in the context of an evolving landscape of understanding, the outcomes of effective lobbying of developers with a strong financial incentive, as well as principles that have remained consistently throughout the evolution of NPS (including the dNPS) and strategy documents, in particular principles of "good design", which include efficient use of natural resources – including land use, development that is sensitive to place and the mitigation of adverse impacts.

Overall, therefore, the case for ground mounted solar at the scale proposed by the Applicant remains flawed, as although the dNPS does include solar, which implies an installed capacity of over 50MW, dNPS EN-3 provides an example of a "typical" solar scheme being 50MW, not an order of magnitude larger. Furthermore, the growing concerns over effective land use weigh heavily against such schemes, particularly as uncontrolled development would serve to undermine the efficient deployment of solar on rooftops, which would far better meet the consistent principles of good design.

Socio-economics, tourism, and recreation

Question 1.12.18

There are 2 traveller sites within all the schemes. The question within the Equality Impact Assessment was directed to the applicant as a way of highlighting deficiencies within their desk top review which made up this assessment.

The document dated 24th February 2014 West Lindsey District Council Gypsy and Traveller Accommodation assessment clarifies the number of traveller sites in their district. Within this is a consultation document commissioned (2013) by the County Council and the 4 District Councils highlighting the issues around accommodation within the County, it highlights specific health inequality issues that the Travelling Communities face.

The 2 sites are: Upton (2 sites, 7 pitches), close to the Order Limits both Gate Burton, Cottam and Tillbridge, and a permanent site at Odder on the River Till (close to the West Burton scheme) near to its junction with the river Witham (10 permanent caravans). During the recent storms, the River Till was at its maximum capacity which if exceeded, it will flood this site. Therefore, a thorough evaluation as to flood drainage off the new proposed fields with solar panels could impact this site considerably. This group were not consulted as they lie outside the targeted area by Island Green Power. This highlights the importance of looking at impacts beyond the schemes that could affect Human Health and Wellbeing.

We feel therefore under the protected characteristics and for those hard-to-reach groups, there has been an inadequate attempt to consult with them. Literacy issues are high, so as a group the applicant should have found alternative ways to engage with them.

Mental health is a key issue within this community. Isolation from community structures creates problems with wellbeing, social function and mental health. It is therefore important that the applicant engages with this community. Also, the health status of this community is worse than the average population. Therefore, we suggest a Health Impact Assessment be carried out as part of the EIA.

Question 1.12.22

As stated in our Written Representation, we felt that given the size and scale of this and the other schemes, a Health Impact Assessment should have been triggered. This would have required the applicant to consult with Lincolnshire Public Health and the Integrated Care Board (NHS), who have a better understanding of the health issues around Gainsborough and its surroundings. A Health Equity Assessment Tool (Public Health England) would have been required to assess whether or not this and the other schemes would have potential to widen health inequalities as well as affecting the NHS initiative Core20Plus 5. Gainsborough has areas of marked deprivation where there are higher levels of economic inactivity and low social mobility. There is also a higher premature mortality rate in this area compared to the Lincolnshire average, approximately 973 deaths per 100,000 patients which is the third highest in Lincolnshire and higher than the Lincolnshire average. If you reduce inequality, you reduce life expectancy. The overlapping dimensions of health inequality are, socioeconomic groups and deprivation, inclusion health and vulnerable groups, geography (rural or urban), protected characteristics in the Equality Duty.

By altering the environment in rural communities has the potential to drive more younger people out leaving above average middle-aged and older people. This increases the risk of social isolation and loneliness, and leaving a more vulnerable older population who need the younger population to help provide social care within our communities. Mental health and the environment are linked, and therefore schemes like this that destroy the visual aspect of the countryside may increase long term mental health issues, which in itself is a disability. We know that green space is beneficial to physical health as well, which then improves health outcomes with reduced mortality from stroke, coronary heart disease, reduction in stress and decline in dementia. Remove this green space and health will suffer as a result. Depression is already increasing in rural areas, and we know that suicide is high in farmers. For those who continue farming by not handing their land to solar development, they may feel disadvantaged and therefore have further increased risk of mental health issues by the nature of their job where rural space is key.

The Equality Impact Assessment produced at desk top, has failed to highlight those vulnerable groups. By doing a Health Impact Assessment, these marginalised groups would be identified, satisfactory mitigation and clear understanding of the rural issues of Gainsborough and its surroundings. We have single parents, single pensioners, military veterans, and a larger proportion of elderly. There are issues around deprivation in certain wards of Gainsborough with higher proportion of people going through these areas (increased turnover), greater family needs, a disconnect with youth, higher levels of renting, little child care, lower unemployment rates, with lower life and health life expectancy in both males and females. This all needs to be considered as one cannot exclude the town of Gainsborough, which is surrounded by these schemes.

Please refer to the Written Representation on Human Health and Wellbeing for a more comprehensive overview how health in our area will be impacted if these schemes go ahead.