

**7000Acres Comments on the Applicant's submissions made for
Deadline 3**

Deadline 4 – January 30th 2024

Introduction

7000Acres represents a large number of local residents concerned about the impact of the Cottam industrial solar NSIP and five other solar NSIPs in the locality.

7000Acres notes that the Applicant has failed to provide any new information or clarity in their responses to the ExA's first set of written questions, or address issues raised by 7000Acres. Typically, the Applicant has referenced their original documents and then repeated the flawed text in their original submissions.

Throughout their documentation the Applicant has frequently failed to provide evidence that supports their development. Instead, they provide high level summaries of their assessments and make undue reliance on "professional judgement".

This WR includes a commentary on General Issues as well as Comments on the Applicant's responses.

General Issues

Rochdale Envelope

7000Acres agrees that it is reasonable to adopt a Rochdale Envelope for a project of this type. However, Advice Notice Nine places a number of requirements on an Applicant applying a Rochdale Envelope. Firstly, the Applicant has repeatedly failed to apply a reasonable worst case assessment. In addition to Advice Notice Nine, the newly adopted EN-3 Section 3.6.2 repeats the requirement by stating:

“Where flexibility is sought in the consent as a result, applicants should, to the best of their knowledge, assess the likely worst-case environmental, social and economic effects of the proposed development to ensure that the impacts of the project as it may be constructed have been properly assessed.”

Furthermore, the Applicant has failed to provide consistent information in their documentation, which is contrary to Advice Notice Nine paragraph 1.4, 3rd bullet:

*“that there is **consistency across the application documents** including any other relevant environmental assessments (e.g Habitats Regulations Assessment (HRA) or Water Framework Directive (WFD) assessment).”*

For example, there is no consistency between the Applicant’s assessment of cumulative effect in their documentation and Joint Report on Interrelationships.

Cumulative Assessment

Throughout their answers the Applicant has dismissed cumulative effects and merely referenced its original ES chapters. The Applicant has not complied with the requirements shown in NPPS Paragraph 160, EN-1 Section 5.10, EN-3 Section 2.10.94 and Advice Notice Seventeen in assessing the true impact of this and the other schemes seeking consent in the local area.

NSIP Process

The NSIP process is designed to be front-loaded, with the Applicant entering examination with a clear and coherent plan. The House of Commons Library Briefing Paper – Planning for Nationally Significant Infrastructure Projects, dated 17 July 2017, states:

“Development Consent Orders (DCOs) The DCO process starts when an application is formally accepted by the National Infrastructure Planning Unit and lasts approximately 12-15 months. The process however, is front-loaded with a number of pre-application consultation requirements, which, depending on the complexity of the project, can take a number of years to carry out.”

It is an obvious element to this Nationally Significant Infrastructure Project that establishing the correct cable 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. 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 the requirement to “front-load” this project.

Comments on the Applicant's Responses

Need:

7000Acres acknowledge the ambition of the UK Government to achieve 70GW of installed solar capacity. However, the Applicant has repeatedly failed to acknowledge or address the relatively limited contribution solar will make in the UK, even with 70GW to 90GW of installed capacity. This is in terms of energy volume and timing in comparison to demand, as described in Section 2 of 7000Acres WR REP-117 (7000 Acres Response to the Cottam Solar Project Ltd Application on the subject of: The role of Solar in Energy Provision and Decarbonisation).

For instance, the Applicant chosen to quoted that the UK electricity system will be predominantly wind and solar, without expressing that the balance between wind and solar will be an order of magnitude different, in that while wind will contribute c. 70%, solar will contribute only c. 7% of the UK's power in 2050. This is particularly important when considering the potential benefits of the scheme against the impacts of development at the extensive scale proposed by the Applicant.

In terms of alternatives, the Applicant has failed to acknowledge the potential contribution rooftop solar can make, which is a particularly important consideration, given the solution eliminates almost all of the adverse impacts associated with such a large-scale solar development. Neither has the Applicant practically reconsidered their proposed development considering calls for a "rooftop revolution" for solar. Instead, the Applicant for Cottam and their representatives consistently espouse support for rooftop solar as well as ground mounted solar, and yet choose to pursue a course that would render rooftop solar redundant. It is therefore an empty, expedient statement to agree with the sentiment for rooftop solar yet continue with such extensive ground mounted solar regardless.

The Applicant repeatedly states that "Brownfield and rooftop solar are unlikely to meet the need" but provides no supporting evidence.

7000Acres do not assert that the 70GW solar ambition can only be achieved through brownfield and rooftop solar but have consistently argued and evidenced that this should be the major proportion of solar provision in the UK. For the remaining proportion of capacity, 7000Acres argue that any ground-mounted solar development should be proportionate and sensitive to the region and its people – and as called for by Skidmore and others, and not “imposed on communities”. The Applicant has provided no evidence to warrant their proposed extensive ground-mounted development – especially in the context of so many parallel proposed NSIP-scale developments. 7000Acres have provided references from the UK Warehouse Association and Ecotricity, which describe the huge potential of commercial and domestic rooftop solar in the UK to deliver the significant proportion of the Government’s 70GW ambition, as well as the example of Germany as a “case study”, which has already delivered 80GW of solar, around 70% of which has been delivered on rooftops, and with no ground-mounted schemes of the scale or capacity proposed by the Applicant. This demonstrates such extensive, large-scale ground mounted solar is unnecessary to deliver the Government’s ambition, yet the Applicant continues to assert that their scheme is necessary.

Grid Connection:

In terms of grid connection, the Applicant does not deny the feasibility of solar connection at low voltages, as described in Section 4 of 7000Acres WR REP-117 (7000 Acres Response to the Cottam Solar Project Ltd Application on the subject of: The role of Solar in Energy Provision and Decarbonisation). Connection to a high-voltage substation is simply the choice of the Applicant, and therefore not essential to deploy solar. The Applicant states that the connections at Cottam are would not be used for offshore wind and would therefore not slow down priority tasks towards decarbonisation. The implication of this is that the Applicant has failed to understand the consequences of them contributing to the 130GW queue of unnecessary solar connections, which inevitably impacts National Grid’s extraordinary challenge of “rewiring Britain” to connect offshore wind to UK demand centres.

The scale of this challenge is staggering; the country will need “around four times as much new transmission network will be needed in the next seven years as was built since 1990”, according to the Electricity Commissioner’s Report. The UK simply cannot afford to act inefficiently by adding unnecessary scope to National Grid’s challenge.

In addition to this, by occupying high-voltage, high power connections, this will sterilise those connections for decades to come. Any other essential high-voltage, high-power connection requirements will therefore be unable to make use of these connections and add further burden to National Grid’s challenge. For instance, in the Electricity Commissioner’s report, which calls for a “Strategic Spatial Energy Plan”, the specific example of locations for green hydrogen production is given (electrolysers). Such facilities are expected to play a major role in decarbonisation. Other high-power facilities, such as data centres, which will also be required to drive the economy will also require such high-power connections – therefore if all strategic connections are unnecessarily consumed, these will also require additional grid connection work. This shows the importance of considering the availability of grid connections as a nationally significant resource, rather than them being consumed on a first-come or opportunistic basis.

Curtailment:

The Applicant introduces the topic of curtailment as being a phenomenon arising from network constraints, however within FES, National Grid introduces the concept of curtailment as being “when supply is significantly higher than demand”, as increasing levels of renewable generation are deployed.

The Applicant states that their scheme is unlikely to be curtailed owing to network constraints, but do acknowledge that “the possibility of curtailment for non-locational reasons remains”, because “more energy was being generated than that which could be consumed or stored at that time” – which is the point made by 7000Acres,

The Applicant has not acknowledged the role of solar in providing a volume of “inflexible” generation, that is typically out of phase with varying demand.

The Applicant makes the point that the volume of solar curtailment is anticipated by National Grid to be much lower than wind curtailment. Intuitively, one might expect there to be significantly more volume of wind curtailment than solar, as the volume of wind generation is itself around 10x greater than solar. What is less clear is the algorithm by which National Grid have allocated the curtailment, given that the peak of solar output is predictably out of phase with demand; it is possible therefore, that less solar is being curtailed at the expense of wind.

The Applicant uses the National Grid FES figures to highlight the “lower” solar curtailment figures, being 2.4-2.7 TWh. It is noted that this is some 2-3x the annual output of the Cottam scheme. Therefore, if the Applicant considers 2.4-2.7 TWh per year not to be significant, it undermines the Applicant’s assertion that the <1TWh of output from the Cottam scheme can make a significant contribution to energy and decarbonisation.

Further details on the topic of curtailment can be found in 7000Acres WR REP-117, Section 2.1.3 (7000 Acres Response to the Cottam Solar Project Ltd Application on the subject of: The role of Solar in Energy Provision and Decarbonisation) and in answer to Question 1.3.5 in 7000Acres WR REP3-067 (7000 Acres Comments on Responses to the ExA’s First Set of Written Questions).

General Land Use:

The Applicant has had several opportunities to address the question of land use, including by the ExA in Q1.3.3. The Applicant has not addressed the increasing importance of managing land use and how competing demands are strategically managed – in particular, given the requirements for land use for direct decarbonisation measures, such as planting trees and creation of peatlands. In terms of land use, the Applicant has referred repeatedly to energy generated per hectare, or scrutinising grades of Agricultural Land Classification (ALC), rather than addressing the sheer

volume of hectares the proposed their scheme and multiples thereof would imply in terms of additional pressure on land use, particularly with regard to the potential to impede decarbonisation efforts.

The Applicant has also not addressed questions of displaced crops for their scheme, an issue which is significantly compounded by the number of such proposed schemes.

Farming & Food:

There is a clear requirement to take account of the loss of farmland, and consequent food and biofuel production, in the Applicant's assessment. To do otherwise would be a narrow and partisan assessment, not consistent with the requirements of a true expert report. The Applicant has ignored more recent government documents, such as the Government Food Strategy published 13 June 2022. The Strategy supports UK farming:

“The conflict in Ukraine has shown us that domestic food production is a vital contributor to national resilience and food security. Domestic food production can reduce the offshoring of food production to countries that do not meet our high environmental and animal welfare standards. It will also play a critical role in meeting government's carbon budgets and environmental targets, delivered through farmers and land managers.”

The more recent House of Commons Environmental Audit Committee Report – Environmental change and food security, second report of session 2023-24, published 29 November 2023, has some interesting points to make. Page 20 paragraph 31 makes the following point:

“31. It is also the case that many of the countries from which the UK imports food are climate-stressed, potentially jeopardising supply in the future.⁸² Furthermore, because UK food production tends to be relatively intensive in nature, any production offshored could triple or quadruple the biodiversity impact, as explained by Dr Elizabeth Boakes:

Every hectare of arable land that we convert to housing or something and then offshore the food production must be replaced by on average 2.9 hectares of land overseas, which will often be in tropical countries that will, therefore, have a much higher biodiversity impact, sometimes three to four times higher than in the UK.”

Based on the expert evidence presented before the committee, the 1,150 hectares of farming land removed from production by the Cottam NSIP will require circa 3,335 hectares of overseas farming land to produce an equivalent crop yield. The biodiversity impact will be three to four times higher than the UK!

Clearly the global impact of the scheme must be addressed in the Applicant’s ES and not merely ignored as being inconvenient to their case.

In addition to the Cottam ES, the Joint Cumulative Impact Report must take account of the circa 6,000 hectares of farmland being taken out of production by the six solar NSIPs in the immediate vicinity. The combined displaced farmland is equivalent to 17,400 hectares of overseas farm land production.

Human Health and Wellbeing

The Applicant has failed to provide additional information on the concerns raised over human health and wellbeing. 7000Acres has requested an Issue Specific Hearing on this topic.

Flooding

The Applicant has not addressed concerns over flooding. It states, *“the ground beneath the panels will remain entirely permeable, draining as existing”*. This is not correct as screening the ground with impermeable solar panels will lead to faster water runoff and the local drains and rivers filling faster. The six solar NSIPs in the area have the potential to remove 15,000 acres of permeable farmland from local flood mitigation.

Flooding remains a major issue that has not been addressed.