

**7000 Acres**

**7000 Acres Supplement to Comments on Applicant's Response ExA's Q1, regarding updates to National Policy Statements.**

Cottam Solar Project

Deadline 3 Submission – 19<sup>th</sup> December 2023

## 1 National Policy Statements

The suite of NPS are currently at the point of change-over, with the a new suite of NPS due to come “into force in early 2024”.

It is also worth noting that the Electricity Networks Commissioner report (June 2023) has called for a number of improvements in the coordination and planning of electrical infrastructure projects and has recommended that “the Energy NPS should be updated again urgently after the current round of changes that are currently in consultation, to reflect the recommendations in this report”. There is potential, therefore that the currently proposed NPS documents are refreshed quickly, following their publication.

## 2 Existing NPS Suite

While the current suite of NPS will be replaced next year, it is worth noting they were published in 2011, three years after the 2008 Climate Change Act came into force. The documents make little reference to solar. EN-1, the Overarching Policy envisages large scale renewable energy generation from wind (offshore / onshore), Biomass, EfW, Wave and Tidal, citing the UK’s abundant national resources in these areas – notably, this does not include solar. Solar is only mentioned once, to highlight the need for back-up capacity to manage intermittent generation.

With regard to land use, the NPS EN-1 (5.10.8) requires that Applicants “*should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5) except where this would be inconsistent with other sustainability considerations*”. It is clear that the Applicant has not considered the wider implications of uncontrolled, extensive land use for solar putting additional pressure on land use, which must meet other decarbonisation and sustainability demands, such as food security, direct decarbonisation measures or growing biofuels.

The current NPS EN-1 also advises that the Inspector should give little weight to the loss of poor quality land (including 3b), “*except... in areas... where particular agricultural practices may themselves contribute to the quality and character of the environment or the local economy.*” Notwithstanding the unusually high proportion of land that has been assessed as 3b, it is clear that within the area of West Lindsey in which the West Burton Solar Project is proposed, there is a demonstrable link between agriculture, the environment and the local economy, therefore the exception should apply.

Within NPS EN-3, National Policy Statement for Renewable Energy Infrastructure, solar is not mentioned in 82 pages of guidance, whereas, onshore wind, offshore wind, biomass, waste combustion, wave and tidal are all covered.

Within the emerging NPS EN-1, Section 1.6 clarifies the arrangements for handling the transition between the 2011 suite and the suite due to come in force in 2024. Section 1.6.2 states that “for any application accepted for examination before designation of the 2023 amendments, the 2011 suite of NPSs should have effect”, although Section 1.6.4 goes on to stat that “any emerging draft NPSs (or those designated but not yet having effect) are potentially capable of being important and relevant considerations in the decision-making process”.

Therefore, for the West Burton, Cottam and Gate Burton schemes, the 2011 suite would be deemed to apply, in which solar does not feature in the landscape of the NPS. The status of the emerging NPS suite is of having the potential to be important considerations, and are therefore described below.

### 3 Emerging NPS EN-1

The NPS suite has been through two drafts, in September 2021 and in March 2023, both associated with consultation rounds. The Consultation Response, as well as the versions to be adopted were published in November 2023.

Overall, the NPS reflects the current situation of transition and uncertainty with regard to decarbonisation, in particular the need for co-ordination of energy policy and planning (as widely called for in reports reviewing UK progress towards decarbonisation, (see 7000Acres WR REP02-90 “Supplement to REP-117 Reviewing the Progress Towards Decarbonisation and the Role of Solar”), noting within the NPS that the “Government has committed to producing a Strategic Spatial Energy Plan (SSEP), to bridge the gap between government policy and infrastructure development plans”. The document also notes that many technologies that will be essential to decarbonisation are in their infancy, e.g. how technologies “to provide storage over longer periods of low wind and solar output (e.g. days, weeks or months)... are not yet available at scale”, or will require further action to develop business models to incentivise their deployment, e.g. as with Carbon Capture Use and Storage (CCUS) or low carbon hydrogen production.

The NPS also describes the holistic nature of sustainable development, as being “relevant not just in terms of addressing climate change, but because the way energy infrastructure is deployed affects the well-being of the environment, society and the economy, for both current and future generations”.

Specifically, regarding electricity, the NPS states that “the larger the margin, the more resilient the system”, but that “a balance must be struck between a margin which ensures a reliable supply of electricity and building unnecessary additional capacity which increases the overall costs of the system”. This underlines the need for overall co-ordination, particularly where the underlying favourable economics could easily deliver an excess of generation capacity associated with specific technologies, and thereby exacerbating issues of inefficiency through curtailment (Section 2.1.3 of 7000Acres WR REP-117 “The role of Solar in Energy Provision and Decarbonisation”).

The NPS describes a list of known generation technologies within the scope of the document, and following consultation feedback, has evolved the definition of “a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure”, where low carbon infrastructure is defined as “for electricity generation, all onshore and offshore generation that does not involve fossil fuel combustion...”. This is an evolution of the dNPS (March 2023), which defined the CNP only “for the provision of nationally significant new offshore wind infrastructure (and supporting onshore and offshore network infrastructure)”.

This very recent change, following a very close margin of feedback (with 35 in agreement with the March proposed draft definition of CNP, and 39 in disagreement). It is worth noting that this is from a total of 157 responses, 61 of which were from the categories “Business / Trade Association” or “Commercial Organisation”. Many of the names of these organisations are redacted from the consultation feedback report, but of the named respondents, many were bodies with interests in solar development, e.g. Solar Energy UK, Eden Renewables, EDF and Scottish Power Renewables.

The result of this is that there appears to be no particular emphasis within the NPS on any one technology over another, even though it is a matter of fact that not all technologies are able to contribute to decarbonisation in equal measure. For instance, offshore wind is foreseen by National Grid to produce over 70% of the UK's electricity by 2050, which is presumably why it was singled out in the original definition of CNP in the March 2023 draft NPS. The result is that the definition of CNP is rendered effectively meaningless within the NPS, as there is no differentiation between technologies, despite their differing contributions.

Although the NPS therefore, at one level, equates such diverse contributors as offshore wind, solar, wave and geothermal, apparently without regard for their potential to contribute towards the energy mix and decarbonisation, in weighing impacts and benefits, the Secretary of State is directed to "take into account its potential benefits including its contribution to meeting the need for energy infrastructure". This allows the SoS to consider the contribution such technologies can make.

The emerging NPS also reinforces two long-standing requirements of planning, namely, applying principles of "good design" and the consideration of alternatives to a proposed development.

"Good design" includes how infrastructure "relates to the landscape it sits within" and that "applying good design to energy projects should produce sustainable infrastructure sensitive to place, including... efficient in the use of natural resources, including land-use". The scale of the Cottam project and height of panels, in comparison to the local landscape and villages, demonstrates a design that lacks sensitivity to place.

Allied to land use, is the subject of the use of agricultural land. The NPS states "Where development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality" (this principle of a "hierarchy" of preferred land use is further expanded in emerging NPS EN-3). In the case of Cottam, the Applicant has focused entirely on the quality of agricultural land, not demonstrated necessity to use agricultural land.

Also, within "Good Design", the NPS notes the importance of "the functionality of an object – including fitness for purpose and sustainability". Section 2 of 7000Acres WR REP2-080 ("The role of Solar in Energy Provision and Decarbonisation") describes 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.

From the NPS, in decision-making, the Secretary of State "should be satisfied that the applicant has considered both functionality (including fitness for purpose and sustainability) and aesthetics including its contribution to the quality of the area in which it would be located, any potential amenity benefits, and visual impacts on the landscape".

With regard to alternatives the NPS states that the "decision making process of the existence (or alleged existence) of alternatives to the proposed development is, in the first instance, a matter of law". The NPS recommends that the "Secretary of State should be guided in considering alternative proposals by whether there is a realistic prospect of the alternative delivering the same infrastructure capacity (including energy security, climate change, and other environmental benefits) in the same timescale as the proposed development".

In the case of Cottam, the Applicant has created an extremely narrow envelope of alternatives, starting with grid connection access, then seeking to secure sufficient volume of land to maximise use of the grid connection. On that basis, the discussion of alternative sites by the applicant is

superficial, in that rooftop solutions, or use of brownfield sites were never genuine considerations. On the other hand, in order to decarbonise effectively, even without retrofitting solar to existing rooftops, the capacity of Cottam could be deployed each year by making use of new-build domestic rooftops, thereby providing a much more rapid deployment of the same capacity, with fewer adverse impacts than the Cottam scheme.

The NPS also describes the impacts on landscape, stating that effects “arise not only from the sensitivity of the landscape but also the nature and magnitude of change proposed by the development”, noting that “the scale of energy projects means that they will often be visible across a very wide area”. The Secretary of State should judge “whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project”. The combination of the colossal scale of ground mounted solar projects such as Cottam as well as the height of panels, is not sensitive to the landscape.

Related to landscape is the provision of green infrastructure and open space to meet the need of local communities, which are seen as having a vital role in promoting healthy living. Development of a scale that dwarfs the surrounding communities removes such amenity.

#### **4 Emerging NPS EN-3**

Within the emerging NPS EN-3 (Renewable Energy) due for 2024, solar is now included, although this describes “a typical 50MW solar farm”, being between 125 and 200 acres. While it notes the potential for this to vary significantly, it also notes the potential for this to change over time as technology becomes more efficient – implying a reduction, rather than an increase in size.

In addition, there is a clearly implied hierarchy in the list of land that should be used for ground-mounted solar. Section 2.10.29 states: *“applicants should, where possible, utilise previously developed land, brownfield land, contaminated land and industrial land. Where the proposed use of any agricultural land has been shown to be necessary, poorer quality land should be preferred to higher quality land avoiding the use of “Best and Most Versatile” agricultural land where possible.”*

The wording is clear therefore, in that agricultural land should be used *after* these other land classes have been explored, *and only where* use of agricultural land has been shown to be necessary. The Applicant has failed to identify any previously developed land, brownfield land, contaminated land or industrial land for any of its proposed development, and the Applicant has failed to make any case that using agricultural land at this scale is at all necessary.

As an aside, there is a clear anomaly in the treatment of different generating technologies within the NPS, by considering “capacity”, without consideration of the yield it can deliver. For offshore wind, it is required to have a capacity of >100MW to be considered a nationally significant electricity generating station. With a load-factor of over 50%, the likely yield of such a plant will be >50MW on average over a year. By contrast, the threshold for a solar farm is 50MW. With a load factor of 10%, the threshold to be nationally significant effectively falls to an average of 5MW.

## 5 Concluding Points:

- While the “Emerging” NPS suite is important and relevant, the existing NPS suite applies to the proposed Cottam solar development.
- There are urgent requirements to overhaul even the “Emerging” NPS, called for by the Electricity Networks Commissioner, to improve the coordination and planning of electricity infrastructure projects.
- Solar does not feature in the existing suite of NPS documents.
- The Existing NPS considers land use, as well as the context of agricultural practices and how they contribute to the character of the environment and local economy.
- The “Emerging” NPS acknowledges the risk of “unnecessary capacity” being built and the need for overall co-ordination in the approach.
- A definition of “Critical National Priority” has evolved through the development of the NPS, and a “watering down” of this definition has rendered it to be effectively meaningless in differentiating priorities.
- Consistent principles of “good design” remain, in terms of efficient use of natural resources, including land use, sensitivity to the landscape infrastructure sits within, as well as the functionality of the development. The Cottam project uses a significant area of land, is not sensitive to the landscape and can only provide limited benefits in terms of energy and decarbonisation – as has been set out in 7000Acres WR REP-117.
- The NPS also continues to require alternatives to be considered in terms of whether there is a realistic prospect of an alternative delivering the same capacity, within the same timescale. In fact, there are other ways of deploying such capacity of solar power, without having such impacts through using large-scale ground mounted solar, e.g through rooftops.
- The emerging NPS suite calls for efficient “use of natural resources, including land-use”, and provides a clear hierarchy for the types of land to be used, and that the need to use agricultural must be demonstrated, before considering Agricultural Land Classification. The Applicant has focused solely on ALC.
- The “Emerging” NPS EN-3 considers a “typical” solar farm, being 50MW, and between 125 and 200 acres. The scale of the Cottam scheme is 10x this size, or even greater, through overplanting.