

Summary statements from 7000Acres regarding matters previously raised during the examination that have not been resolved to their satisfaction.

West Burton Deadline 7

8th May 2024

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1. Executive Summary

7000Acres feels compelled to restate many key points of our case, as the Applicant has not responded to our numerous concerns in a meaningful way. Based on the submissions made by Lincolnshire County Council, West Lindsey District Council, 7000Acres and other Interested Parties, the Applicant has not taken full account of the cumulative impact of this and the other 5 solar NSIPs, plus sub NSIP energy schemes, in the local area.

We fully understand the policy ambition for 70GW of installed solar capacity. However, we will show that current Government Policy on energy, climate change, and land use do not require schemes such as the West Burton Solar Project, which make grossly inefficient use of land. We will show that the Applicant's claims on the benefits for the scheme are not justified.

The National Planning Policy Framework identifies that availability of land for food production should be considered but this has been dismissed by the Applicant. A recent High Court Judgement confirmed that the Written Ministerial Statement of the 25 March 2015 remains extant and relevant, contrary to the Claimant's (Island Green Power) argument that recent amendments to net zero targets and delivery budgets had reshaped the policy framework for renewable energy.

The Applicant has failed to provide any mitigations for their scheme. Instead, they conducted a Public Consultation based on a 40 year operational period, then amplified the harm by increasing the operational period by 50% to 60 years. The Applicant maintains that 4.5m high solar panels will be used, despite the considerable adverse impact on the local environment. The only mitigation proposed by the Applicant is screening vegetation. This will take circa 15 years to become effective, and even if effective, it will adversely change the local environment.

The Applicant has not conducted a Health Impact Assessment to identify the effect this, and the other local solar NSIPs, will have on people's physical and mental health. Instead, it has

used a general planner from the Lanpro consultancy, i.e. a lay person, to conduct a shallow and simplistic desktop assessment. 7000Acres recommends that the Applicant should use a health professional to conduct a valid assessment.

Overall, 7000Acres we retain serious concerns over how the Applicant has assessed a number of issues, including flooding, visual impact, Biodiversity Net Gain, noise, Battery Safety, Greenhouse Gas Emissions and suitable alternative sites.

As the West Burton Scheme cannot be mitigated effectively, it is evident that there is a strong case for refusal, particularly as it is clear that the Government's ambition for 70GW of solar capacity can be delivered by rooftop solar and smaller, less intrusive ground mounted installations, such as the 125-200 acres sites envisaged in EN-3 (EN-3 2.10.17).

A recent Westminster debate has highlighted many of the issues raised by 7000Acres, and which have not been adequately addressed by the Applicant in the course of the examination. Topics covered included the poor strategic use of land that large-scale solar represents, the strong preference for rooftop solar, concerns over the adequacy of the ALC framework for use in decision making, as opposed to actual land yields, the unprecedented scale of development, adverse community impacts for no benefit and little engagement, as well as the potential to adversely impact property values. Overall, there was widespread support for effective land use and rooftop solar, including from the Government representative. There was no such support for solar development at the scale proposed for the West Burton scheme.

2. Introduction

7000Acres is a collection of concerned residents formed from over 30 villages in and around the footprint of the West Burton, Cottam, Gate Burton and Tillbridge Solar Farm Projects. We have over 1,000 members.

Overall, the Applicant has failed to show clearly how the very limited benefits of their scheme outweigh the considerable harms identified by the Councils' experts and Interested Parties.

The NSIP process is supposed to be "front loaded"¹. The Applicant's Public Consultation cited a 40-year operational period and then changed it to 60 years, and altered the cable corridor routing, immediately the Examination commenced. The Applicant entered Examination without a mature plan and their shallow and incomplete documentation reflects this.

The Applicant has ignored the major issues raised during the Statutory Consultation, not proposed any mitigations and instead worsening the harm by increasing the operating period of the scheme by 50% (20 years).

We retain many concerns regarding matters that have not been resolved to our satisfaction. In general, the Applicant has not engaged in the Examination process by providing further details or clarity on the need for the scheme and how they will mitigate the major harm it will cause to the area. Instead, they have merely repeated their flawed case in response to the issues raised by Interested Parties and in the ExA's Written Questions.

For these reasons we feel compelled to restate our case in full, as the Applicant has not responded to, or addressed, our numerous concerns in a meaningful way.

Firstly, we will discuss the need for this scheme and what benefits it might provide. We will then identify the harms this and the other solar NSIPs will impose on the region. We will

¹ PA0228 Advice Notice Sixteen - Introduction

show that the Applicant has not consulted in an honest manner and has not followed the relevant processes and guidance.

3. The Need

The need for solar vs. the need for large-scale ground-mounted solar

7000Acres agree there is an urgent need to decarbonise. We recognise that solar has a role to play in decarbonisation and that the UK Government has set out an ambition for 70GW of installed solar capacity by 2050. However, while the headline figure of 70GW has been frequently quoted, it is vital that the anticipated contribution of the 70GW solar capacity is understood, as part of the overall picture of need.

National Grid FES (Future Energy Scenarios) expects solar to make a relatively modest contribution by 2050; between 7% and 10% of UK electricity demand (even in scenarios of up to 90GW of installed solar capacity). For that output, FES 2023 (Data Workbook)² expects solar may account for up to 25% of the UK's installed generating capacity. This is due to the inherently low yield of solar generation in the UK's northern location. For context, wind would account for 43% to 47% of installed capacity but is expected to contribute between 69% to 72% of national demand, i.e. up to 10x the anticipated contribution of solar power.

A further key issue with solar output is that the greatest proportion of the energy it produces is during the middle of sunny, summer days when demand for power is typically low. Conversely, the panels produce nothing when the demand for electricity is at its highest, during winter evenings. The fact that there is no currently deployable technology to store excess volumes of summer solar power, exacerbates this issue, because, during peak output hours this excess power is likely to be "curtailed" (or wasted), or displace other low carbon energy sources, such as wind or nuclear. This means that, in addition to the volume of energy solar being limited, the value of this contribution is similarly compromised.

² [Future Energy Scenarios \(FES\) | ESO \(nationalgrideso.com\)](#)

At the core of 7000Acres concerns is that the potential benefits of solar do not warrant ground-mounted deployment at such large scale, with all the attendant consequences. 7000Acres therefore strongly reject there is a need case for extensive ground mounted solar deployment in the UK as the primary route to delivering the Government’s 70GW ambition. However, this does appear to be the current trajectory of applications, which continues despite repeated calls for a “rooftop revolution” as a means of delivering solar, such as in the Mission Zero – Independent Review of Net Zero (Skidmore Review)³, and from the CPRE⁴.

The specific need for the West Burton scheme

The case put forward by the Applicant is that their scheme is essential requirement to decarbonise and to achieve 70GW of installed capacity, however, this is not consistent with evidence and references provided by 7000Acres and has not been adequately addressed in the course of the examination.

Pace of deployment is also cited as a key reason why their scheme is necessary to meet the Government’s ambition within the intended timescales, nevertheless, it is clear that more capacity could be installed each year, through mandating solar on new build housing alone, than could be delivered through the West Burton scheme, which has already taken years in development, and will take many more to deliver.

The argument that the only way to quickly meet the UK’s 70GW solar ambition to decarbonise the UK system is through large scale ground mounted schemes is not borne out by the evidence and experience from other countries, e.g. Germany, which installed 14GW in 2023 alone, 70% of which was on rooftops.

³ [MISSION ZERO - Independent Review of Net Zero \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

⁴ [A rooftop revolution: turning possibility into reality - CPRE](#)

7000Acres have provided references from the UK Warehouse Association⁵ and Ecotricity⁶ (see also 7000Acres WR REP1A-026). These reports 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", where 80 GW of solar capacity has been installed without a single scheme of the capacity proposed for West Burton 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.

The Applicant has repeatedly stated that they are supportive of all forms of solar, and that both rooftop and ground mounted solar are required for the Government to meet their ambitions, however, it is clear that, with the current surge in ground mounted solar applications, if simply handled on an unplanned, uncontrolled, "first come first served" basis, then almost the entire UK capacity target for UK solar will be delivered through ground mounted solar, despite the clear advocacy for rooftop solar in Government policy documents, the Skidmore review and as debated in parliament recently, and thereby leaving vast areas of roof space vacant and unused.

The recent National Grid document "Grid Guide to Accelerating UK Connections"⁷ shows there is a pipeline of projects that is "over 5x the amount needed to meet the UK Government's 2035 decarbonised electricity system commitment". This pipeline includes around 150GW of solar, split between the transmission and distribution connection queues, which is over double the Government's 70GW ambition for solar capacity. Alarming, this figure does not include the existing 16GW of capacity, and almost no rooftop solar - the connection queue is comprised almost exclusively of ground mounted solar.

Quite simply, without carefully managing the current tsunami of large-scale ground mounted solar applications, there will be no opportunity to deliver the called for "rooftop

⁵ [Delta-EE Publications \(ukwa.org.uk\)](http://ukwa.org.uk)

⁶ [GBF-Report-Solar-v14.pdf \(ctfassets.net\)](http://ctfassets.net)

⁷ [PowerPoint Presentation \(nationalgrid.com\)](http://nationalgrid.com)

revolution” or to properly plan land allocation to meet the many competing demands on land, including for houses, commercial development, reservoirs as well as for direct decarbonisation requirements, such as tree planting and establishing peatlands.

Given the astonishing size of the pipeline of solar development, along with the untapped potential for rooftop solar, it is clear that the UK can be selective as to which schemes may be permitted, to ensure that the clear hierarchy indicated within NPS EN-3 is strictly followed, ie. that “applicants should, where possible, utilise suitable previously developed land, brownfield land, contaminated land and industrial land”. Only then, once there is a clear case for agricultural land to be used should such land be considered.

Overall, it is clear that the Applicant’s claims of “need” for their scheme as a solution to the Government’s solar capacity ambitions are not borne out, as demonstrated by the evidence provided by 7000Acres.

4. Cost

The Applicant has claimed the electricity generated will be “low cost” (Statement of Need 10.3.1 but this is only a partial picture. Under the Contract for Differences (CfD) Scheme⁸ the Applicant will be paid an agreed strike price: the recent Contracts for Difference Allocation Round 5 resulted in a typical solar cost of £47 per MWh (CfD scheme prices are quoted in 2012 prices, with the latest indexation⁹ this is £64.56 per MWh). The peak generation of all solar will be around the middle of a sunny day in summer, when the typical grid price is frequently much lower, and already sometimes negative.

The graphs below are taken from BMReports¹⁰ (website of the UK Electricity balancing and settlement market) and show the first three Mondays of July 2023 (Monday is chosen as this is frequently the highest demand day of the week) and show that system prices are

⁸ <https://assets.publishing.service.gov.uk/media/64fa0473fdc5d10014fce820/cfd-ar5-results.pdf>

⁹ [AR6 Core Parameters \(publishing.service.gov.uk\)](https://assets.publishing.service.gov.uk/media/64fa0473fdc5d10014fce820/ar6-core-parameters.pdf)

¹⁰ [Electricity Data Summary | BMRS \(bmreports.com\)](https://www.bmreports.com/)

frequently significantly lower than the indexed strike price. For 03/07, the price falls to £-75 per MWh, but hovers around zero for much of the peak solar output period. For 17/07, the price plummets to £-185 per MWh, and is around £22 per MWh for much of the peak solar output period. These figures demonstrate the relatively low spot market prices of electricity during periods when solar output is at its greatest, and the relatively high cost solar will be paid during these periods, through CfD prices.

Over the same period, the weekly average prices ranged from £115 per MWhr to £125 per MWhr (Electricity Prices: Forward Delivery Contracts, Weekly Average, from Ofgem) ¹¹, which provides an indication of the much higher cost of energy during periods at other times of the day, when solar is not able to contribute to the electricity system.

This demonstrates that, while the Applicant may argue the cost of deploying solar is low, the value of when the bulk of solar energy is produced in the UK, is already when prices are among their lowest, and therefore this must be considered when weighing the benefits and impacts of large-scale ground-mounted solar installation.

¹¹ [Wholesale market indicators | Ofgem](#)



As raised by 7000Acres in Section 2.2.2 of 7000Acres WR REP1A-026, suppliers are already identifying ways to encourage energy usage during periods where it is anticipated that solar generation will be high, by offering half-price tariffs during this time. Therefore, in the context of when the energy is available and how it can be used, paying £47 per MWh (indexed to £64.56 per MWh in 2023 prices) is not low cost.

5. The Benefits

The volume of energy the scheme will deliver

We have already touched on the relatively small contribution solar will make, even with 70GW of solar capacity installed. At its heart, this is because the UK has very low levels of solar gain on a global scale. This should make the UK an unlikely choice for some of the largest concentrations of ground-mounted solar capacity in the world. Nevertheless, the 4 NSIP schemes in West Lindsey could see development on a similar scale to the largest schemes in China or India, notably in areas with much greater solar gain, and far fewer pressures on land use.

Recognising that, even if 90GW of solar will only deliver up to 10% of energy production, a 500MW solar scheme would contribute only 0.055% of the UK's annual demand. This cannot be considered to be a sufficiently material contribution to the energy system to warrant the harms associated with ground-mounted solar development at the scale proposed.

Countries must make use of the natural resources they have, in order to maximise yield. This point is made by the technical author of the Applicant's Statement of Need, in a separate paper "Power System Fundamentals"¹², which states that, located in north-west Europe, the UK "has potential for plentiful wind generation but has low solar generation potential".

The scheme being proposed by the Applicant is being considered for "overplanting", i.e. with capacity installed greater than the grid export capacity. This "builds in" a certain level of self-curtailment. It means that solar panels in this area, which is already one of the lowest areas of solar gain worldwide, would, by design, then have a deliberately reduced output. These would be some of the lowest yielding panels anywhere on earth. Perhaps in an economic spreadsheet such a decision would make sense, but in terms of deploying resources efficiently to decarbonise, this is a backward step.

The importance of when energy is delivered

In terms of benefits, 7000Acres have highlighted other limitations with solar generation, particularly the mismatch between greatest demand (heavily biased towards winter

¹² [Humbeat Limited - Resources](#)

evenings), and greatest electricity production (summer days, typically with lower demand). This is of particular concern given the limited options for long-term energy storage, i.e. season to season, rather than the short-term BESS facility proposed by the Applicant. Production without the ability to use in the moment or store, will lead to energy being wasted, or “curtailed”. Uncontrolled deployment of solar will result in more curtailment, therefore a less efficient and more expensive path to decarbonisation, ultimately resulting in higher energy bills for consumers. Section 2.1.3 of 7000Acres WR REP1A-026 further describes the scale and cost of curtailment, and Section 7.3 of 7000Acres WR REP1A-026 considers the Applicant’s treatment of the subject in the SoN.

6. Security of Supply

The Applicant has claimed that solar enhances security of supply, by adding diversity of energy sources to the electricity system. In terms of security of supply, the primary challenge is to keep the lights on and meet demand. The Applicant has glossed over the fact that, even with 70GW of solar capacity installed, none of this can be counted on to meet peak demand, which is on winter evenings. The security of supply gains from having a contribution of up to 10% of solar per year on the electricity system are therefore relatively minor. For the Applicant to state the minor advantages of solar in security of supply, without addressing the “elephant in the room”, i.e. that solar won’t contribute to security of electricity supply when the country needs power most, is an example of partial information presented to the Examining Authority. This is further discussed in Section 7.2 of 7000Acres WR REP1A-026, which also describes the Applicant’s limited treatment of the potential of solar to contribute to the UK’s Capacity Mechanism, which is the primary market tool for ensuring sufficient electricity capacity is available to National Grid (system adequacy).

7. The Harms

Land use 1: Overall

The Applicant has not addressed one of the key points raised by 7000Acres, which is that there are exceptional pressures on land use in general, and cropland in particular, much of which come from the need to decarbonise, therefore the extensive and uncontrolled use of land for large scale ground mounted solar will only serve to exacerbate this problem, impeding requirements to plant 30,000-70,000 hectares of trees per annum and establish peatlands. In their analysis of land use for decarbonisation, the UK Climate Change Committee make no reference or allocation to land being used for extensive large-scale ground mounted solar. The Government has already been criticised for “overpromising” finite land with its multiple ambitions for land use in a report by the Royal Society on the subject of Land Use. The Government has recognised the competing tensions for land use and has committed to developing a Land Use Framework. The pressure on land use is also highlighted in the Skidmore review.

The Applicant has focused solely on the 3a/3b debate, in terms of Agricultural Land Classification, and has failed to address the issue of overall pressure on land use, or acknowledge the role it is playing in exacerbating this situation.

The House of Commons Environmental Audit Committee Report¹³, 29 November 2023, paragraph 201 states:

“The Government should designate food security as a public good and incorporate food security and environmental goals more explicitly in the design of the Environmental Land Management schemes.”

In paragraph 31, the report then states:

“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. Furthermore, because UK food production tends to be relatively intensive in nature, any production

¹³ <https://publications.parliament.uk/pa/cm5804/cmselect/cmenvaud/312/report.html>

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.”

So, in addition to producing no power when demand is high, the scheme will do environmental damage by displacing food production abroad.”

Land use 2: Agricultural Land Classification

We retain our concerns over the ALC methodology applied by the Applicant. The Applicant has not addressed our concerns, merely repeated their initial flawed assessment. The 7000Acres Rep 1A-011 identifies a number of anomalies in the ALC survey conducted by the Applicant.

The principle that BMV land must not be used “without compelling evidence” has recently been upheld in the High Court,¹⁴ where the Applicant for the Lullington solar scheme (Island Green Power) lost their appeal. Importantly, the High Court case confirmed that the Written Ministerial Statement of March 25th 2015 remains extant and relevant, contrary to the Claimant’s argument that recent amendments to ‘net zero’ target and delivery budgets had reshaped the policy framework for renewable energy.

Permanent Loss of BMV Land

7000Acres request the ExA takes account of recent research by the Welsh Government¹⁵ and others¹⁶ that installing large solar arrays on farmland results in deep soil compaction,

¹⁴ <https://www.bailii.org/ew/cases/EWHC/Admin/2024/295.html>

¹⁵ <https://www.gov.wales/sites/default/files/publications/2023-08/impact-solar-photovoltaic-sites-agricultural-soils-land-spep21-22-03-work-package-3.pdf>

¹⁶

https://www.researchgate.net/publication/343578893_Effects_of_Revegetation_on_Soil_Physical_and_Chemical_Properties_in_Solar_Photovoltaic_Infrastructure

increased water runoff and runoff from panels can lead to rivulets, which can lead to soil loss by erosion. Additionally, good quality soil can be downgraded by compaction and damage caused by removing the solar foundation and piles¹⁷. Unless low pressure tyres and tracks, along with only working the land in dry conditions is secured, then soil compaction and degradation is a reasonable worst-case assessment. It is apparent that the Applicant has not taken account of this recent research and has not addressed damage to the soil by compaction.

Adverse impacts on decarbonisation efforts

Three major reports have been published this year that assess the decarbonization of the power sector and the UK's 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 come from the UK Climate Change Committee (CCC)¹⁸, the National Audit Office (NAO)¹⁹, and by the Business, Energy and Industrial Strategy Committee (BEIS)²⁰.

Together, their most pressing concerns are:

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

¹⁷

https://www.researchgate.net/publication/343578893_Effects_of_Revegetation_on_Soil_Physical_and_Chemical_Properties_in_Solar_Photovoltaic_Infrastructure

¹⁸ [Delivering a reliable decarbonised power system - Climate Change Committee \(theccc.org.uk\)](https://www.theccc.org.uk/reports/2022/06/2022-06-20-delivering-a-reliable-decarbonised-power-system/)

¹⁹ [Decarbonising the power sector - National Audit Office \(NAO\) report](https://www.nao.org.uk/wp-content/uploads/2022/06/Decarbonising-the-power-sector-NAO-report-2022-06-20.pdf)

²⁰ [Decarbonisation of the power sector \(parliament.uk\)](https://www.parliament.uk/business/committees/committees-a-z/business-energy-and-industrial-strategy-committee/committees-reports-and-publications/2022-06-20-decarbonisation-of-the-power-sector/)

Solar simply does not feature in the landscape of key challenges to be overcome for the UK to deliver on decarbonising the power sector.

Extensive deployment of large-scale ground mounted solar will serve to impede decarbonisation efforts by:

- Creating a significant additional pressure on land-use (see above). Solar can be deployed on rooftops and brownfield sites, thereby removing a source of pressure on land use. The choice of developers to pursue the economic opportunity of large-scale ground-mounted solar puts more pressure on land – a finite and precious resource in the UK, which must also meet demands for housing, commercial development, food production – as well as making its own contribution to decarbonisation, through planting forests and establishing peatlands.
- Diverting scarce resources vital for higher priority decarbonisation efforts. There are already shortages of skilled engineering staff, transformers and high voltage equipment. With the key priority being identified being the need to deploy the grid infrastructure to support offshore wind, the unnecessary connection of solar to HV substations, miles from the panels, puts additional pressure on this supply and skills chain (Recommendations 14 & 15 from the Electricity Commissioner’s Report²¹).
- Adding a volume of unnecessary projects to the National Grid connection queue, e.g. with 150GW of solar capacity in the National Grid project connection queue, this is more than double the Government’s ambition. The result is to exacerbate the difficult position faced by National Grid to “rewire Britain” to deliver decarbonisation.
- Sterilising strategically important grid connection points. To decarbonise, it is understood that the country will need further nuclear reactors (including small modular reactors), electrolysers and other equipment. Such equipment will require high voltage, high power grid connections, and their use for solar schemes will sterilise these connections for decades. The consequence of this will be the need for yet more grid infrastructure, and / or a delay of such technology being deployed.

²¹ [Electricity-Networks-Commissioner-report-to-SoS.pdf \(esc-production-2021.s3.eu-west-2.amazonaws.com\)](#)

- Displacing crops. By covering productive farmland with solar panels, the crops grown within the region would need to be produced elsewhere. These crops are a mixture of food for people, animal feed and crops for biofuels. There is no consideration as to the net carbon effect of these crops being displaced, nor potential impacts on food security. The NPPS footnote 62 is very clear:

“Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality. The availability of agricultural land used for food production should be considered, alongside the other policies in this Framework, when deciding what sites are most appropriate for development.”

Opportunity Cost of Renewable Energy Sources

There are two primary dimensions to cover when considering the opportunity cost of renewable energy crops displaced by the proposed development:

- i. The absolute quantity of renewable energy associated with displaced energy crops. The Applicant has not factored in the renewable energy that is already produced, which should be counted against the claimed benefit, therefore the benefit stated by the Applicant is overstated.
- ii. The relative value of the energy displaced through the loss of energy crops versus that provided by solar. The Applicant has not considered the much greater flexibility of bio-fuel derived energy, which can be stored long-term, e.g. for winter heating demand, or transported in a way that can decarbonise other sectors of the economy, e.g. road, rail, aviation and shipping. By contrast, there is no such capability for long-term storage of solar energy, which is therefore intermittent and much less flexible.

Neither of these aspects has been adequately addressed by the Applicant in the material provided, and both should reduce the weight given to the benefits claimed by the Applicant for their project. These points are set out in 7000Acres REP05-51 in response to the ExA’s Second Written Questions, Question 2.3.8.

8. Timespan

The revised EN-3 (November 2023) 2.10.65 states that an *“upper limit of 40 years is typical”*. The Applicant is seeking approval for 60 years, which when the construction period is taken into effect, will permit the system to be operational until circa 2089. Ground mounted solar panels will be obsolescent long before 2089, so this extensive period of time is not required.

The Applicant has not explained why they need consent for such an extensive period of time, and not the “*temporary use*” identified in EN-3.

One of the grounds that led to the refusal of the Lullington solar scheme was timescale, where the Inspector stated that 40 years was not temporary use (as required by EN-3) but a “*generational change*”. Evidence from research conducted for the Welsh Government²² shows that agricultural land, in particular BMV may not revert to its original state, so making the damage to soil quality permanent.

We agree with WLDC in their statement that (REP 1A-004 para 5.74):

“With a consent period of 40 years being sought, this timescale should not be considered temporary in the decision-making process. Generations of communities would experience the solar farm landscape for most of their lives and to dismiss such impacts as temporary is disingenuous. Whilst site decommissioning is likely to result in the removal of much of the infrastructure, there remains uncertainty about what may remain and consequently hindering a return to agricultural use and the districts cultural landscape character. WLDC therefore disputes the applicant’s contention that the impacts of the development are temporary and reversable.”

For locals, residents and visitors, the experience of the scheme will not be temporary. It will be permanent, occupying the majority and if not the entirety of their lifetime.

9. Size of the Scheme

EN-3 (November 2023) describes a typical 50MW solar scheme as being 125 to 200 acres in size. Although it does state that size will vary, there is no support for a scheme over ten times that size. Furthermore, the cumulative impact of the multiple solar schemes in West

²² <https://www.gov.wales/sites/default/files/publications/2023-08/impact-solar-photovoltaic-sites-agricultural-soils-land-spep21-22-03-work-package-3.pdf>

Lindsay, and just across the River Trent, are completely beyond anything envisaged in the NPSs, with each of the schemes being as large as the biggest solar schemes in Europe.

10.Height of the Solar Panels

The Applicant has not provided a clear explanation why it is necessary to use solar panels that are 4.5m high, whilst other similar schemes, such as Sunnica²³ or Stow Park use panels up to 2.5m high. Use of 4.5m high panels is unprecedented in the UK. Panels with a height of 2.5m could be screened almost immediately by typical Lincolnshire hedges and mitigate much of the visual impact.

11.Visual Impact

The Applicant has failed to address the concerns raised by Interested Parties. 7000Acres agrees with the WLDC assessment that states the industrial development of the landscape will (paragraph 4.11, AHH) *“bring about an extensive change on land use...and subsequently the openness and perception of solar development: creating what may be perceived as an ‘energy landscape’ as opposed to rural or agricultural one at present, which is a complete change of character.”*

12. Landscape Character

West Lindsey District Council’s Written Representation (REP 1A-004 para 5.73) states that: *‘The West Burton Solar Project scheme will cause significant harm to the landscape character of the area, altering it from its agricultural use and character potentially irrevocably. The visual effects on communities are [sic] visitors will be significant’.*

In addition, the Council continue that they, *‘are unclear as to why the applicant has continued to promote a project that has direct negative impacts upon it.’* WLDC’s consultants ((4.9, AHH Planning Consultants, Landscape & Visual Review Lincolnshire County Council, West Burton Solar Project) disagree with the Applicant’s assessment that their scheme is

²³ [EN010106-005906-December 23 information request.pdf \(planninginspectorate.gov.uk\)](#)

moderately beneficial. AHH state, *'we are not in agreement with the findings of the landscape assessment, and do not see any appropriate justification for assessing significant beneficial landscape effects on both landscape character areas, or individual contributors to landscape character by the construction and operation of a large solar development.'*

Since the above assessment by West Lindsey District Council and throughout the Examination process, the Applicant has not amended the Scheme to accommodate the issues raised. In contrast, the Applicant has increased the unreasonably long-life span of the Scheme from 40 years to 60 years. The Applicant has repeatedly failed to propose effective mitigation, relying solely on vegetation as main sole mitigation, and "opaque fencing" to mitigate glare. Even the Applicant concedes that this will take up to 15 years for vegetation screening to become effective, although they take no account of reduced foliage in the winter months; as such, the proposed mitigation measures are not valid and do not adequately alleviate harms.

The proposed solar panels will be 3.5 and 4.5m in height. In some Flood Zone areas the panels will be raised further. There will be extensive security fencing, lighting, CCTV, BESS, substations, warehousing and storage buildings varying in heights above the height of the mature hedgerow line across the landscape. With no leaf cover for approx. 6 months of the year and reflecting that plant establishment will be difficult to achieve, it is evident that the proposed screening will not be effective.

The Public Rights of Way (PRoW's) in and around the sites which constitute the West Burton Solar Project have open aspects with short and long distance views. If the proposed hedging and mitigation measures are implemented, it is arguable that loss of landscape character and enjoyment of the landscape will occur. 9.10 The 7000 Acres Group argues that planting mitigation measures will not be effective as suggested in the LVIA and will harm the character of the landscape. If all trees and hedgerows are removed in relation to the West Burton Solar Project as stated in the Draft DCO, the negative effects on the environment, regional and local landscape character will be immeasurable.

13.Flooding

Most of the soil on the proposed development areas has a high clay content, which despite its ability to hold water in times of drought to produce high crop yields, becomes saturated during prolonged periods of heavy rain, resulting in excess water to shed off directly over the surface into the dykes. Also, during periods of drought, clay soil becomes hard and initially impervious to rainwater until it is softened enough to allow infiltration. Under drought conditions, its hard impervious nature of clay soil results in rainwater from a sudden storm running off faster than it can be absorbed. The residence time, for rainwater falling over an area of the soil surface is currently much longer than would be the case when covered by 4.5-metre-high impervious solar panels, which concentrate the runoff at the drip line. The developer appears to have misunderstood the hydrology of a concentrated flow of rainwater running from the inclined 4.5 metre high solar panels onto the confined area of the drip line falling onto the edge of the compacted panel maintenance lanes between the solar array and the inaccessibility of the area in the sheltered rain shadow beneath the panels, resulting in at least half the area of the development being unavailable for infiltration than is currently the case. Also, the impingement and sheer force of the fast-moving channel of water along the panel driplines to erode the soil and mobilise clay, fine particles together with natural vegetation to enter the water courses and negatively impact aquatic invertebrates and the general ecology of the dykes, drains including the river Till. It remains a matter of serious concern that the Environment Agency and the Upper Witham Drainage Board have not also raised concerns regarding the flooding risk, which is patently obvious. West Burton Solar Project's Flood Risk Assessment in its Environmental Statement makes scant reference to the effect the development will have on the River Till and its tributaries and appears to concentrate mainly on the flood risk to the solar arrays and equipment within the development itself. Nowhere in the developer's Flood Risk Assessment is there an estimate of the maximum quantity of surface water running from approximately millions of square metres of solar panels. Periods of heavy rain exceeding 50mm in a 24-hour period are not unknown in Lincolnshire which would produce 0.32 million cubic metres of surface water, much of which would not be absorbed along the panel drip line when the soil becomes saturated. This quantity of water could not possibly be contained on the site even if Defra's SuDS formula were to be applied to provide tens of thousands of cubic metres of storage for

West Burton 1 and 2 alone. The flood risk from West Burton 1 and 2 cannot be considered in isolation and the flooding risks arising from Gate Burton EP, Cottam Solar Park and Tillbridge Solar must also be jointly considered since they all are situated on the catchment area of the river Till and comprise approximately 10,000 acres of land in total.

The Applicant claims the landowner will maintain the drainage, but this is not secured. Welsh Government research²⁴ on solar schemes identifies that flooding risk increases if drainage is not maintained. We submitted photographs of flooding in the area in our REP 1A-016.

Research conducted by the Welsh Government shows that water runoff from solar panels created erosion channels.



Welsh Government Report - Figure 6: Channels created by panel runoff within 12 months of site operation commencing

The Report explains the mechanism leading to soil erosion in paragraph 4.4:

“Runoff from solar panels has an influence on soil erosion. Water is known to run along the edge of the panels then fall to the ground at localised points and form rivulets.”

At ISH 3 the Applicant (Mr Rigby) stated *“the available research that we have, which is the McEwen report, which is a US report, but it is the best that we've got, shows that panelled*

²⁴ <https://www.gov.wales/sites/default/files/publications/2023-08/impact-solar-photovoltaic-sites-agricultural-soils-land-spep21-22-03-work-package-3.pdf>

areas on grassed fields have a minimal impact on surface water runoff. In fact, I believe the wording is negligible". Clearly the Applicant has not considered recent research in the UK which contradicts their opinion.

14. Health

7000Acres remain concerned there is no Health Impact Assessment associated with the proposed concentration of developments within the West Lindsey region. We maintain that a desktop review is not satisfactory, and understanding a broad depth of current quantitative data is essential. The Applicant has used a general planner from the Lanpro Consultancy to assess the health impacts. This has resulted in a shallow and incomplete assessment that does not address the health and wellbeing issues identified by the health professional in the 7000Acres team.

We maintain that these projects should have been seen as one, as there is a cumulative impact effect on health and wellbeing that needs to be considered. As four separate single schemes, this potentially negates an assessment, however as one scheme, this would definitely prompt one due to scale and potential impacts on people. By not doing this assessment, demonstrates the applicant's inability to clearly understand how the project will harm health and wellbeing in a rural community.

Our view is supported by WLDC, who in their response to ExA question 2.2.3 state:

"WLDC maintains that, in order to comply with development plan policies, a Health Impact Report should have been submitted with the application. The report is separate to the EIA, as its purpose goes beyond the scope of simply identifying 'likely significant' impacts, to the identification of all potential impact. A HIA would allow the assessor to be more qualitative in its assessment and seek to identify impacts that, although may not be 'significant' in EIA terms, will still be adverse impacts that every effort should be made to mitigate and taken into the overall planning balance."

Please refer to our evidence presented at Deadlines 1 and 5.

15.Socio-Economic

The breadth of area chosen for Impact Assessment is too wide and misses Gainsborough within the socio-economic study, area with some of the most deprived areas within the country. This should be considered to be a failing of the study.

The Applicant has provided only limited information which lacks transparency in its assessment of any jobs lost, or the nature of any jobs created. There is little or no evidence presented of community benefit through employment from the development, in an area that is in desperate need of jobs and prospects. The loss of farming livelihoods therefore can only be seen as an erosion of opportunity. This is particularly material as any perceived benefits of the scheme will be outside the region that is most severely impacted by the scheme, and which already suffers deprivation.

While the Applicant states their compliance with policies within Local Plans, the Applicant has not addressed the specific points raised by 7000Acres in highlighting the significant amount of work that has been carried out to develop plans for the future of the region. Despite being extremely conscious of climate change and actions to decarbonise the economy, this work makes no proposals for the development of large-scale ground mounted solar as a contribution to the development of the region. In particular:

- The industrialisation of an area of Lincolnshire through extensive deployment of large-scale ground mounted solar would serve to undermine the Agrifood ambitions of the Lincolnshire Industrial Strategy as well as the appeal for visitors and the ambition to improve areas of deprivation through the stimulation of the Visitor Economy.
- The Central Lincolnshire Plan sets out objectives for Land Use (protecting the resources of the county) as well as for Climate Change and Energy. Where solar does feature, it is primarily in relation to retrofit to buildings or incorporation into building design.
- The CLP sets out policies for Renewable Energy as well as the protection of landscapes. The criteria to be met for a renewable scheme to be acceptable are clear, including considerations of scale, impacts on landscape character, visual amenity

amongst other issues. What is also clear is that meeting these criteria would be impossible for a scheme at the scale of GBEP.

16. Climate Change Assessment

7000Acres retains its concerns over the greenhouse gas (GHG) assessment made by the Applicant (Chapter 7: Climate Change APP-045). The Applicant has repeatedly failed to provide further information on how it reached its conclusions. It still has not provided a meaningful assessment of the GHG emissions generated during replacing degraded solar panels, batteries and decommissioning. It has not taken account of the GHG emissions caused by importing the crops displaced by the scheme. Many of the assumptions made by the Applicant are highly optimistic and so not consistent with Advice Notice Nine, which requires a reasonable worst case assessment.

In particular, the Applicant has not applied a reasonable worst-case assessment to the life of PV panels and batteries. In the case of PV panels, they have assumed a 0.4% per annum failure rate, without any supporting evidence. This results in 24% of the panels being replaced after 60 years and 60% of the panels lasting 100 years. Evidence by Solar Energy UK, to the House of Commons²⁵ stated:

“The lifespan of a new solar panels is also increasing. The typical operational lifespan of a new solar panel can now be 35 years or longer.”

Therefore, based on the solar industry’s own evidence, a reasonable worst case is a 35-year life. Applying a 35-year life, the physical failure rate will be 100% before the original 40-year life of the scheme is reached. It is not a reasonable worst-case assumption that only 24% of the PV panels will need replacing over 60 years.

During the 15-year period covered by the Contract for Difference (CfD) financial support will be provided to the operator. Under the CfD Scheme²⁶ the Applicant will be paid an agreed

²⁵ <https://committees.parliament.uk/writtenevidence/113682/pdf/>

²⁶ <https://assets.publishing.service.gov.uk/media/64fa0473fdc5d10014fce820/cfd-ar5-results.pdf>

strike price: the recent Contracts for Difference Allocation Round 5 resulted in a typical solar cost of £47 per MWh (CfD scheme prices are quoted in 2012 prices, with the latest indexation²⁷ this is £64.56 per MWh). At the end of the CfD support, the operator will compete on the energy market on a fully commercial basis at a significantly lower daytime price per MWh, sometimes in summer a negative price due to curtailment. As solar power is generated only during daylight, with peak power produced in the middle of the day when demand is lower, PV panels will have to be replaced on a frequent basis in order to maintain economic levels of energy production. Failing to do so will result in a decreasing energy production/revenue but fixed costs. The Applicant has failed to take account of replacing PV panels on economic grounds in their ES. However, they have sought a very lax and wide-ranging definition of “maintain” in the DCO that will permit them to change panels at will. The combination of degradation and end of CfD subsidies is likely to result in an economic life of the solar assets of no longer than 20 years²⁸.

In order to assess the true impact on transport, waste, noise, and GHG emissions, the Applicant should provide evidence regarding the true replacement cycle of the PV panels; failure to do this will render the SoS unable to assess the true impact of this scheme.

A similar comment applies to the BESS batteries, where the current life is circa 10 years, not 20+ years claimed by the Applicant.

17. Biodiversity Net Gain

The Applicant does not take a reasonable worse case approach when assessing biodiversity net gain. Natural England (Natural England, 2016) and the Planning Inspectorate (Alder, n.d.) both identify that there is limited evidence to support claims that utility solar increases biodiversity. While a number of case studies have been published, e.g. by Natural England, these are hypothetical illustrations of the methodology, and cover relatively small areas of development (<10ha.) in comparison to large scale solar development (e.g. Island Green Power’s proposed West Burton and Cottam schemes are over 1000ha. each). To rely on such

²⁷ [AR6 Core Parameters \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/531222/AR6-Core-Parameters.pdf)

²⁸ <https://www.ref.org.uk/attachments/article/374/Economic-Solar-Generation.pdf>

an unproven methodology in the face of development on such unprecedented scale would seem to undermine the potential to accurately estimate the potential BNG improvements across the various categories highlighted by the ExA.

A balanced expert report would have identified the relevant research, the limitations of the available research and addressed the conclusions made in the Natural England research.

7000Acres agrees with WLDC (Local Impact Report - West Burton.2.0), where it states: Ecology 20.11. *“During construction, the Scheme will result in the loss, degradation and fragmentation of habitats. It will also cause disturbance to the flora and fauna of West Lindsey. There is also the potential that the Scheme would introduce invasive species. Operational impacts of the Scheme could include light disturbance to bats and birds. There is also the potential that Battery and Energy Storage System (BESS) will generate noise attraction or disturbance. Maintenance activities could also have an impact on ecological receptors.”*

The Applicant takes no account of the net biodiversity harm caused by producing equivalent amounts of crops overseas. The House of Commons Environmental Audit Committee²⁹ identified that the adverse harm was three to four times the local BNG for a solar site. A true biodiversity NET gain must include the adverse impact of outsourcing food production. These adverse effects have not been addressed by the Applicant.

In combination with such evidence as the recent short video highlighting the conditions during the construction of Cleve Hill Solar Farm³⁰, the environmental damage to the area during construction is extensive. West Burton will be almost twice the land area as the Cleve Hill scheme, once “over planting” has been accounted for, and the in-combination effects of other NSIP schemes in the region mean that the assumed recovery of habitats and species necessary to assure the BNG gains cannot be assumed.

²⁹ <https://publications.parliament.uk/pa/cm5804/cmselect/cmenvaud/312/report.html>

³⁰ [Cleve Hill Solar Park \(youtube.com\)](https://www.youtube.com/watch?v=...)

18. Battery Energy Storage System (BESS) Safety

The Applicant has failed to address the concerns raised over BESS safety. It is acknowledged that this is emerging technology, but as the Applicant has chosen to adopt a Rochdale Envelope then their assessments must be based on a Reasonable Worst Case Assessment (Advice Notice Nine). A Reasonable Worst Case Assessment would be to base their safety case on current technology and current safety requirements.

In particular, the Applicant has not taken account full account of a BESS Thermal runaway, the release of toxic gases and the impact of the polluted firewater on the local environment. Water storage, bunding and fire water storage should be secured in the DCO.

19. Battery Energy Storage System (BESS) Planning Requirements

The Applicant has not clearly explained why a BESS of this size is required to support the solar generation. The Applicant for the Mallard Pass solar NSIP in Lincolnshire states that their scheme is economically viable without a BESS. In the case of Mallard Pass, only an export BESS is technically feasible, therefore the Applicant is not installing a BESS as it will not provide an additional income from energy arbitrage. This demonstrates the primary purpose of a BESS is generating an additional income from energy arbitrage and not storing generated power.

The Applicant has frequently provided incomplete or misleading information, for example they claim battery storage is supported by EN-1. The National Policy Statement EN-1 (2024) uses the word “battery” once, where it states that there is 3GW of pumped hydro storage and 1 GW of battery storage.

EN-3 does not refer to batteries at all. EN-1 3.3.29 states that the Infrastructure Planning (Electricity Storage Facilities) Order 202043 removed all forms of electricity storage, other than pumped hydroelectric storage, from the definition of nationally significant energy generating stations under the Planning Act 2008. Therefore, a BESS is outside the NSIP scheme and should be assessed as a stand-alone scheme, approved by the LPA, and not consented under the Trojan Horse of a solar NSIP.

The Application is for a Generating Station. The main economic purpose of the BESS is energy arbitrage using the National Grid connection. As the solar scheme will only be capable of generating power during daylight, and only generates close to the claimed 500MW on sunny summer days, the BESS will be the main source of income between Autumn through Winter to Spring, and only source of income at night. Therefore, the BESS provides an additional source of income to the solar generating station. As it is an additional source of income, it is not Associated Development in accordance with the PA2008, Guidance on Associated Development Applications for Major Infrastructure Projects.

The PA2008, Guidance on Associated Development Applications for Major Infrastructure Projects is clear on the requirements for what constitutes Associated Development. To trade energy with the National Grid, additional equipment and monitoring systems will be required. As the Consent will be for operating a “*generating station*”, revenue operations when the scheme is not capable of generating power should be viewed as a separate system. The PA (2008) Associated Development Guidance states in paragraph 5 (iii) that:

“Developments should not be treated as associated development if it is only necessary as a source of additional revenue for the applicant, in order to cross-subsidise the cost of the principal development”.

PA (2008) Associated Development Guidance Paragraph 6 states:

“It is expected that associated development will, in most cases, be typical of development brought forward alongside the relevant type of principal development or of a kind that is usually necessary to support a particular type of project, for example (where consistent with the core principles above), a grid connection for a commercial power station.”

It is evident that the primary purpose of the BESS is to provide an additional income and cross-subsidise the solar scheme. Therefore, the BESS is not Associated Development and should be removed from the dDCO.

20. Cumulative Impact

NPS EN-1 4.2.6 and Advice Notice Seventeen require the Applicant to consider how the “accumulation of, and interrelationship between effects might affect the environment, economy or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place.”

The Applicant’s Technical Note on Cumulative Effects of Additional Schemes (Document reference: EX4/WB8.2.5) dismisses any cumulative impacts caused by the various solar NSIP schemes in West Lindsay and across the River Trent.

The proposed landscape change to the region and locality is overwhelming. It is evident that each Scheme will have compounding effects on the others and yet the Applicant has stated that there will be beneficial effects in Landscape Character at National and Local levels but does not offer valid justification of their findings. West Lindsey District Council state: *‘that such impacts cannot be deemed ‘beneficial’ due to their obvious harm as alien features in the countryside and have a significant adverse impact upon both visual amenity and landscape character.’* We fully support the Council’s assessment.

In contrast to the findings for the West Burton Solar Project LVIA Cumulative Landscape and Visual Effects and Residential Effects Amenity Assessment, the Gate Burton Scheme has assessed there to be a moderate adverse impact based on cumulative impact of the West Burton, Tillbridge Solar and West Burton Solar schemes. West Lindsey District Council finds the assessments of both cumulative assessments by Gate Burton and West Burton are in conflict. Lincolnshire County Councils consultants, AHH, found *‘that the cumulative change to the landscape will be considerable and significant, and the combination of two or more sites has the potential to change the local landscape character at a scale that would be of more than local significance. The cumulative impact of the four adjacent NSIP scale solar schemes has the potential to affect the landscape at a regional scale through predominantly a change in land use: from arable to solar, creating what may be perceived as an ‘energy landscape’ as opposed to rural or agricultural one at present.’*

The "professional judgment" applied by the Applicant when claiming that multiple solar NSIPs in the local area will not have any cumulative impact is fanciful and is an outlier compared to other professionals.

7000Acres retains its concerns regarding the cumulative impact of the 6 solar NSIP schemes, and other sub NSIP energy projects, on:

- Socio-economic impact
- Land use
- Health and wellbeing
- Landscape and Visual Amenity
- Glint and glare
- Transport and access
- Ecology
- Drainage and flooding
- Cultural heritage

The Applicant's glib and shallow assessment of the cumulative impact on the region is unacceptable and makes a very weak case. We also agree with the Lincolnshire County Council conclusion that:

"The cumulative change to the landscape will be considerable, and the combination of two or more sites has the potential to change the local landscape character at a scale that would be "of more than local significance" or would be "in breach of recognised acceptability, legislation, policy or standards".

21.The Applicant's Approach

Throughout the Public Consultation the Applicant failed to consult in good faith. It made partial and misleading claims that resulted in 7000Acres writing to the Planning Inspectorate.

The Applicant has chosen to apply a Rochdale Envelope but has frequently failed to follow the requirements of Advice Notice Nine. Consistently, they have not applied a reasonable

worse case assessment, but instead taken an over optimistic approach to their benefit. For example, they have not taken full account of the GHG emissions generated during decommissioning, nor taken account of importing the crops displaced by this scheme.

The Applicant has tried to downplay the impact their scheme will have on the region. For example, they have repeatedly produced misleading diagrams, photomontages, incomplete maps and videos: please see our Deadline 5 Submission: Comments on the Applicant's Deadline 4 Supporting Video.

22. Failure to Adequately Consider Alternatives

Fundamentally, the Applicant has not challenged the explanation set out by 7000Acres, that solar panels generate electricity at low voltages, and there is no inherent need for solar to be connected using high voltage grid connections. Nor has the Applicant challenged the statement that deployment on rooftops needs no grid-scale infrastructure adjustments, and typically needs little or no adjustments to local distribution networks. This explains why this approach therefore takes pressure of National Grid's queue for transmission connections. It is noted that the Applicant has made no comment on the evidence provided in the 7000Acres WR, citing reports from the UK Warehouse Association and Ecotricity on the potential capacity for rooftop solar to make an overwhelming contribution to delivering the Government's ambition for 70GW of solar, there being, as a result, no real case for extensive ground mounted deployment.

The Applicant therefore has not challenged potential capacity for deployment of solar on rooftops as an efficient alternative to large-scale ground-mounted solar and has not demonstrated any credible consideration of this route as an alternative to meeting the Government's ambition, having been solely focused on the availability of a high-voltage, high power grid connection.

23. Decommissioning Bond

7000Acres believes that a Decommissioning Bond should be provided to ensure that sufficient funds are available to decommission the scheme in 66 years' time (5 years to

implement and 60 year time period for the scheme). This was also proposed by Lincolnshire County Council for the Gate Burton scheme. This should be secured in the DCO: failure to do so could render the land unusable for farming if the operator went into administration. Therefore, the loss of land would be permanent and not temporary, as required by EN-3.

24. Westminster Hall General Debate: Large-scale solar farms

Several prominent and senior MPs debated the subject of Large-scale ground mounted solar farms in a Parliamentary debate on 18th April 2024. Many of the points raised in the debate echoed those made by 7000Acres, and which have remained unresolved throughout the course of the West Burton examination.

Among the specific additional points made by MP's are the following:

Poor strategic use of land

- Dr Caroline Johnson, in her opening statement, noted that “there is a considerable risk that in the name of saving the environment, we end up destroying it, and that in the name of energy security, we make ourselves dependent on food imports”. She continued, “as it stands, the balance has tipped too far towards energy security at the expense of food security. National self-sufficiency in food has fallen from 74% to 61% since the mid-1980s.” and highlighted “the war in Ukraine and its associated impacts on food security and prices internationally has demonstrated that the maintenance of historical trade patterns cannot always be relied on”. Sir John Hayes agreed, “To compromise food security in the interest of energy security is a nonsense.” There is also a strong belief that land will never be returned to farming, a point made by Greg Smith.
- Greg Smith proved an illustration of the inefficient use solar makes of our land, making the point that “2,000 acres of solar panels produce, on current usage... 50,000 homes-worth of electricity. A small modular reactor is the size of two football pitches and can power 1 million homes. That surely has to be the more sensible use of land in this country to power people’s homes and businesses”.

- Sir David Davies made the point that “in the event of a serious breakdown of international trade—not even necessarily in the context of a continental war—which has happened a couple of times already through covid and Ukraine, our ability to access food becomes a real problem”.
- Dr Caroline Johnson made the point that “Solar must take its appropriate place in the many conflicting demands on land: agriculture, housing, calls from some people for rewilding, health, and conservation. It does not trump all the others. We simply cannot have it all; we must make intelligent use of our finite resources of land and balance what some see as conflicting priorities.”
- The overdue “land use framework” from the Government was also referenced several times as being a priority piece of work to help address the situation with such a wave of large-scale solar projects.
- Throughout the examination process, the Applicant has not provided any detailed analysis of the impact of food crops or biofuels being displaced and have effectively dismissed any concerns raised regarding food security or land use, despite seeking to use agricultural land at a massive scale, in pursuit of the West Burton Solar scheme.

Solar should be on rooftops before farmland

- In her opening statement, Dr. Caroline Johnson made the point that linked the strategic misuse of farmland with the missed opportunities from not using more favourable sites for solar, stating “The loss of good-quality arable land at a time of unstable world trade situations is a first-rate folly, particularly when other infinitely more sensible sites are available, such as brownfield sites, domestic roofs and commercial rooftops”.
- The sentiment in favour of rooftop solar echoed throughout the debate, with Greg Smith asserting that “Solar has its place, but that place is on rooftops and not in fields”, continuing to add “there are the rooftops of many thousands of distribution centres and warehouses, and these big sheds that are going up as logistics hubs everywhere, vibrantly adding to our economic development, but with no solar on the roof.”

- In the Government response, Andrew Bowie stated that “we are deploying rooftop solar. It remains a key priority for the Government, and continues to be one of the most popular and easily deployed renewable energy sources. We want to see more rooftop solar on industrial and commercial properties, such as warehouses, factories and buildings, to make maximum usage of the available surfaces for business as well as for the environmental and climate benefits. There will be more on that in the solar road map, which will be published in the next few months”.
- While Andrew Bowie stated, “we need to deploy both rooftop and ground-mounted technology” and noted “a strong need for increased ground-mounted solar deployment” but recognised the impact of schemes may have on communities. He also restated the key points in EN-3, that developers “should, where possible, utilise suitable 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”. Clearly, the West Burton scheme uses no previously developed land, brownfield land, contaminated land and industrial land. The Applicant made no case that the use of agricultural land is necessary for an entire scheme; a developer seeking a vast area of land in an almost exclusively agricultural area is fundamentally not a demonstration of need.
- There was no explicit endorsement of ground-mounted schemes at the scale of West Burton, from interested MP’s, the Government representative or the opposition shadow energy spokesman.

Frailties in Agricultural Land Classification and Requests to Extend protection to 3b land:

- The point was raised several times that the key issue should be the productivity of the land, rather than the ALC classification, particularly in a circumstance where the developer carries out their own assessment to help justify their own interests.
- Paul Howel noted “there seems to be a marginal differentiation between grades 3a and 3b, and the question is about who makes that decision and how it is made”.

- Greg Smith quoted local wheat yields on 3b land within his constituency that has been well managed and illustrated the point stating, “many farmers in other parts of the country on grade 2 land or even grade 1 land would bite their right hand off to get such a yield”.
- James Gray noted that “3a and 3b are both productive agricultural land” and “most people in the countryside know that one field might be half 3a and half 3b”.
- Sir Edward Leigh stated that “Any farmer in Lincolnshire would say that there is absolutely no difference between 3a and 3b in terms of production” and called for independent verification.
- Sir Edward Leigh noted the planning framework has a presumption against building solar farms on land graded 1, 2 or 3a. He and Sir John Hayes met with the Prime Minister to ask him “to extend that protection to 3b” and was reassured in Energy questions, that “it was never the intention of the Government to build on good agricultural land”. He concluded this point, saying “we just have to act to end this scandal of solar panels being put on 3b land”.
- Sir David Davies said farmers could not tell the difference between 3a and 3b classified land and called for “an unequivocal ban on large solar farms on the green belt and the UK’s best and most agricultural land, including 3b land, and strong incentives for developments to use rooftops, brownfield land and poorer-quality, unproductive land”.
- Such arguments echo both the points made by 7000Acres as well as the hierarchy within the NPS EN-3, quoted in the debate during the Government response by Andrew Bowie, which, for solar, states that “applicants should, where possible, utilise suitable 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.”
- Within his response, Andrew Bowie stated that “It is clear to me and to the Government that concerns remain about the scale and volume of projects that are being applied for on BMV land in specific areas of the country, particularly in areas

with historic and established grid connections. We have concerns that not all developers are properly considering those requirements”.

- From this, from both constituency MP’s and Government, there are clear reservations about applications such as the West Burton Solar Project.

The unprecedented scale of ground mounted solar in the context of planning:

- Sir David Davis highlighted the difficulty comprehending the scale of such solar development, comparing the scale of one such solar scheme Boom Power, which is 3500 acres, as being the equivalent to “2,000 football fields or about 1.5 times the size of Heathrow airport”, and that it would be “about the size of the city of Durham—a city with a population of 50,000 people.” (For reference, Island Green Power, the developer of West Burton and Cottam schemes which are adjacent to one another within a small area of West Lindsey would occupy over 5000 acres between them.)
- Sir David Davis made the point that an equivalent planning application covering 50,000 homes would never even be considered.

Impact on Property Values within an area with Socio-economic challenges:

- Sir Edward Leigh, MP for Gainsborough, highlighted that “Massive solar panel installations have the potential to send property values plunging”. In the context of the West Lindsey region where house prices already do not keep pace with national trends, in a region that suffers higher rates of deprivation and lower income per capita (See 7000Acres WR1A-024 Socio-Economics and Land Use), the cumulative effect of large-scale ground mounted solar on property prices has the potential to be particularly punitive.
- On a related point, Sir David Davis noted that people who live in the countryside “moved there because of the environment. They go there for a peaceful retirement, because they would like to work there or because they want their children to grow up in a good environment... They bought their view. They placed themselves and invested their savings in the environment that we are talking about.”, and that “we

should keep in mind what we might call the importance of individual property rights”. Such rights would undoubtedly be harmed by development at the scale of West Burton and others within the region, without any locally felt benefit.

- For reference, the West Lindsey area already has significantly lower property prices than the UK average and is also below the Lincolnshire average, with lower rates of growth than both. Action which will further damage property prices will leave people living in an industrial environment they did not choose, stranded and unable to afford to move elsewhere.

	Jan-14	Jan-24	10-year change
England	£188,265	£297,735	58%
Lincolnshire	£143,272	£224,844	57%
West Lindsey	£144,215	£202,965	41%

³¹Average price of all property types, by area (House Price Statistics, UK Land Registry)

Community Engagement, Benefit and Impacts

- A point raised by Dr Caroline Johnson was that the current activity is “sacrificing public trust through opaque planning laws, eschewing public consultation and silencing the voices of residents affected by these schemes. The rightful concerns of residents who do not wish to live in an energy factory must count”.
- In his Government response Andrew Bowie stated “It is vital... that communities have a voice in decisions about their local areas” and that the “Level and quality of community engagement will be taken into account in decision making”.
- James Gray interjected with reflections on his own experience of consultation, stating “The consultation process is bogus” – which echoes the experience of 7000Acres – and we have cited many examples of where the information provided by the Applicant has been partial, misleading, or not straightforward, either during consultation or in the course of the examination.
- There is no benefit to the local communities doomed to be impacted by the overwhelming presence of such large schemes, as described by Dr. Caroline Johnson stated that “asked in their responses whether the solar panels would reduce the local

³¹ [UK House Price Index \(data.gov.uk\)](https://data.gov.uk)

community's electricity bills as compensation for the industrial landscape, but no: the electricity produced will go straight into the national grid".

- In contrast, the impacts will be felt very strongly in the immediate communities impacted by the large-scale construction of schemes like West Burton, examples cited were impact on green space, a detrimental impact on quality of life, visual impacts, employment and the local economy more widely.

25.Summary

Based on the submissions made by LCC, WLDC, 7000Acres and other Interested Parties, the Applicant has not taken full account of the harm generated by the West Burton NSIP. Additionally, the Applicant has not taken full account of the cumulative impact of this and the other 5 NSIPs, plus sub NSIP energy schemes, under consideration.

It is clear that the harm caused by this scheme greatly outweighs the limited benefits of this solar industrial plant. 7000Acres agrees with WLDC in stating:

"The Scheme will have an adverse impact on the landscape and character setting in West Lindsey throughout all the stages of the development and cannot be mitigated."

In the recent Westminster Hall Debate on Large-scale solar farms, Andrew Bowie, in his response as Parliamentary Under-Secretary of State for Energy Security and Net Zero, restated the key points in EN-3, that developers "should, where possible, utilise suitable 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".

Clearly, the West Burton scheme uses no previously developed land, brownfield land, contaminated land and industrial land. The Applicant made no case that the use of agricultural land is necessary for an entire scheme; a developer seeking a vast area of land in an almost exclusively agricultural area for their commercial purpose is fundamentally not a

demonstration of need, especially given the alternative, less damaging routes available to enable the Government to fulfil its ambition for 70GW of solar capacity.

7000Acres have highlighted the very credible potential for rooftop deployment of solar, as outlined by the UK Warehouse Association and Ecoricity, as well as the example of Germany, as a country that has rapidly deployed rooftop solar and already installed more capacity, more quickly than the UK Government ambition.

7000Acres have also warned that the current uncontrolled volume of solar applications resembles a wild-west style goldrush which, unchecked, could rapidly become a source of regret, meeting the solar capacity target almost entirely through large scale ground mounted solar, leaving vast areas of rooftops empty while the country struggles with ever increasing pressures on land use, and carrying strategic risks for food security.

It is notable that the Applicants of such schemes as West Burton are alone in seeking to justify the massive aggregation of solar panels and land they consume. 7000Acres observe that:

- Despite the urgent need to decarbonise, domestic and commercial rooftops continue to be built without solar panels, thereby missing the most obvious and quickest route to increasing solar capacity every day.
- There is an urgent need – but the urgency is to do what is right, and what will make prudent use of the country’s resources – looking holistically across energy, food and land use, acting with confidence in a way we will not look back on with regret.

Overall, it can be difficult to cover the ground of an entire application “in a nutshell”, but in overall terms, pursuing decarbonisation through the deployment of large-scale ground mounted solar at the scale of the West Burton Solar Project is a clear example of pursuing compromised, short-term benefits, but suffering profound, long-term consequences, both for the country’s strategic needs and the communities the proposed scheme will surround. In these terms, the West Burton Solar Project amounts to a basic failure of sustainability.