

Submission by Mallard Pass Action Group (MPAG)

– unique ID ref. 20036230

Deadline 8:

Comments on the Applicant's Oral Submission

for CAH2, ISH4 & ISH5

& Appendix 1

1.0 Comments on the Applicant's Oral Submission for ISH4

Land take

1.1 The Applicant provides an updated list of schemes with the MW per acre for solar PV area in Appendix A under 'Table of other schemes approach to plan technology flexibility'. Of all the cases listed the Proposed Development has the **highest land-take.** The Applicant cites that this is within acceptable limits quoting NPS EN-3. However it is debatable how NPS-EN3 should be interpreted as it says at para 3.10.8 "Along with associated infrastructure, a solar farm requires between 2 to 4 acres for each MW of output. A typical 50MW solar farm will consist of around 100,000 to 150,000 panels and cover between 125 to 200 acres." The NPS uses the term solar **farm** and not solar PV area to describe the suggested land take, therefore MPAG feel the Applicant is understating the level of land take.

Project (Technology)	Installed Solar DC Capacity (MW)	Order Limits (ha)	Works Number 1 ¹ Area (Ha)	Land area to Installed MW Ratio Ha / MW Acres / MW	Mitigation and Enhancement Areas (Ha)
Mallard Pass (FSF & SAT)	350	852	420	1.2 Ha / 1 MW 2.9 acres / 1MW	395ha
Longfield (FSF)	371	453	275	0.74 Ha / 1MW 1.8 acres /1MW	Habitat Management Areas: a minimum of 55.8ha. In addition Work area no.6 which totals 370.09ha includes among other components, 'landscaping and biodiversity mitigation and enhancement measures including planting', however the percentage for landscape is not specified.
Little Crow (FSF)	150 - 200	225	153.4	0.77 – 1.02 Ha/ 1 MW 1.90 – 2.5 acres / 1 MW	59.826 Ha ecological corridor
Cleve Hill Fixed East West	350	491.2	176.3	0.50 Ha / 1MW 1.23 acres / 1MW	50.1 ha of functional habitat management land
Sunnica (FSF)	627	981	621	0.99 Ha / 1 MW 2.44 acres / 1 MW	
Cottam (SAT & FSF)	871 ²	1451.23	879.39	1.0 Ha / 1 MW 2.47 acres / 1 MW	Works No 10 – 80.93 ha
Heckington Fen (FSF)	500	542	417.07	0.83 Ha / 1 MW 2.05 acres / 1 MW	Work No 9A – 16.5ha (Biodiversity Net Gain Areas)

Project	Installed Solar DC	Order Limits	Works Number 1 ¹	Land area to Installed MW Ratio	Mitigation and Enhancement
(Technology)	Capacity (MW)	(ha)	Area (Ha)	Ha / MW	Areas (Ha)
				Acres / MW	
West Burton	661 ³	886.4	733.99	1.1 ha / 1 MW	Works No. 9 – 98.81 ha
(SAT & FSF)				2.71 acres / 1 MW	
Gate Burton	531	824	474	0.89 ha /MW	11.3Ha⁴
(FSF)				2.19 acres / 1MW	

¹ Being the area of the solar generating station for each project. The other projects also had battery development taking up agricultural land that would add to these figures, but have not been included to provide a 'clean' like for like comparison.

² The installed DC MWp has been based upon 1,320,624 PV Modules, as referenced within the Cottam Climate Change chapter (paragraph 7.8.15) and an assumption of a 660w panel to enable a comparison with Mallard Pass.

1.2 If a solar farm requires such **substantial mitigation** to enable it to be acceptable, it suggests that perhaps it is **located in the wrong place**.

The Applicant is selective whether they use 420H or 531ha for the solar area, they know it would be impossible to construct it without the field margins around each land parcel which increases it to 531ha, the figure they have been using for the BMV calculation.

Additionally there is a further 82Ha of habitat mitigation required just to try and make it more acceptable from an L&V, residential and ecology perspective.

It could also be argued the retained arable at 239ha should also be reflected, otherwise where would the skylark plots be put without it if they were not part of the Order Limit requirement. (Note: somewhere in the figures should also be the 6Ha of substation.)

Given the application is for a solar farm with an Order Limits of 852Ha, that is the area the Applicant requires to make the scheme work for them. On that basis the land take could be as high as **5.97 acres per MW**. On that basis recently consented Longfield would be 3 acres per MW and Sunnica just 3.9 acres per MW.

420Ha : 1.2ha/2.96 acres (solar) 531Ha: 1.51Ha/3.73 acres (solar inc margins) 531Ha + 82Ha = 613Ha = 1.75Ha/4.32 acres (solar inc margins + mitigation) 531Ha + 82Ha + 239Ha = 852Ha: 2.42ha/5.97 acres (total site incl retained arable)

1.3 NOTE: also listed on the Planning Inspectorate portal is East Park Energy, a 400MW solar farm NW of St Neots, just entered into stage 1 consultation.

2.0 Comments on the Applicant's Oral Submission for ISH4

2.1 Matters relating to the scope of the proposed Development

MPAG are covering this in our Comments on the Applicant's 'Statement on 60 Year Time Limit'

2.2 Water & Flood Risk

2.2.1 There are some striking points standing out from the Applicant's hearing notes. points the modelling is based on the effectiveness of the grassland as stated below:

"In response to a query from the ExA as to whether any more fine grained modelling could be applied to consider the effectiveness of measures in mitigating flood risk, **construction** explained that the modelling is intended to **demonstrate the effectiveness of establishing grassland** and vegetation specifically, not other measures such as swales which are yet to be designed. The design of these measures will be up to the construction contractor in consultation with the LLFA, whose approval will be required."

2.2.2 Yet is very non-committal about the absolute importance of sowing the grass sward in advance, yet not sufficiently explaining why it is not possible:

" Responding to the ExA's question as to when and where grassland will be provided, referred to paragraph 4.7 of the oSMP [REP6-016], which provides that advanced sowing of grass can be advantageous where it can be achieved, however in some circumstances this will not lead to the best outcome. This dovetails with the oWMP, which provides that where grassland is not able to be established for soil reasons, other measures will need to be included as part of the detailed WMP, which the Lead Local Flood Authority will be required to approve. The SMP, WMP and LEMP are all interconnected in this respect and need to be read together in order to understand the full suite of mitigation measures and how these will be provided and managed."

2.2.3 With so many management plans the Applicant is in danger of not providing a clear plan with a design-led strategy on their approach to flooding. To MPAG's dismay reading the NEW Grassland Establish Management Plan (GEMP), we find there is no intention of effectively establishing a grass sward in advance of construction that would ensure minimum compaction to the soil. This was a subject discussed at length during the hearing, yet the Applicant never shared the outline of the GEMP until deadline 7. There are 3 scenarios presented, all of which are not acceptable with a slow growing seed mix, as chosen by the Applicant.

- Best case: sow Autumn, install panels Spring = 6 months for establishment
- Middle case: sow Spring, install panels Spring = 0 months for establishment
- Worst case: Install panels and then sow grass = -months for establishment

2.2.4 "Example stated that there needs to be flexibility to provide for an evolving situation. As emphasised, if the Applicant was required to establish grassland before any form of construction could commence, if there was a weather event that resulted in further grass needing to be sown and allowed to establish, such a requirement would effectively be imposing an unknowable hold point for which construction could actually begin". MPAG are not sure what event that result evolving situation would be. The likelihood of not being able to sow grass seed in the Autumn post harvest is hugely unlikely otherwise farmers would be missing

out on sewing their crops each year which doesn't seem to happen (certainly not in this area). There is an ample window to sew the grass seed if planned correctly.

2.2.5 Seeds need contact with soil and moisture to germinate and grow, this is why it is necessary to cultivate and prepare a seed bed and drill into moist soil (or irrigate). It is possible to spin seeds on but this will only work well if there is a previously well prepared seed bed and this technique generally requires rolling (Cambridge rolls) to provide the seed / soil contact for germination. That would not be possible under a solar array and needs to be done in advance. Placing panels over the top will reduce / remove moisture and light and impede germination leading to poorer establishment and sowing under installed panel will be even worse.

2.2.6 Spraying to remove previous crop and other undesirable plants is ok but is only really feasible prior construction. Undertaking this under panels with knapsack sprayers would be very difficult and lead to under / over application. Also what products would they use? Glyphosate is most likely to clean up before sowing, but you would probably need a broad leaved weed herbicide post sowing and choice will depend on weeds present. Quite a lot of these products now are not permitted for use in knapsack and logistically it would be a huge exercise to knapsack spray.

2.2.7 Assuming construction starts 2026, the best result will be drilling in the autumn 2024 and using 2025 to get good establishment from either light grazing or mow & mulch. Anything less is sub-optimal and increases the risk of soil damage, erosion, flooding, siltation etc.

2.2.8 The **plans** in respect of flooding management **rely on a poor grassland establishment strategy** driven no doubt by **commercial priorities** and **retrospective mitigation** if there is a problem. There is **no bespoke drainage strategy** in place yet, just a number of options and most intended for areas where hard surfaces are to be created, not for grassland areas. **Retrospective mitigation is not the answer.**

2.3 BMV.

2.3.1 Site selection: The Applicant seeks to use the Longfield site selection as the template for the proposed development in terms of site selection, however site selection is not just about BMV, it has to take account of a whole host of considerations as the Applicant well knows. Longfield and Mallard Pass are not the same and should be treated separately.

2.3.2 The Applicant only provides only 2 possible options or outcomes in respect of BMV:

- I. To use the site area suggested requiring extensive mitigation and taking out of food production over 40% BMV (in our estimations upward of 50%), or
- II. To extend the area of the site to find more 3b land so that the BMV % is far lower, meaning it spans across a bigger area and is more fragmented something the Applicant has not explored.

These options are only made as Natural England maps and forecast ALC grades suggest the "nearest large area of grade 4 ALC land is to the West of Nottingham". They seem to be forgetting they are allowed to target 3b land (even if MPAG don't agree with policy in that respect).

2.3.3 It is a well known fact Lincolnshire is known as the 'bread basket of the UK' and the grades of the land are likely to be grade 3 and above. Therefore if the Applicant does not want to ALC sample in a wider area to

identify specifically more 3b land and doesn't want to go further afield for known grade 4 land, then it **suggests** the Proposed Development area is not suitable in the first place.

2.3.4 For the record and maybe MPAG has not been clear enough with respect to BMV, we are concerned about the loss of food production for the duration of the scheme, not for there being a loss of land. We accept that this is for a finite period of 60 years, but that represents 2 generations of farming. Previously being time unlimited it was for an unknown period, it could have been shorter or a lot longer.

2.3.5 A recent article (**see Appendix 1**) this month in The Independent informed by experts highlights the very real concerns about 'climate triggered food shortages'. This is the very reason why the decision to potentially sacrifice any large tracts of BMV land for up to 60 years needs to be weighed very carefully in the planning balance. The Proposed Development as it stands has one of the highest proportions of BMV of NSIPs in the pipeline or approved.

2.3.6 See separate document – D8 MPAG ExA Request for further information – BMV. This addresses concerns with Natural England's contribution and conclusions about ALC surveys and grading following an FOI request.

2.4 Fencing

It is interesting to note a sister development of Windel Energy and Canadian Solar, namely Fosse Green, use the terminology of "security fencing" on their website. It is either a mistake or recognition that security fencing will be required by the time this scheme is constructed (were it to be consented).

 Security fencing, likely to be 2m in height to enclose the operational areas of the site, along with pole mounted internal facing closed circuit television (CCTV) deployed around the perimeter of the operational site.

3.0 Comments on the Applicant's Oral Submission for ISH5

3.1 Customer Liason Group (CLG)

Please note that Uffington, Greatford and Braceborough & Wilsthorpe Parish Councils should have been included as villages adjacent to the Order Limits. They were part of the original consultation process and MPAG believe are part of the TWMG.

2. Group Membership

2.1 Membership will be drawn from:

- Community Liaison Officer (once appointed, as required by the oCEMP)
 - Member of Parliament for Rutland and Melton
 - Member of Parliament for Grantham and Stamford
 - Mallard Pass Solar Farm Limited
 - Member of Mallard Pass Action Group
 - Member of Essendine Parish Council
 - Member of Ryhall and Belmesthorpe Parish Council
 - Member of Carlby Parish Council
 - Member of Careby, -and Aunby and Holywell Parish Meeting
 - South Kesteven Council Planning Officer
 - Rutland Council Planning Officer
 - Lincolnshire Council Planning Officer
 - Lincolnshire County Councillors representing Deepings West and Rural ward, Colsterworth Rural ward, Stamford East ward, and Stamford West ward
 - South Kesteven District Councillors representing Dole Wood, Glen, and Casewick ward
 - Rutland County Councillor representing Ryhall and Casterton ward
 - Representative from local business community

3.2 Draft DCO.

All comments will be submitted at **deadline 8A** following the ExA's commentary and questions on the draft DCO. That way MPAG can consider both the Applicant's draft DCO changes at D7 and the ExA's response/reaction to the changes made.

Appendix 1

UK could experience 'civil unrest' due to food shortages triggered by climate disasters

Story by Stuti Mishra for The Independent 16.10.23

"The UK's top food security experts believe the country could face "civil unrest" in the coming decades due to climate-triggered food shortages, according to a new survey.

Nearly 80 per cent of the experts surveyed expressed their belief that civil unrest is either possible (45 per cent), more likely than not (24 per cent), or very likely (10 per cent) over the next 50 years due to food shortages.

Shortages of popular carbohydrates such as wheat, bread, pasta, and cereal were identified as the most likely potential triggers for social unrest.

The research, published in the journal Sustainability, surveyed 58 of the UK's top food experts from academia, policy, charities, and businesses.

Extreme weather events that have increased due to rising average global temperatures, including storm surges, flooding, snow, and drought, were identified as the most probable cause of food shortages and subsequent distribution issues.

Experts have long raised concerns over the vulnerability of the UK's food supply, with around half the food consumed in Britain being imported, including 80 per cent of fresh fruit, 50 per cent of vegetables, and 20 per cent of beef and poultry.

A quarter of the food imports are from the Mediterranean alone, which has been suffering from droughts, heat waves and wildfires at record levels in recent years.

The researchers from Anglia Ruskin University and the University of York conducted an in-depth analysis of the current state of the UK's food system, noting that the heavy reliance on imports, coupled with a food system optimised primarily for efficiency rather than resilience, poses a significant threat to the nation's food security.

We are witnessing an increasing number of extreme weather events, many of which are driven by climate change. It is entirely possible that in the coming decades, extreme weather events will cause major crop yield failures across multiple breadbaskets.

Professor Sarah Bridle, chair of food, climate, and society at the University of York

The study also highlighted various factors contributing to this vulnerability apart from the worsening climate crisis, including ecological collapse, trade restrictions, financial crises, rogue AI, new pandemics, and animal or plant pathogens.

It is the combination of these factors that experts fear might lead to catastrophic failures in the food system, potentially resulting in insufficient food to feed the UK population.

"Government agencies and businesses must explore options to increase the resilience of the food system," professor Aled Jones, the director of the Global Sustainability Institute at Anglia Ruskin University and lead author of the study, said.

"This includes initiatives such as ecosystem restoration, innovative storage solutions, sustainable farming practices, comprehensive approaches to consumer engagement, as well as addressing food poverty and mitigating the adverse effects of climate change."

Professor Sarah Bridle, chair of food, climate and society at the University of York, says there is a need for a fundamental shift in the way we approach our food system.

"Covid-19, Brexit, and the ongoing cost of living crisis have already exposed the UK to certain vulnerabilities. The food system faces significant challenges."

"We are witnessing an increasing number of extreme weather events, many of which are driven by climate change. It is entirely possible that in the coming decades, extreme weather events will cause major crop yield failures across multiple breadbaskets."

"We need a food system designed not just for optimal efficiency, but also for resilience."

The year 2023 is on track to be the hottest on record for the world and this summer in the northern hemisphere was found to be the hottest ever, according to data from Nasa, the UN's World Meteorological Organization and the EU's Copernicus Climate Change Service.

July 2023 was the hottest month ever recorded on Earth. It was also likely the hottest month in 120,000 years.

Nasa map shows global temperature anomalies for meteorological summer (June, July, and August) 2023 (Nasa)



 Nasa map shows global temperature anomalies for meteorological summer (June, July, and August) 2023 (Nasa)
© Provided by The Independent

Scientific studies say these weather extremes will continue to worsen as long as greenhouse gas emissions keep rising and, therefore, controlling them is the only way to ensure consumers are protected from future shocks.

In a new report called Climate Impacts on UK Food Imports, the Energy and Climate Intelligence Unit (ECIU) said the UK cannot simply grow its way out of the food crisis triggered by climate extremes because to do so would create extra energy demand at a time when growers still rely on fossil fuels."