

Date: 16 November 2023 Our Ref: EN010127

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Mallard Pass Solar Farm Project

The Planning Act 2008 The Infrastructure Planning (Examination Procedure) Rules 2010

This letter introduces Mallard Pass Solar Farm Limited's ('the Applicant's) submissions for Deadline 10 of the Examination.

Updated Documents Submitted

The following updated documents are submitted as part of the Applicant's Deadline 10 submissions:

- Document 1.2.11 Guide to the Application (Clean and Tracked) [Version 11];
- Document 4.3.8 Book of Reference (Clean and Tracked) [Version 8];
- Document 7.7.7 Outline Operational Environmental Management Plan (Clean and Tracked) [Version 7];
- Document 7.8.6 Outline Decommissioning Environmental Management Plan (Clean and Tracked) [Version 6];
- Document 9.6.6 Book of References Schedule of Changes [Version 6]; and
- Document 9.12.3 Appendix 3 Planning Statement Updated Policy Tables (Clean and Tracked) [Version 3]. This has been updated to correct typographical matters and ensure that the Applicant's position is as clear as possible. No new points have been made from the versions of these tables submitted at Deadline 9.

New Documents Submitted

The following new document has been submitted: Document 9.56 – Applicant Closing Submission.



Management Plans and DCO Schedule 13

The submission of the updated Book of Reference, Outline Operational Environmental Management Plan and Outline Decommissioning Environmental Management Plan, as set out above, will also lead to changes in Schedule 13 (Documents and Plans to be Certified) to the Draft Development Consent Order (dDCO). The Applicant is not submitting an updated dDCO as part of the Deadline 10 submissions and has set out the changes to Schedule 13 in track changes in the table below.

The Applicant requests that the Examining Authority and the Secretary of State take these changes into account while determining the application:

book of reference	4.3	7 8	10 16 November 2023
outline decommissioning environmental management plan	7.8	5 6	25 October 16 November 2023
outline operational environmental management plan	7.7	6 7	25 October 16 November 2023

Response to Interested Parties' Deadline 9 Submissions

The Applicant has considered the Interested Parties' Deadline 9 submission and, in the table below, has responded to the key concerns raised:

Parties Raised	Issues Raised	Applicant's Response
Local Planning Authorities and MPAG	Concern about surface water flooding in the 60-year scenario	This is not a reason why a 60-year time limit cannot be agreed. Whilst the Applicant's modelling demonstrates that there should not be a flooding issue post-2078, a Requirement could
		be imposed on this in the adjusted form provided for on a without prejudice basis in the Applicant's Deadline 8 response to the ExA's Rule 17 Request.
Local Planning Authorities and MPAG	Consideration of the definition of 'low-level' piling	The Applicant notes the positions presented by the LPAs and MPAG. The LPAs remained focused on the matter of 'sufficient trial trenching' and the Applicant sees no advantage in revisiting this point.



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MPAG Impacts to Archaeology i Panels are replaced	 MPAG have made reference to the modern tillage techniques that seek to minimise the depth of ploughing (to c150mm). As noted within the Supplementary Trial Trenching Report (PDA-015) there are extensive areas and clear evidence of modern ploughing disturbing buried archaeological remains (often at depths greater than 150mm) within the site. MPAG note the Historic England guidance on piling, referring to the suggested practice of using a 'fourfold increase in the area of pile impact' compared to the actual area displaced by the pile. This matter was explained by the Applicant at Deadline 2, responding to ExAs Q6.0.4. The Applicant has assumed an 'impact area' equivalent to x7.5 larger than the likely displaced material in making its assessment and developing the mitigation measures set out in the Outline WSI. As such, the points made would not change the conclusions made by the Applicant. f The Applicant does not anticipate having to undertake wholesale replacement of piles or mounting structures during the operational period as the Project will be designed in a way to minimise the creation of waste, as set out in the Design Guidance (C3.7) within the Design and Access Statement. Further to this Design Guidance (PL3.12) sets out that the Mounting Structures will consist of non-corrosive materials such as anodised aluminium alloy or galvanised steel (or an equivalent material) which have a much longer lifespan than that of standard steel products, as acknowledged by MPAG in their response.



It is therefore unlikely that MPAGs concerns are likely to arise. However, in the event that replacement of piles are required, then the Applicant must provide notification of planned maintenance, the relevant to authorities, as set out in the oOEMP [REP8-011]. Alongside the maintenance schedule, the Applicant will provide supporting environmental and traffic information to evidence that there are no materially new or materially different environmental effects arising from any planned maintenance activities when compared to those identified in the assessment of the operational phase in the ES. The oOEMP and oDEMP have been updated at Deadline 10 to require the Applicant to provide further clarity with respect to its proposals for piles in relation to the replacement of piles, in the unlikely event that piles require replacement, and for the decommissioning phase.

Notwithstanding the above and in specific reference to archaeology, the removal / extraction of piles and the potential for displaced material is discussed in the same Deadline 2 submission referred to above. Further to this, the Applicant is of the opinion that even in the unlikely scenario, that every single pile had to be removed and replaced (in a new but proximate location) the resultant impact on buried archaeological potential remains would still be insignificant (still a tiny fraction of 1%). The statement made by MPAG that there would be "a huge risk of damage and disturbance to archaeological assets" is wholly without merit and substance.



		Solar Farm
MPAG and Greatsford Parish Council	Raise concerns about impacts to soils further to Welsh Government ADAS report and response to Applicant's critique of Landpro submission	Please see the Appendix to this Cover Letter
MPAG	Critique of the Applicant's GHG calculations and the savings that can be said to arise.	At Q5a, MPAG state that "The Applicant continues to ignore the necessity of replacing all panels and associated equipment and the reality of these being replaced at more or less the same time". The Applicant wholeheartedly disagrees with this statement. The calculations set out clearly include the full replacement of all aspects of the Proposed Development in its 60-year Carbon analysis by virtue of taking the ultra- conservative approach of assuming the carbon costs associated with the Proposed Development to have doubled from the initial 40-year illustration to a 60-year illustration. The terms of the DCO and the oOEMP control the replacement of panels through the operational life of the Proposed Development. In response to Issue 2 of 9.51 Applicants Response to MPAG's Deadline 8 Submissions on Carbon [REP8a-010], the Applicant reminded the ExA that the 'lifetime carbon emissions cost' includes "emissions associated with procurement, supply chain, construction, installation, operations, maintenance and decommissioning." The Applicant explains with evidence and illustration that its net carbon benefit assessment is inherently conservative because of the reasons stated above as well as the fact that no uplift to generation has been attributed to the act of replacing panels within the 60-year operational life.



MPAG also state that *"during period of* replacement of panels the level of power would dec[r]ease and the contribution of the Proposed Development will be impacted." On a panel-by-panel basis, if the uplift associated with replacing a panel was not greater than the 'baseline' benefit associated with not replacing the panel (I.e. uplift less downtime to replace < 'base case' of not replacing the panel), then there would be no benefit to replacing the panel, and the panel would therefore not be replaced. The Applicant's assessment, therefore. remains inherently conservative on this point.

Relating to MPAG's comments on Q5b Carbon Benefit, the Applicant maintains that they have taken a clear and appropriate approach to the calculations, which demonstrate the carbon benefits associated with a 60year operational life versus the original illustration of benefit over 40 years.

The Excel spreadsheet provided demonstrates the inherently conservative net carbon benefit assumptions described in the Applicant's response and described further above. The conclusion MPAG draws from the analysis is, therefore, incorrect. It is clear that that even against the most conservative of assumptions, the net benefit of a 60year scheme is a<u>t least as large as</u> the net benefit of a 40-year scheme and, in reality, is likely to be larger.

Table 2 of the Applicant's responseclearly illustrates the additional netcarbon benefit of a 60-yearoperational life vs. a 40-year



		operational life. Presenting the information another way shows that over 40 years, the Proposed Development would produce power equivalent to 40 x 83,543 = 3.3 million house-years of consumption, while over 60 years, power production would be equivalent to 60 x 79,994 = 4.8 million house years, I.e. nearly 44% higher. To suggest that the 'households' number as 'now just under 80,000 homes' clearly misrepresents the data provided.
MPAG added to Mr Hughes	Concerns with regards to the visual impacts of the Onsite Substation	The Applicant has set out previously the rationale for the location of the Onsite Substation. This can be found in the following documents: • Table 4.1 - Environmental Statement Volume 1 Chapter 4: Alternatives and Design Development [APP-034] • Sub-theme 'Substation Design' - Applicant's Responses to Interested Parties' Deadline 2 Submissions' - Site Selection, Design and Sizing [REP3-023] • Appendix D - Summary of Applicant's Oral Submissions at ISH1 & Appendices [REP4- 022] • Sub-theme 'Project Substation' - Applicant's Response to Deadline 7 Submissions [REP8-019] As set out previously, the Applicant considered that the co-location of the taller elements of the electrical infrastructure with existing infrastructure reduces the landscape and visual impacts in comparison to a dispersed arrangement of electrical infrastructure. Its location is considered to be preferable in terms



		Solar Farm
		of its functional requirement to be located at close proximity to the existing Ryhall National Grid Substation, minimises the length of the grid connection cable and the existing and proposed landscape framework surrounding Field 19 provides visual enclosure as demonstrated by the wireframe photomontage [REP4-022].
		The Applicant refutes MPAGs suggestion that the existing Ryhall substation is entirely screened behind Freewards woodland from both residents and those travelling along the A1621. The Applicant considers that the proposed tree belt strengthens the screening of the PV Arrays located in field 18 and the substation in field 19. The proposed tree belt is seen in the context of the existing wooded disused railway line, helping assimilate it into its immediate landscape context.
BESS	MPAG submitted points at Item 5 of " <u>Deadline 9: Comments on</u> <u>the Applicant's Responses</u> (REP8-019) at D8 to D7 <u>submissions of Interested</u> <u>Parties</u> "	The Applicant considers that its response to FWQ 1.2.6 [REP2-037] adequately deals with the concerns raised here.

If the ExA or the case team has any questions, please do not hesitate to contact me.

Yours faithfully,

Sarah Price Partner DWD For and on behalf of Mallard Pass Solar Farm



Appendix 1 – Applicant's Final comments on Land Use and Soils

This final document provides a response to:

- i) [REP9-039] MPAG comments on REP8-019;
- ii) [REP9-037] MPAG Appendices to the above;
- iii) [REP9-038] MPAG comments on REP8-021
- iv) [REP-035] Greatford Parish Council's D9 Submission

In the time available, it is not considered a good use of Examination time, to respond to all the many detailed points in detail. Nor is it necessary. The response collates comments into topics and addresses those. The lack of individual commentary on each and every criticism should not be seen as acceptance that any criticisms are accepted by the Applicant.

The topics addressed are:

- i) the ALC survey and the extent to which it is fit for purpose;
- ii) the extent to which soil structure, and crucially ALC grade, might be adversely affected or the extent to which soil will benefit;
- iii) whether the oSMP provides adequate coverage to ensure that adverse effects do not happen or are capable of full mitigation and the extent to which the LPA will have control over the construction, operational and decommissioning phases;
- iv) food production.

Concerns are also raised in respect of impacts of piling, particularly in the maintenance and decommissioning phases. This is discussed further in the Cover Letter above, meaning that the risks identified in the documents above are unlikely to occur. Furthermore, although the Applicant considers that any risks could be managed in any event, we acknowledge that research on this topic is continuing to develop, so has made amendments to the oOEMP and oDEMP to provide that further detail must be provided on this for the maintenance and operational phases.



Торіс	Comments made	Response	Solar Farm References
ALC survey	The ALC survey is not	Validity of Samples Taken. The ALC survey was carried out by a team of three	
	reliable because it has not	people led by Robert Askew BSc(Hons) MSc F.I. Soil Sci cSci. Rob Askew meets	
	been carried out at a	the requirements of the BSSS Competency Standard for ALC endorsed by Defra	
	detailed level. There are	and IEMA and other organisations (see 2.1, 2.2 of the ALC [APP-091]). It might	
	comments in particular	seem otherwise from the commentary made but MPAG do not question the	
	about:	individual validity of each of the auger points that comprise the ALC survey	
	• validaty of samples taken;	[REP9-037 Appendix 1 3.5). Natural England accept the survey as accurate	
	• number of sample points;	[REP9-019 SoCG NE 016].	
	• extent of detailed survey;		
	• changes between PEIR	Number of Sample Points. MPAG's criticism is that for a detailed ALC survey,	
	and ES;	one sample per hectare is required, and that a lesser sampling density has been	
	• inclusion of photographs	carried out in this case. This is correct. The ALC results are presented as a mix	
	of soil pits;	of detailed and semi-detailed survey data. Both are recognised methodologies.	
	• boundaries between	It is agreed in the SoCG with Natural England [REP9-019] that the oSMP [REP8a-	
	grades;	004] is accurate. It is thus agreed that the areas for the installation of solar PV	
	• extrapolation of results.	arrays, the tracks, the solar station bases, and the substation can all be restored.	
		It is therefore agreed that there is no permanent loss of land, BMV or otherwise.	



Extent of Detailed Survey. The detailed survey did not cover all the BMV land identified as BMV at the initial semi-detailed level, but it focussed on the three main areas. The detailed survey identified in all three areas surveyed that the pattern of grading was more complex, and that there was more subgrade 3b distributed within the fields than had been assessed of the semi-detailed level. MPAG are critical of this, suggesting that detailed ALC would identify a higher proportion of BMV, but based on the work done to date if the other areas of BMV are surveyed at a greater sampling density and produce similar results, the proportion of BMV is likely to fall rather than rise. There was no suggestion from Natural England that the non-BMV areas be surveyed at greater density (see the Record of Engagement in the SoCG [**REP-019**]).

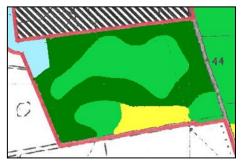
Changes between PEIR and ES. MPAG continue to make comments about the changes between PEIR and ES. The maps were redrawn for the ES and as explained in the detailed response [**REEP8-019**] there were changes, for the reasons given. These are accepted by Natural England [**REP9-019**]. The areas being challenged by MPAG are generally very small areas (e.g. [**REP9-037**] Landscope, A on the sixteenth page). The land is not being sealed or downgraded, and the survey is a mix of detailed and semi-detailed. Minor

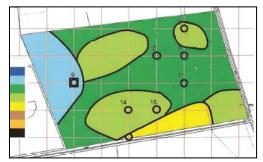


	Solar Farm
boundary changes have no significant effect on the assessment. The boundary	
of grades in the area where the substation is proposed, which will involve a small	
part of that field, was revised but as agreed in the SoCG with Natural England	
[REP9-019] and in the OSMP, further survey pre-commencement will be carried	
out to advise the SMP to ensure that suitable soil storage positions will enable	
full restoration on decommissioning.	
Inclusion of Photos of Soil Pits. These have been provided at Deadline 9. There	
is no requirement for an ALC report to include these, as the ALC is based on the	
auger samples, the data for which was provided.	
Boundaries Between Grades. A detailed ALC involves one auger per hectare. A	
semi-detailed involves usually one auger per 4 hectares. Even with a detailed	
survey the boundary between grades cannot be accurately determined based on	
a 100-metre separation between samples, and this is therefore a professional	
judgement. Two surveys are likely to draw slightly different boundaries. Rob	
Askew and his team drew the boundaries in this case, and were plotted on the	
plans.	



Landscope states that his survey only redrew boundaries in the areas he surveyed. Their plan for the 8 sample points (below right), and the Applicant's ALC plan (below left) which involved 22 auger samples in the 30 ha are shown below can be compared, enabling a judgement to be made as to whether the redrawing was indeed only in the areas of the eight samples.





KCC ALC

Landscope ALC

Extrapolation of Results. The ALC results set out in the ES are based on the semidetailed and detailed ALC. There is no extrapolation. Whilst some of the survey is semi-detailed, there is general agreement from all except MPAG that this provides adequate information for the assessment. That should be particularly so because the land quality will not be lost by sealing or downgrading.



			Solar Farm
Soil	The soils will not benefit as	All the available evidence concludes that soils will benefit from long periods of	
Structure	significantly as is suggested	grassland use. There may be other techniques, such as minimum tillage	
	in the assessment	advocated by MPAG and Landscope, but their benefits are not as significant as	
		those derived from converting arable land to grassland. This is a distinct benefit	
		for soils, but the Applicant does not put this forward as a significant benefit.	
Soil	The criticism is that the	The oSMP is an outline document. There will be a detailed SMP required as part	
Management	oSMP does not give enough	of the DCO order. The oSMP is clear that soils can be damaged and therefore	
Plan	confidence that the	sets out a methodology to ensure that soils are not damaged {REP8a-004].	
	installation, management	Landscope state at paragraph 10.5 of REP9-037 , in what is a contrary position	
	and decommissioning can	to MPAG at D8 that this point "is open to question". "There is not enough	
	be completed without	evidence either way to say that ALC grade won't change". The comment goes	
	damage to soils. The ADAS	on to state that "however, there is a real possibility of the Soil Management Plan	
	report sets out concerns	being breached, resulting in soil compaction, disturbance and mixing of soils".	
	about soil effects		
		It is therefore implicit that if the SMP is not breached, there will be no soil	
		compaction, disturbance and mixing of soils. If that is the case it must follow that	
		there will be no risk of downgrading. It cannot also not be the case that a	
		judgement on a Scheme should be made on the basis that a management plan	



	Solar Farm
secured by Requirement, the detail of which will be approved by the LPA will be	
breached. The mitigation measures must be assumed to be in place.	
The SMP will be under the full control of the local planning authority, and can be	
properly controlled, as well as the numerous other control documents (as set	
out in the oCEMP and oDEMP).	
MPAG now produce a report by ADAS, so brief comments are made on that	
document. The ADAS report is a work-in-progress in that there is a clear	
identification that there is limited research and information, but raises no points	
of concern for this examination. It seems to be mainly a 'state of play' report that	
is full of language that there are matters that 'might' be a risk if not managed	
properly but is not definitive as to whether they actually will be, noting that no	
solar farm has reached the end of its design life.	
The key take-away message is that soil management and restoration requires	
careful management and oversight (including during the operational life of the	
scheme) and that the risk of compaction is a particular concern. The measures	
in the Applicant's oSMP provide the measures to deal with the risks raised in this	



	Solar Farm
report. The Local Planning Authority will be able to have oversight of each stage	
of this if they have any further concerns (and research moves forward), as	
secured by the DCO for construction, and the oOEMP and oDEMP.	
It identifies that:	
• the main impact on soils is from compaction. This is recognised in all	
the documents including the oSMP [REP8a-004] and various mitigation	
measrues proposed;	
deep compaction can cause land quality downgrading. This is	
recognised. As set out in the ES Chapter 12 (APP-092) and Appendix 12.8	
[APP-095] and the oSMP [REP8a-004], the machinery involved in	
installing a solar farm is all generally smaller than modern farm	
machinery, thus the risk is not from the installation per se, but from	
trafficking the land when conditions are not suitable. Hence the need for	
an SMP. As identified, however, if localised compaction occurs this is	
capable of being rectified readily. Natural England are satisfied with the	
oSMP.	
• reverting arable land to grassland improves soil structure (4.2). This	
confirms the other data provided.	
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	Solar Farm
Whilst data is limited it is clear that soil compaction is the biggest risk.	
It is not stated that soil compaction is inevitable. Very large farm	
machinery does not cause compaction unless used in the wrong	
conditions. Generally smaller solar installation equipment carries a	
lesser risk.	
MPAG set out a series of photographs in their response at Appendix 2 [REP9-	
037]. This was a winter installation. Figure 8 is after the framework has been	
bolted together, and is reproduced below. This is reproduced because it	
confirms the Applicant's statement that even in really poor conditions it is only	
the main travelling routes that suffer damage. Under the panels the grassland	
is not disturbed, and hence there is no risk of compaction. The main travel	
routes can be alleviated prior to being levelled and reseeded, as set out in the	
oSMP and GEMP.	



			Solar Farm
		<image/>	
Food	The proposal will result in	There is no policy for food production, nor does MPAG put forward any	
Security	lost food production for 60	reference to any policy which sets out either a food production concern, a food	
	years. Sheep grazing is not	security concern, or a policy or initiative for agricultural land to be used for	
	a substitute for wheat	production. The MPAG / Landscope references provide no policy basis to	
	growing. [REP9-037	conclude that the BMV land should be kept available or used for arable use.	
	Appendix 1, 10.6]. The UK		
	Food Security report 2021	The land will remain able to be in use for food production by the grazing of	
	is not referenced [REP9-	sheep.	
	037 , Appendix 1, 11.4].		



	Solar Farm
Food security and production is quantified in the ES [APP-042] at sections	
12.4.66 to 12.4.98. This included reference to the Government Food Strategy	
(June 2022) at 12.4.77, which followed from the UK Food Security Report of	
2021. The ES also quantified the production implications of selecting non-BMV	
land to BMV to be of the order of 250 tonnes per annum (APP-042 Table 12.11).	
The relevant statistics, many from the UK Food Security Report 2021, were	
presented in Appendix D Q7.0.5 "Self Sufficiency of UK Agriculture", the	
Applicant's response to the ExAs Second Written Questions [REP5-013]	
If soils and land quality are not sealed or downgraded, and subject to good	
practice there is agreement that there will then be no significant harm, the	
MPAG concern distils down to one of food production importance.	
There are many reasons why land is not in food production. Biomass and biofuel	
are not food production matters yet involve considerable areas of land. Agri-	
environmental schemes have involved large areas.	



	JUIAI FAITH
For example, the statistics from Defra on the area of arable land in the	
Countryside Stewardship Scheme, the old agri-environmental scheme that is	
now replaced with the Environmental Stewardship Scheme, is that 7,700ha is	
being funded as a reversion from arable land to low fertiliser grassland, and that	
19,400 $ha^{(1)}$ is cultivated land in funded 4-6metre buffer strips. If 42% of this land	
is BMV, which is the national average BMV proportion, then 11,400ha of BMV	
land is being funded to be farmed or managed in grassland uses rather than	
arable uses in just one agri-environmental scheme operating in England. The	
implications for the use of the 216ha of BMV land in the Solar PV Site and Field	
Margins areas for grazing rather than arable use should be viewed in its proper	
context. The area involved with the MPSF is not significant.	
(1) Countryside Stewardship and Environmental Stewardship Option	
Summaries at 1 April 2023, Defra (31 st August 2023), tiers SW1 and SW4	
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