CLEVE HILL SOLAR PARK

THE APPLICANT'S RESPONSES TO THE EXA'S FIRST WRITTEN QUESTIONS – EXQ1

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Revision A

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CLEVE HILL
SOLAR PARK

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List of Abbreviations

AADT	Average Annual Daily Traffic
AGL	Above Ground Level
AHLV	Area of High Landscape Value
ALC	Agricultural Land Classification
AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
AR HMA	Arable Reversion Habitat Management Area
BBPP	Breeding Bird Protection Plan
BS	British Standard
BTO	British Trust for Ornithology
CCTV	Closed Circuit Television
CEMP	Construction Environment Management Plan
CHSP	Cleve Hill Solar Park
CHSPL	Cleve Hill Solar Park Limited
CIEEM	Chartered Institute of Ecology and Environmental Management
CL:AIRE	Contaminated Land: Application in Real Environments
CLS Area	Core Landscape Study Area
CNMP	Construction Noise Management Plan
CO2	Carbon Dioxide
COP	Conference of the Parties
CSL	Central Science Laboratory
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
dDCO	draft Development Consent Order
DEFRA	Department for Environment Food and Rural Affairs
DML	Deemed Marine Licence
DRP	Decommissioning and Restoration Plan
EA	Environment Agency
ECOW	Ecological Clerk of Works
EIA	Environmental Impact Assessment
EMF	Electric and Magnetic Field
EPS	European Protected Species
ES	Environmental Statement
ExA	Examining Authority
ExQ	Examining Authority's Question
ExQ1	Examining Authority's First Written Questions
FCERM	Flood and Coastal Erosion Risk Management
FFL	Finished Floor Level
FGM HMA	Freshwater Grazing Marsh Habitat Management Area
FRA	Flood Risk Assessment
GCN	Great Crested Newt
Ha	Hectares
HGV	Heavy Goods Vehicle
HMA	Habitat Management Area
HMSG	Habitat Management Steering Group
HRA	Habitat Regulations Assessment
IDB	Internal Drainage Board
IPCC	Intergovernmental Panel on Climate Change
JNCC	Joint Nature Conservation Committee
kV	Kilovolt
KWT	Kent Wildlife Trust
LBMP	Landscape and Biodiversity Management Plan
LGM HMA	Lowland Grassland Meadow Habitat Management Area
LI	Landscape Institute
LNR	Local Nature Reserve
LVIA	Landscape and Visual Impact Assessment
MAFF	Ministry of Agriculture, Fisheries and Food
MEASS	Medway Estuary and Swale Strategy

MHWS	Mean High Water Springs
MMO	Marine Management Organisation
MR	Managed Realignment
MW	Megawatt
MWh	Megawatt hour
MWp	Megawatt-peak
NEER	Natural England's Evidence Review
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
PRoW	Public Rights of Way
PV	Photovoltaic
RIAA	Report to Inform an Appropriate Assessment
RPA	Relevant Planning Authority
RR	Relevant Representations
RSPB	Royal Society for the Protection of Birds
RVAA	Residential Visual Amenity Assessment
SACO	Supplementary Advice on Conservation Objectives
SCOA	Seasalter Chalet Owners Association
SNCB	Statutory Nature Conservation Bodies
SNH	Scottish Natural Heritage
SoCG	Statement of Common Ground
SPA	Special Protection Area
SPA CNMP	Special Protection Area Construction Noise Management Plan
SSSI	Site of Special Scientific Interest
SUDS	Sustainable Urban Drainage Systems
TCPA	Town and Country Planning Act
UKCP18	United Kingdom Climate Change Projections 2018
UXO	Unexploded Ordnance
WeBS	Wetland Bird Survey
WR	Written Representation
WWII	World War Two
ZTV	Zone of Theoretical Visibility

1 INTRODUCTION

1. This document provides Cleve Hill Solar Park Ltd's (the Applicant's) response to the First Written Questions (ExQ1) published by the Planning Inspectorate (PINS) on 07 June 2019, relating to the Development Consent Order Application (the DCO Application) for Cleve Hill Solar Park (the Development).

2. Table 1.1 lists the topics covered. The Applicant has responded to each of the relevant questions in Section 2 of this document.

3. References to the Application documentation are provided where necessary with hyperlinks according to the reference system set out in the Cleve Hill Solar Park Examination Library.

Table 1.1: List of Topics

PINS Reference	Topic
1.0	General, Cross-topic and Miscellaneous Questions
1.1	Biodiversity and Nature Conservation (including HRA)
1.2	Compulsory Acquisition, Temporary Possession and Other Land or Rights Considerations
1.3	Cultural Heritage
1.4	Draft Development Consent Order
1.5	Environmental Statement, General
1.6	Landscape and Visual Impact Assessment (LVIA), including RVAA and Glint and Glare
1.7	Noise
1.8	Socio-economics
1.9	Traffic and Transport
1.10	Water, Flooding and Coastal Defence

1.1 Appendices

4. This response is supported by the following appendices.

Table 1.2: List of Appendices

Appendix	Title
1	Glossaries
2	Transport CO_2 costs estimation calculation
3	Evidence review of the impact of solar farms on birds, bats and general ecology
4	Potential Ecological Impacts of Ground-Mounted Solar Panels
5	Bird use of solar farms, Interim Results
6	Arna Wood Solar Farm Piling Noise Investigation
7	Arna Wood Solar Farm Wintering Bird Mitigation Report
8	Updated RIAA Figure 2
9	A statement of English Nature's views about the management of The Swale Site of Special Scientific Interest (SSSI)
10	Elver and Eel Passes
11	Unknown Plots
12	Updates to Appendix B of the Statement of Reasons
13	Letters between Cleve Hill Solar Park Ltd and the Environment Agency dated 13 April 2018 and 8 May 2018
14	List of Marine Developments from MMO
15	Updated photomontages at viewpoint 22 at years 1, 5 and 10
16	Planting Heights Table
17	Glint and Glare Guidance

2 EXAMINING AUTHORITY'S FIRST WRITTEN QUESTIONS AND THE APPLICANT'S RESPONSES

2.1 General, Cross-topic and Miscellaneous Questions

Table 2.1: Applicant's responses

Ref.	Question to:	Question	Applicant's Response
1.0.1	The Applicant	Apart from the Explanatory Memorandum, the major application documents appear to lack glossaries that would assist readers in their understanding of the more technical terms used. (The inclusion of a list of acronyms in the Environmental Statement [APP-250] is noted, but this does not cover some acronyms used in other application documents and provides no explanation of the terms.) Could the Applicant consider the guidance provided in PINS Advice Note 6, Preparation and submission of application documents, which states… 'A glossary should be included for each written document in order to provide clarification of meaning for all readers (including the general public)' and consider if supplementary information is required?	New or updated glossaries for the following Application documents have been produced and are included in Appendix 1: • Environmental Statement (APP-250) • Statement of Reasons (APP-019) • Funding Statement (APP-020) • Report to Inform and Appropriate Assessment (APP-026) • Statement in Respect of Statutory Nuisance (APP-028) • Grid Connection Statement (APP-029) • Outline Design Principles (APP-251) • Mitigation Schedule[1] (APP-252) • Statement of Need (APP-253) • Planning Statement (APP-254) • Heritage Statement (APP-257)
1.0.2	Swale Borough Council Canterbury City Council Kent County Council	Are Swale District, Canterbury City and Kent County Councils content with the summary of local planning policies set out in Chapter 6 of the Environmental Statement and the analysis of local planning policies at Appendix A of the Planning Statement?	Consultee response.
1.0.3	The Applicant	Does the Applicant feel that anything needs to be updated in the Planning	The changes in the latest version of the NPPF published on 19 February 2019 are not relevant to the policies or approach set out in the Planning Statement and Environmental Statement. Therefore, these

[1] A revised version of this document has been submitted at Deadline 2.

Ref.	Question to:	Question	Applicant's Response
		Statement or Environmental Statement to take account of changes to the NPPF published on 19 February 2019?	documents do not need to be updated to take account of the recent changes to the NPPF.
1.0.4	The Applicant	Could the Applicant clarify the two unattributed references listed in the Planning Statement [APP-254] at paragraph 152 and provide direction to where in the Environmental Statement 'Exploring behavioural responses of shorebirds to impulsive noise' has been used as a standard or guidance?	The first unattributed reference relates to *Cutts, N., Phelps, A. and Burdon, D. (2009). Construction and Waterfowl: Defining Sensitivity, Response, Impacts and Guidance. Report to Humber INCA. Institute of Estuarine and Coastal Studies, University of Hull (IECS).* This is referred to in Chapter 9 (Ornithology) of the Environmental Statement at Paragraph 127, Page 93. The second unattributed reference relates to *Wright, N, Goodman, P, and Cameron, T. 'Exploring behavioural responses of shorebirds to impulsive noise' Wildfowl (2010), p. 150-167.* This document is not directly referred to in the Environmental Statement and was used only as general guidance regarding the assessment of noise impacts on wildlife.
1.0.5	The Applicant	Paragraph 182 of the Environmental Statement [APP-035] states that the short-term benefit of cleaning the solar PV modules can be outweighed by the costs. Could the Applicant expand on the impact of not cleaning on output and efficiency?	A soiling loss factor of -2% has been included in the calculations of energy production for the array. The Applicant would highlight that solar panels can be cleaned by natural events, such as rainfall, or by manual intervention using cleaning equipment and deionised water. The timing and frequency of manual cleaning interventions is based on local characteristics, prevailing weather conditions and dust and other deposition rates on the panels. Whilst an east-west array is more efficient to clean than a south facing array, there is still a cost benefit calculation to undertake, to ensure that the cost of cleaning the panels does not exceed the increase in revenue from any additional electricity generated. The cost benefit calculation will vary through the operational life of the Development with variations in the price of electricity and according to the prevailing conditions as outlined above. It is likely that designated cleaning equipment will be located onsite reducing the potential variability of operational costs associated with cleaning in order to minimise soiling losses and maximise energy generation.
1.0.6	The Applicant	The Environmental Statement states that CCTV fields of view will cover the fences, but not locations on the public rights of way [APP-043]. Could the Applicant provide further assurances about how the privacy of users of the public rights of way adjacent to fences will be respected?	During the detailed design of the CCTV system prior to construction, where it is identified that images from cameras have the potential to overlook private property or public rights of way where there may be privacy issues, then those cameras will where possible be adjusted away from those areas, or if that is not feasible, then images from the relevant cameras will be digitally 'masked' to exclude these areas whilst ensuring that the security of the Development is not compromised. The installation of camera systems would be undertaken in accordance with the Data Protection Act 1998 and the Information Commissioner's Office CCTV Code of Practice 2008. By Law the Applicant will be responsible for registering the system with the Information Commissioners' Office. A sign, providing information compliant with the Data Protection Act, will be located at the site

Ref.	Question to:	Question	Applicant's Response
			entrance to be viewed by persons entering the site. Other CCTV Warning signs are to be installed in appropriate locations closest to public areas such as public rights of way.
1.0.7	The Applicant	Could the Applicant provide details of the likely frequency of use of the three diesel gensets mentioned in the Development Description chapter of the Environmental Statement [page 5-20, APP-035]. Please could the Applicant confirm whether potential impacts from these have been considered in the noise and air quality assessments, and, if so, clarify where their contribution to the assessments is set out? If they have not been considered, can the Applicant confirm whether the use of the diesel gensets would result in any likely significant effects beyond those assessed in the Environmental Statement and RIAA?	The diesel gensets are for backup use only and therefore are only expected to be operated during periodic maintenance checks. These would approximately occur for around 30 minutes to an hour at or near full load once a month, depending on how long it takes the cooling system to reach a stable temperature, recommended maintenance intervals etc. Detailed design may reduce the number of diesels and/or remove them in favour of temporary diesels, which would only be brought to site if and when needed. The emissions from non-road mobile machinery (during construction) is scoped out of the Air Quality assessment at section 16.2.9 of Chapter 16, Air Quality (APP-046). Although not explicitly referenced in the air quality or noise assessments, the emissions from non-road mobile machinery within the electrical compound during operation would also not result in any likely significant effects beyond those assessed in the ES and the RIAA, particularly given the infrequent and short duration of operation and the assessment conclusions of other similar aspects of the noise and air quality assessments such as vehicle emissions during construction, and the noise emissions of other operational plant within the electrical compound.
1.0.8	The Applicant All Interested Parties	Although National Policy Statements (NPSs) EN-1, EN-3 and EN-5 are referred to in the Planning Statement [APP-254], it is acknowledged that no NPSs are designated in respect of solar PV or energy storage developments. The Examining Authority's preliminary view is that policies in NPSs EN-1 and EN-5 are potentially 'important and relevant' matters for the Examination. The Applicant and Interested Parties are invited to comment on the applicability of NPSs to the policy framework within which the application should be determined, and to identify any particular policies in the NPSs that they consider to be important and relevant to this examination, as described under s105(2)(c) of the	As stated at Paragraph 59 of the Planning Statement, NPSs set out the national case and establish the need for certain types of infrastructure, as well as identifying potential key issues that should be considered by the decision maker. S104 of the Planning Act (2008) makes clear that where an NPS exists relating to the development type applied for, the Secretary of State must have regard to it. Although there is no NPS which provides specific policy in relation to solar photovoltaic (PV) and energy storage development, these technologies constitute forms of renewable energy generating stations and the policies set out in EN-1, 3 and 5 therefore apply, and unquestionably are "important and relevant", to which significant weight should be afforded. in previous applications where no technology-specific NPS applies, the Secretary of State has applied relevant related NPSs (see for example paragraphs 8, 11 and 97 of the decision letter for the Swansea Bay Tidal Generation Station Order 2015, paragraphs 4.6 to 4.7 of the decision letter for the Triton Knoll Electrical System Order 2016, and paragraph 4.4. of the decision letter for the Glyn Rhonwy Pumped Storage Generating Station Order 2017, along with all road and rail related DCOs granted prior to adoption of the National Policy Statement for National Networks in December 2014). PINS has also confirmed this approach in pre-application advice for the Development.

Ref.	Question to:	Question	Applicant's Response
		Planning Act 2008.	In light of the treatment of relevant NPSs in the consideration of previous DCO applications, the urgent national need for energy generating stations set out in both EN-1 and EN-3 is of great significance to the determination of this Application. In terms of considering the impacts of the scheme, NPS EN-1 (Energy) states at Paragraph 5.1.2 that where technology-specific NPSs do not state that certain impacts should be given a particular weight, the level of weight to be given to such impacts set out in NPS EN-1 should be followed. Therefore, in the absence of specific consideration of solar and energy storage in NPS EN-1 or technology-specific NPSs for solar energy and/or battery storage, the level of weight given to the potential impacts of this application should be determined in accordance with the policies in NPS EN-1 along with other relevant matters. The test therefore becomes whether the need for the development at the national level is outweighed by other material considerations. Policies within NPSs EN-1 (Energy) and EN-5 (Electricity Networks), along with Paragraph 1.1.1. of NPS EN-3 (Renewable Energy Infrastructure) are considered to be important and relevant to this proposal. The NPS policies which are of particular relevance and importance to this examination are set out in the Planning Statement at Paragraphs 59-98. The Applicant has also submitted a Written Representation on Policy at DL2, which is relevant to this ExQ.
1.0.9	The Applicant	Environmental Statement non-technical summary paragraph 60 [APP- 249] and Chapter 5 Paragraph 162 [APP-035] state that work would be allowed outside the stated working hours in exceptional circumstances to protect plant, personnel or environment. Could the Applicant further define 'exceptional circumstances' and suggest how and where these could be controlled through any DCO?	Exceptional circumstances in this context is defined as reasonably unforeseeable circumstances which would result in the curtailment of construction activity, causing an increase in health and safety risk to humans (determined by the construction site manager) or a risk to wildlife (determined by the Ecological Clerk of Works). Examples of this would be ensuring work areas in proximity to public areas are fully secure outside of working hours, or to close up trenches to protect wildlife where practicable. The Construction Environmental Management Plan (CEMP) and Construction Traffic Management Plan (CTMP), secured under Requirements 10 and 11 respectively, will control the timing of works, any prior permissions required for exceptions, and the definition of exceptional circumstances. Updated outline versions of these documents will be provided during the Examination prior to Deadline 3.
1.0.9	Swale Borough Council	Does Swale Borough Council agree that prior approval for working outside restricted hours should normally be sought beforehand by the Applicant?	The Applicant is happy to define exceptional circumstances and any conditions related to prior approval in an updated version of the Outline Construction Environmental Management Plan and Outline Construction Traffic Management Plan to be provided before Deadline 3.

Ref.	Question to:	Question	Applicant's Response
1.0.10	The Applicant	Can the Applicant confirm how the advice regarding waste management from the Environment Agency in its Relevant Representation [RR-507] will be incorporated into the Outline Site Waste Management Plan (Appendix A of the Outline CEMP)?	The Outline Construction and Environmental Management Plan, Appendix A - Site Waste Management Plan will be updated to include reference to the CL:AIRE Code of Practice. Whilst the Phase 1 site investigation report (APP-229) identified that all potential contamination risks are Low or Very Low, a Materials Management Plan will be implemented to control the reuse of materials associated with the construction of the electrical compound, including flood protection bund.
1.0.11	The Applicant	The 'Influences of the Development on Climate Change' section of the Environmental Statement [APP-045] references Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. This appears to be based on research published by Kim et al, 2012 (and others). The Environmental Statement suggests that the CO2 lifecycle assessment should include emissions from transport of components to the project site. Could the Applicant confirm whether the quoted comparison research included transport of components, and if not, whether the addition of transport CO2 costs would affect the conclusions of the project CO2 life cycle assessment.	This answer is provided in two parts. Firstly, looking at the research on which the assumptions in the ES were based. Secondly, an estimation of transport CO_2 costs is made and presented in the context of the project CO_2 life cycle assessment. This has been included as Appendix 2. **IPCC Research Basis** The values presented in ES Chapter 15 - Climate Change (Examination Library reference APP-045) were taken from Table A.III.2 of the IPCC report. Reference 17 on page 11 for the IPCC report has been updated, and is now: https://www.ipcc.ch/report/ar5/wg3/ [accessed on 14/06/2019]. The origin of those values is described in Section A.II.9.3: Lifecycle greenhouse gas emissions, of the IPCC report. This includes a link to the source of the data at http:/ /en.openei.org/apps/LCA/. Selecting just PV from the menu on the left at this site shows the data and the sources of data used, including the same range of data as quoted in the IPCC report (18 to 180, with a median of 48). The references for this data are a set of 17 publications (all of which are peer-reviewed), dating from the year 2000 to 2009. The Kim et al. (2012) publication referred to by the ExA is a peer-reviewed output of the analysis of these 17 publications. These are generally not freely available, however, several of them reference "life cycle" emissions in their titles. The IPCC report notes, in Annex I, that "Lifecycle assessment (LCA): A widely used technique defined by ISO 14040 as a "compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life cycle". This would normally include the installation of a technology, given that without its installation, it could not have a functional 'life'. We would therefore reasonably assume that the data do account for the transport of components. The Kim et al. (2012) paper provides relevant comment. Its full reference is: Kim H. C., V. Fthenakis, J.-K. Choi, and D. E. Turney (2012). Life Cycle Greenhouse Gas Emissions of Thin-film Photovoltaic Electricity Generation. Journal of Industrial Ecology 16, S110–S121. doi: 10.1111/j.1530-9290.2011.00423.x, ISSN: 1530-9290. Available at: https://onlinelibrary.wiley.com/doi/full/10.1111/j.1530-9290.2011.00423.x [accessed on 14/09/2019].

Ref.	Question to:	Question	Applicant's Response
			Although it relates to thin-film PV technology, this paper is a synthesis of a large body of research work conducted by others, and quotes much lower carbon footprints than the IPCC report, however (c. 14-26 gCO2eq/kWh. This value appears to include transportation, although it is not definitive on the matter. The paper does note, however, that "the carbon footprint of thin-film PV technologies decrease significantly as the production capacity increases, reflecting technological advances in process and device designs". As the paper was based on research published in 2000-2009, over a decade will have passed between the most recent of that research and the start of the lifecycle of solar PV modules that may be used in the Development, and in that time production capacity of solar PV modules globally has increased dramatically. On this basis we might conclude that the carbon footprint figures are overestimates of present-day values. **Transport CO_2 costs estimation** As a "belt and braces" approach, an estimate has been made of the carbon footprint of transportation during the construction phase. The calculation is included in Appendix 2 to this response. **Summary** Overall the carbon footprint of solar PV modules used in the 'Influences of the Development on Climate Change' section of the ES is considered to be conservative. The assessment relies on the IPCC's panel's research for our findings, and that the IPCC report was subject to peer review by experts in that field.

2.2 Biodiversity and Nature Conservation (including HRA)

Table 2.2: Applicant's responses

Ref.	Question to:	Question	Applicant's Response
1.1.1	Natural England Kent Wildlife Trust RSPB Local	Are Natural England, Kent Wildlife Trust, RSPB and the Local Authorities content with the approach to defining study areas for wildlife surveys and assessment in Chapter 8 of the Environmental Statement [APP-	Consultee response.

Ref.	Question to:	Question	Applicant's Response
	Authorities	038]and the appended survey reports?	
	Natural England Kent Wildlife Trust RSPB Local Authorities	Are the same parties content with the explanation of how the zone of influence for ornithological study and assessment was determined, especially in relation to the functional linkage identified between affected habitats on the development site and interest features of the Swale SSSI, SPA and Ramsar site (Chapter 9 of the Environmental Statement [APP-039] and the RIAA [APP-026])?	Consultee response.
1.1.2	The Applicant	In the Environmental Statement, the ecology assessment [APP-038] refers to the Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal (CIEEM, 2016). The Examining Authority notes that these guidelines were updated in 2018, and that the updated guidelines were used in the ornithology assessment [APP-039]. Could the Applicant confirm whether the updates introduced by the 2018 guidelines would (if followed) result in any difference to the conclusions reached in the ecology assessment?	The conclusions of all the ecology assessments of the Development under the 2016 guidelines are still applicable under the revised 2018 guidelines. No differences in the conclusions would have resulted from the use of the 2018 guidelines.
1.1.3	The Applicant	Could the Applicant explain further why some European and nationally protected species have been determined to be of low (local) importance in Environmental Statement Table 8.7 [APP-038]?	Despite protected species such as bats, water voles, reptiles, great crested newt being present within the study area and protected for their importance at the national, European level, they are widespread and well represented within Kent and landscapes connecting to the Development site. The conservation status of protected species and their use of the site is also a factor in determining importance. For example, aquatic (breeding) habitat for GCN are limited to offsite locations or boundary locations, with only terrestrial habitat important to GCN impacted, or with bats, it is important for foraging bats, but no roost (maternity/hibernation) sites are present on the Development site. For these reasons, species utilising the site are considered of importance at the local level only despite having national or European level protection. This approach is supported by relevant guidance such as:

Ref.	Question to:	Question	Applicant's Response
			• Guidelines for Ecological Impact Assessment in the UK and Ireland, Terrestrial, Freshwater, Coastal and Marine, CIEEM, (2018); and • Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition) 2016.
1.1.4	Natural England Kent Wildlife Trust RSPB Local Authorities	Are Natural England, Kent Wildlife Trust, RSPB and the Local Authorities content that the various 2015 protected species surveys, some of which were carried out in accordance with subsequently updated guidance, and the 2016 breeding bird and flight activity surveys are sufficiently up to date to facilitate an accurate assessment, noting the timing and results of the updated phase 1 habitat survey in February 2018?	Consultee response.
1.1.5	The Applicant	In the Environmental Statement, the ecology assessment states that the perimeter fences around the Proposed Development would incorporate mammal gates 'at regular intervals' to avoid the fence acting as a barrier to movement through the site. The Development Description chapter [Chapter 5 of the ES, APP-035] describes these as being at 50m intervals (paragraph 136). Could the Applicant explain: • why 50m was selected as a suitable interval for the mammal gates; and • how provision of the mammal gates is secured through the dDCO?	Approximately 15 km length of perimeter deer fencing is proposed across the site boundary which at 50 m intervals would equate to approximately 300 mammal gate access points. The 50 m interval is based on professional ecological judgement as being appropriate to ensure no barriers to dispersal for mammal species. Mammals would naturally range across a greater distance than this and so 50 m spacings is considered to be appropriate for ensuring no barrier to dispersal. Provision for mammal gates is secured through Requirement 4 of the dDCO which relates to the submission of a Landscape and Biodiversity Management Plan prior to construction. The provision of the mammal gates is provided for in the outline LBMP (Examination Library reference APP-203) which the final scheme must accord with in Table 1 (for the construction phase). The fence, once implemented during construction will remain in place during the operational phase.
1.1.6	The Applicant	Further to the position at the time of submission of the DCO application (as provided in [APP-222]), could the Applicant provide an update regarding the likely timescales for receiving 'Letters of No Impediment' in relation	Following further dialogue in the Pre-Examination phase, all requested information was provided to Natural England in May 2019. We are awaiting response on this which is expected by end of July 2019. The Applicant will update the Examining Authority on this once received.

Ref.	Question to:	Question	Applicant's Response
		to great crested newt and water vole licence applications from Natural England?	
1.1.7	The Applicant	Could the Applicant explain whether any evidence or studies exist to support the conclusion presented in section 5.2.5.9 of the RIAA [APP-026] that any attraction of invertebrates to the solar panels would not result in a likely significant effect?	The conclusions in section 5.2.5.9 of the RIAA (Examination Library reference APP-026) reflect the assessment set out in section 8.5.4.3 of ES Chapter 8 - Ecology (Examination Library reference APP-038) that the solar PV modules would be placed at 1.2 to 3.9 m above ground level, and that aquatic habitats where invertebrates oviposit are below this height, within sheltered ditch habitats (which are a minimum 15 m from solar PV modules), or within vegetation on site below this height. On emerging from nymph stages, aquatic invertebrates recruitment strategy typically involves placing effort into reproduction rather than flight. Therefore, most recruitment typically takes place within a few metres of emergence locations and following aquatic pathways. This observation is widely reported within published literature for a range of species. On this basis, any attraction of invertebrates to solar panels would not result in a likely significant effect, with distance and height the main factors separating invertebrate rich habitats from the solar panels. Feltwell, (2014a)[2] describes an informal invertebrate survey that appears to be have been undertaken during a dedicated bird survey. Over 60 species of insect were recorded, with "buffer areas" on site described as reservoirs for invertebrate diversity. Butterfly species appeared to be benefitting from the grass species on site, with some using the infrastructure of the solar farm as substrate to pupate. Diptera and Coleoptera were the only orders of insect observed on the solar panels themselves. Overall, section 8.5.4 of ES Chapter 8 - Ecology predicts a significant beneficial effect on invertebrates due to cessation of arable pesticide use and water quality improvements.
1.1.8	The Applicant Natural England Kent Wildlife Trust RSPB Local Authorities	A Natural England review of the impacts of solar farms on birds is referred to in the non-technical summary of the Environmental Statement (paragraph 158 of APP-249]. Could the Applicant confirm the full reference and submit a copy into the Examination? In relation to potential bird mortality or injury through collision with solar panels or fences, are the Applicant,	Natural England (2017). Evidence review of the impact of solar farms on birds, bats and general ecology (NEER012). 1st edition – 9th March 2017. A copy is included as Appendix 3. An internet search using key words "solar" + "collision" + "monitoring" did not locate any monitoring studies investigating collision with solar panels at UK or European solar farm sites. The 'lake effect' that may attract birds to the solar panel surfaces has been postulated as a cause of collisions. Studies have been undertaken in the USA and South Africa, which have included utility-scale solar PV: • Kagan, R.A., Viner, T.C., Pepper, T.W. & Espinoza, E.O. (2014) Avian Mortality at Solar Energy Facilities in Southern California: A Preliminary Analysis. • Walston, L.J., Rollins, K.E., LaGory, K.E., Smith, K.P. & Meyers, S.A. (2016). A preliminary

[2] Feltwell, J. (2014a) 'Observations on the effects of photovoltaic solar panels on invertebrates at Ebbsfleet Farm, Sandwich, Kent.' The Newsletter of the Kent Field Club, 79 pp. 4–17

Ref.	Question to:	Question	Applicant's Response
		Natural England, Kent Wildlife Trust, RSPB or the Local Authorities aware of any relevant monitoring studies at existing solar farm sites?	assessment of avian mortality at utility-scale solar energy facilities in the United States. Renewable Energy 92, 405-414. • Visser, E., Perold, V., Ralston-Paton, S., Cardenal, A.C. & Ryan, P.G. (2019). Assessing the impacts of a utility-scale photovoltaic solar energy facility on birds in the Northern Cape, South Africa. Renewable Energy 133, 1285-1294. BSG Ecology has recently published a literature review, included as Appendix 4, that includes a synopsis of the findings from those studies: Taylor, R., Conway, J., Gabb, O. & Gillespie, J. (2019). *Potential ecological impacts of ground-mounted photovoltaic solar panels*. Bird collisions have been recorded at a solar PV installation in the US, including waterbirds, but BSG Ecology's review highlights the difficulties in comparing the impacts of large solar farms in arid desert habitats on major migration pathways with those proposed or existing in the UK. In South Africa, eight bird carcasses were found during three months of mortality surveys; however, the causes of death were impossible to infer due to the level of decay of the carcasses. There is a lack of scientific evidence that significant fatality risks occur as a result of solar PV installations; however, the RSPB state that this might reflect lack of monitoring effort, rather than absence of effect, recommending that further research is needed.
1.1.9	The Applicant	As reported in Table 9.1b of the Environmental Statement [APP-039], at the Preliminary Environmental Information Report stage, Natural England expressed concerns around the use of thresholds to assess the impacts of noise disturbance on birds. This position is reiterated in Natural England's Relevant Representation [RR-826]. A potentially more suitable approach was suggested by Natural England in its response to the Preliminary Environmental Information Report: this would be to assess the change in noise levels, with a change of up to 3db of similar noise types thought unlikely to be significant. Could the Applicant explain: • the extent to which the current approach is considered sufficiently	For the ES, the Applicant amended the assessment of noise disturbance in response to Natural England's comments on the PEIR in this regard. The Applicant considers the thresholds used in the assessment to be precautionary. Section 9.5.2.1 of ES Chapter 9 - Ornithology (Examination Library reference APP-039) and Section 6.1.1 of the RIAA (Examination Library reference APP-026) describe the rationale for setting precautionary thresholds of noise levels for the assessment of effects on breeding and wintering birds. These were based on the available literature and had consideration of the site-specific baseline ambient environment. These noise thresholds were used to guide the outline SPA Construction Noise Management Plan (Examination Library reference APP-243). An ECoW will also be deployed during the construction phase to observe bird responses and inform further action in order to prevent significant disturbance providing further confidence that significant disturbance effects will not occur. Natural England's suggestion of +3 dB(A) change is in itself a threshold level of change, although it is not considered by the Applicant to be an appropriate threshold level of change against which to assess potential impacts during construction. The detectability of a change of 3 db(A) will also vary depending on the background level of noise. However, using the example that +3 db(A) represents a barely discernible level of change, then this is not considered to be appropriate for assessing a potential impact on a receptor because it is the reaction of the receptor to a degree of change in the noise received that is important rather than whether or not it can be detected; this is set out in paragraph

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		precautionary? • the anticipated effect on the assessment conclusions around disturbance of relevant interest features of the Swale SSSI/ SPA/ Ramsar site if the >3db change level recommended by Natural England was adopted?	131 of ES Chapter 9 - Ornithology. Hence the Applicant undertook a review of available literature (as described in section 9.5.2.1 of ES Chapter 9 - Ornithology and on that basis proposed precautionary thresholds of noise for breeding and wintering birds, as set out in paragraphs 132 and 133 of ES Chapter 9 - Ornithology). Discussions were held between the Applicant and Natural England at a meeting on 18th June 2019. Natural England indicated that they were content with the precautionary threshold approach to the assessment and mitigation of noise effects, which will be reflected in an updated Statement of Common Ground expected to be submitted ahead of Deadline 3.
1.1.10	The Applicant	Could the Applicant provide further clarity around the scheduling for construction and how this would take account of the following matters: a) How the Applicant would ensure that construction activity would be focussed on one field or area within the development site at a time (as stated in paragraph 138 of the RIAA [APP-026]), thereby reducing disturbance and ensuring that areas of the site remain available for foraging birds, including marsh harrier, during construction? b) How the Applicant would ensure that construction activities would not take place in the areas closest to the Swale SPA/ Ramsar site during the bird breeding season? (Greater certainty isrequired for the purposes of Habitats Regulations Assessment than the statement in the Outline Breeding Bird Protection Plan [APP-205, Appendix B] that this would be avoided 'where practicable'.) c) How the piling works closest to the SPA/ Ramsar site (Castle Coote in particular) could be timed to avoid high tide, for the purposes of	a) The Applicant would ensure that construction is focussed on one field at a time by including this construction methodology in an updated version of the Outline Construction Environmental Management Plan (Examination Library reference APP-205), to be updated before Deadline 3. This requirement will then feature in the final Construction Environmental Management Plan which must comply with the outline and which is secured through Requirement 10 of the dDCO. b) Based on the assessment of effects, an outline SPA Construction Noise Mitigation Plan (SPA CNMP, Examination Library reference APP-243) has been developed together with the Breeding Bird Protection Plan (BBPP, Appendix B of the outline CEMP) to minimise the risk of significant disturbance to birds. In paragraph 158 of the BBPP in the outline CEMP, the term 'where practicable' was intended so as not to restrict all construction activities in areas closest to the SPA boundary during the breeding season. It is necessary to permit activities that do not cause noise emissions exceeding the 65 dB(A) threshold (at the receptor) described in the assessment – such activities may be required for the efficient execution of the Development's construction and would be no more disturbing to breeding birds than the typical baseline farming operations. Section 6 of the outline SPA CNMP describes the measures, including implementation of setback distances for piling and other noisy construction activities, to be implemented to ensure that the noise levels at the SPA boundary will not exceed 65 dB L_{Amax} for piling activity or 65 dB L_{Aeq} for other construction activity (e.g. plant movement) during the breeding season. The wording of the BBPP in the outline CEMP will be updated to reflect any clarifications required in this respect. c) Following discussion between the Applicant and the Habitat Management Steering Group, and the Applicant and Natural England, it is proposed that piling works in the areas near Castle Coote will be avoided during the core winter period. Construction activities in the same area resulting in noise exceeding 65 dB(A) received at the SPA boundary in the bird breeding season must also be avoided. The area within a zone resulting in noise emissions exceeding 55 dB(A) at roost locations on Castle Coote (a precautionary threshold noise level below which no reaction from birds is expected) will only

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		minimising disturbance to wintering birds? (Natural England's Relevant Representation [RR-826] explains that wintering SPA birds are more susceptible to disturbance at high tide, when they are roosting.) In responses to these three questions, could the Applicant include an explanation of how any such commitments might be secured in any DCO?	be undertaken during September and October when non-breeding birds associated with the SPA will be less susceptible to the effects of disturbance, should it occur. The outline SPA CNMP and the outline CEMP will be updated to include this protocol for construction. These commitments would be secured through: • updating the outline SPA CNMP, which is the subject of Requirement 12 of the dDCO; and • updating the BBPP in the outline CEMP, which is the subject of Requirement 10 of the dDCO.
1.1.11	The Applicant	The RIAA [APP-026] conclusions regarding marsh harrier include: 'Subject to the appropriate management of large grassland swathes between the solar arrays, it is therefore concluded that there would be no adverse effect on the integrity of the Swale SPA in this respect'. The locations of the 'Field Margin and Ditch Margin Habitat' (for marsh harrier) are illustrated on Environmental Statement Figure 9.3 [APP-056], but it is not clear which of the proposed management measures in the Outline LBMP [APP-203] relate to this habitat. Could the Applicant: • Confirm the management measures proposed for the areas between the panels and the ditches (the 'Field Margin and Ditch Margin Habitat') for marsh harrier, and how these measures are secured in the dDCO? • Provide an update on discussions about this with Natural England? (As requested in paragraph 8.9 of Natural England's Relevant Representation [RR-826]) • Confirm what evidence there is to	• Figure A5.1 of the outline LBMP (Examination Library reference APP-203) shows that the areas between the solar panel arrays and ditches are to be managed as Coastal and Floodplain Grazing Marsh. Appendix A of the outline LBMP sets out the management prescriptions for the Coastal and Floodplain Grazing Marsh Grassland in areas within and outside the perimeter fence. Environmental Statement Figure 9.3 (Examination Library Reference APP-056) will be updated to show the same area and labelling. The outline LBMP and associated Figure A5.1 will continue to be updated as further details of the management of this area are developed with the HMSG. These measures would be secured by Requirement 4 of the dDCO. • Further discussion between the Applicant and Natural England was held at a meeting on 18th June 2019. The Applicant confirmed that the inter-array areas will be managed as grazing marsh grassland, maintained through grazing by sheep. Natural England confirmed that they wish to see more detail in the outline LBMP (Examination Library reference APP-203) with regards to the control of grazing by use of temporary stock fencing, the location of the stock fencing, the proposed grazing intensity and the management of the ditch habitats, including water level control. The Applicant therefore intends to provide additional detail by updating the outline LBMP during the Examination ahead of Deadline 3. • There is no peer-reviewed empirical evidence regarding any changes in behaviour of marsh harriers at or around solar farms. BSG Ecology's recent review (Appendix 4) refers to a study by DeVault *et al.* (2014) that indicates lower abundance of raptors within solar farms compared with adjacent grasslands; however, the study was of small solar PV installations at airports and not representative of the Cleve Hill Development. At the Development, displacement from the solar panel arrays of foraging by marsh harriers is predicted to occur and has been assessed as such, whereas the areas between the solar panel arrays and ditches represent 'adjacent grasslands' that will be managed to provide suitable foraging habitat for marsh harriers. Research on bird populations at solar farms is being carried out by

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		support the prediction in paragraph 209 of the RIAA that marsh harrier would forage in the areas between solar panels? (Other than the single reported observation of a marsh harrier foraging in similar circumstances in paragraph 360 of the Environmental Statement Ornithology chapter [APP-039]).	the RSPB Centre for Conservation Science in association with solar developer, Anesco. A blog post by the researcher on the RSPB's website that discusses the preliminary results, suggests that raptors continue to forage over solar farms, with red kite, kestrel, sparrowhawk and buzzard all recorded over the solar panels. This post is provided as Appendix 5.
1.1.12	The Applicant	Could the reports produced by Arcus examining piling noise impacts at Arna Wood Solar Farm (and referenced in the Environmental Statement and RIAA) be made available to the Examination by the Applicant?	The reports referenced are: • Arcus Consultancy Services (2017a). Arna Wood Solar Farm Piling Noise Investigation. Report to Canadian Solar, February 2017; and • Arcus Consultancy Services (2017b). Arna Wood Solar Farm Wintering Bird Mitigation Report. Report to Canadian Solar. These reports are provided as Appendix 6 and 7.
1.1.13	The Applicant	Could the Applicant confirm when the 2017/18 Swale WeBS counts will be available? If they are available, do they have any implications for the conclusions of the Environmental Statement or the RIAA?	2017/18 WeBS counts for The Swale are now available. WeBS counts for The Swale were primarily used in the Environmental Statement and RIAA to place numbers of Brent goose, golden plover and lapwing in the context of the wider estuary. For each of these three species, the rolling five-year peak mean has increased between the periods 2012/13-2016/17 and 2013/14-2017/18: • Brent goose: 2,527 (2013/14-2016/17 5-yr peak mean) increased to 2,600 (2013/14-2017/18 5-yr peak mean). • Golden plover: 2,652 (2013/14-2016/17 5-yr peak mean) increased to 2,968 (2013/14-2017/18 5-yr peak mean). • Lapwing: 6,749 (2013/14-2016/17 5-yr peak mean) increased to 6,976 (2013/14-2017/18 5-yr peak mean). As the rolling 5-year peak-mean has not changed substantively for these three species, these updated data would not change the conclusions of the Environmental Statement or RIAA and no updates to these documents are proposed.
1.1.14	The Applicant	The ornithology assessment in the Environmental Statement identifies the	The ecological effect of damage or harm to nesting birds is not assessed as an environmental effect in the assessment because criminal offences in this regard must be avoided. For example in relation to

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		potential for 'Criminal offences in relation to damage or harm to nesting birds and additionally, disturbance to specially protected bird species listed on Schedule 1 of the Wildlife and Countryside Act, even if significant adverse effects are unlikely', but there does not appear to be a specific conclusion on this matter. Could the Applicant confirm the conclusions of the assessment in this regard?	the breeding farmland bird community, paragraph 367 in Chapter 9 - Ornithology of the ES (Examination Library reference APP-039) refers to the BBPP (Appendix B of the Outline CEMP (Examination Library reference APP-205)), which provides mechanisms to implement during construction to avoid damage or harm to nesting birds, as well as disturbance to Schedule 1 nesting birds. The conclusion is therefore that criminal offences (under the Wildlife and Countryside Act) in relation to nesting birds will have no effect.
1.1.15	The Applicant	Could the Applicant confirm the dates that were assumed in the Environmental Statement ornithological assessment [APP-039] and the RIAA [APP-026] regarding the latest point at which construction of Phase 2 could commence? How could any DCO ensure that construction of Phase 2 could not commence at a point later than that assessed in the Environmental Statement and RIAA? If Phase 2 was to be undertaken separately from Phase 1, could the Applicant confirm if any construction activities undertaken between 1 September and 28 February would be controlled using the methodology in the SPA CNMP [APP-243]? If so, where would this be secured?	The ornithological assessment has not made an assumption regarding the latest point at which construction of Phase 2 could commence. The bund surrounding the energy storage facility would be constructed during Phase 1 as set out in section 5.5.1.1 of Chapter 5 - Development Description (Examination Library reference APP-035), and the potential effects of disturbance to birds during its construction would be controlled by the same mechanisms as described in the BBPP (Appendix B of the outline CEMP, Examination Library reference APP-205) and outline SPA CNMP (Examination Library reference APP-243). Installation of Phase 2 will have no piling activity and will therefore not emit higher levels of noise that require mitigating in that respect. Other installation activities during Phase 2 will use the mechanisms set out in the outline SPA CNMP to minimise noise emissions from construction plant and ensure there are no emissions exceeding 70 dB(A) at the receptor location (the level of noise likely to cause flight responses) within the AR HMA during the winter period between 1 September and 31 March. Noise levels above 55 dB L_{Aeq} from construction of Phase 2 are not predicted to extend into the functional area of the AR HMA and therefore no effects on wintering birds using the AR HMA are predicted to occur. The outline SPA CNMP will be updated before Deadline 3 to reflect this. These measures would be secured through updating the outline SPA CNMP, which is the subject of Requirement 12 of the dDCO.
1.1.16	The Applicant	Kent County Council [RR-797] has raised the issue of loss of habitat for ground-nesting birds. Could the Applicant expand on its additional submission [AS-009] and provide reference to specific parts of the Outline LBMP [APP-203] where the mitigation measures proposed for ground-nesting birds can be found?	Paragraph 371 and 372 of ES Chapter 9 - Ornithology (Examination Library reference APP-039) assess the potential effect of loss of arable habitat to solar panels on ground-nesting birds including lapwing, skylark and yellow wagtail. The assessment concludes that if the more open habitat preferring species do not find that space between the arrays is sufficiently large to be attractive to them, then there would be lower numbers of skylark and yellow wagtail, although the larger grassland extents provided by the Habitat Management Areas will provide enhanced habitat for these species. Paragraph 10 of the outline LBMP (Examination Library reference APP-203) describes the ornithological objectives of the outline LBMP. There are no specific parts of the outline LBMP that set out measures to mitigate for ground-nesting birds, beyond the general aims of the habitat management in areas between the

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			arrays (as grazing marsh grassland) and in the HMAs (specifically the AR HMA and LGM HMA). The residual effect for these species would be negative and not significant, but overall the residual effect on the farmland bird community (which includes species associated with field margin habitats) was assessed as uncertain positive and not significant.
1.1.17	Natural England	Could Natural England explain the rationale for the inclusion of the existing coastal flood defences at the site within the boundaries of the statutory nature conservation notifications/ designations (SSSI, SPA, Ramsar)?	Consultee response.
1.1.18	The Applicant	Regarding the inclusion of the existing coastal flood defences within the DCO boundary, paragraph 75 of the RIAA [APP-026] explains: 'No development is proposed in these areas. The flood defences have been included in the Development to permit future maintenance work and no specific flood defence works over and above those likely to be undertaken on an ongoing basis by the Environment Agency to maintain the current standard of protection are currently proposed. There are no planned flood defence works as part of the Development that would result in a loss or change of habitats within the SPA/Ramsar Site'. Given the relationship between the existing coastal defences and the Swale SPA and Ramsar site, to what extent does the Applicant consider that the maintenance of the existing coastal defence constitutes an action that is connected with or necessary to the management of those designated sites?	The Applicant considers that the primary function of the existing coastal flood defences is to protect human settlement and enterprise. However, the Applicant considers that the maintenance of the existing coastal defences is, in part, also an action connected with or necessary to the management of The Swale SPA/Ramsar site, because its function is necessary to protect the freshwater components of the designated site from inundation by seawater.

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1.1.19	The Applicant	Habitat loss during construction is not identified in Table 3 of the RIAA [APP-026] as an impact screened into Stage 2 of the HRA (consideration of adverse effects on integrity). However, this impact is considered in the integrity matrices provided in Appendix 8 of the RIAA [APP-027]. Could the Applicant clarify?	Habitat loss/change will occur incrementally during construction and will then remain throughout the operational phase of the Development. Table 3 should therefore include the construction phase for this effect. Stage 2 of the HRA as reported in Section 6.1.2 of the RIAA (Examination Library reference APP-026) has incorporated the assessment of habitat loss throughout the Development, including the construction phase.
1.1.20	The Applicant	Could the Applicant confirm whether the Swale SPA and Ramsar site are currently considered to be in favourable condition?	The Swale SPA/Ramsar site hosts 22 component species in its wintering waterbird assemblage, including the two species (Brent goose and dunlin) which are qualifying interests in their own right. The British Trust for Ornithology (BTO) analyse Wetland Bird Survey (WeBS) data for trends in the abundance of waterbirds at wetland sites. These are called 'Alerts', reported as green, amber or red depending on the magnitude of change. Amber (medium) and red (high) alerts highlight negative changes in the abundance index of >25% and >50% respectively, reported over short- (5 years), medium- (10 years) and long-term (25 years), as well as since classification of the designated site. Only one alert is reported since classification: 75% decline in European white-fronted goose. Of the 22 component species, medium alerts are also reported for shelduck (medium-term), shoveler (medium-term), lapwing (medium-term), grey plover (medium-term) and dunlin (long-term). Natural England trialled and rolled out a new condition assessment methodology for SPAs in 2016. The condition assessment for The Swale SPA has not yet been completed. However, Natural England has also published Supplementary Advice on Conservation Objectives (SACO) for The Swale SPA as an interactive WebLink. The SACOs for The Swale indicate that the breeding and wintering bird assemblage features are in unknown or good condition with respect to most attributes, with the exception of recreational disturbance, where there is evidence that human activities such as dog-walking provide a source of disturbance to birds.
1.1.21	Natural England	There are several birds identified on the information sheet for the Swale Ramsar site (and in section 5.2.3 of the RIAA [APP-026]) 'for possible future consideration under criterion 6'. Please could Natural England confirm the status of these features? Is it likely that the Ramsar citation will be updated in the near future to include these as features under Criterion 6?	Consultee response.

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1.1.22	The Applicant	Could the Applicant update the matrices [APP-027] to address the following points? Matrices for all sites: • Add references to the specific dDCO Requirements that secure the proposed mitigation measures; and • Add references to areas of agreement with Natural England (where relevant). Matrices for the Swale Ramsar site: • Potential Likely Significant Effects on the Swale SPA/ Ramsar site are identified in section 5.2.5. of the RIAA in respect of (amongst other impacts and features) dust emissions and hydrological changes on Ramsar invertebrates during construction and decommissioning. However, the Ramsar invertebrate feature (under Criterion 2) is greyed out on the screening matrix for the Swale Ramsar site, and not included in the integrity matrix for the Swale Ramsar site. • On the screening matrix for the Swale Ramsar site, in-combination effects are marked with a 'x' (Likely Significant Effects can be excluded), although the assessment has gone on to consider in-combination effects in terms of adverse effects on integrity.	The matrices will be updated as requested and submitted to the Examination before Deadline 3.
1.1.23	The Applicant	The Environmental Statement and RIAA explain that ending the use of fertilisers, herbicides and pesticides will have long-term, positive effects. To help gauge the likely benefits, could the Applicant provide an estimate of the level of application of fertilisers, herbicides and pesticides	Updated information on the application of fertilisers, herbicides and pesticides has been obtained from the landowner. A clarificatory report will be prepared and submitted before Deadline 3 that draws comparison between the baseline and proposed application of fertilisers in the AR HMA, including the potential effects of any change on other ecological interests including the Ramsar ditch communities. The commitment to restrict fertiliser to the area beyond 10 m of the ditches and wet field boundaries will be secured by inclusion of this in Appendix J of the outline LBMP (Examination Library Reference APP-203) which will be updated before Deadline 3. This then will be a requirement for the final LBMP,

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		currently employed on the application site, and a comparison with the proposed application of fertilisers to the Arable Reversion Habitat Management Area? Could the Applicant expand on the potential impacts of the proposed change in land management practices in the Arable Reversion Habitat Management Area, including the application of fertiliser, on other ecological interests including the Ramsar ditch communities? In its response to Relevant Representations [AS-009], the Applicant indicates that application of fertiliser would be restricted within 10m of ditches and wet field boundaries. Could the Applicant confirm how this commitment is secured in the dDCO?	which is secured by Requirement 4 of the dDCO.
1.1.24	The Applicant	Could the Applicant clarify the location of the Arable Reversion Habitat Management Area and the Freshwater Grazing Marsh Habitat Management Area on Figure 2 of the RIAA [APP-026]?	Figure 2 of the RIAA omitted these areas in error (they are on the legend but not shown). An updated version of this Figure is included as Appendix 8 to this response for reference.
1.1.25	Natural England	Is Natural England content that the RIAA [APP-026] includes sufficient regard for the Swale and Medway European Marine Site and its Conservation Objectives?	Consultee response.
1.1.26	The Applicant	To provide further confidence, could the Applicant confirm the extent to which the literature cited in the RIAA [APP-026] and in the ornithology assessment of the Environmental Statement [APP-039] is applicable to the development of an Arable	The AR HMA is designed to mitigate for the loss of foraging opportunities for Brent geese, lapwings and golden plovers in arable habitats that will be occupied by solar panels. Based on knowledge of the habitat preferences of the species and the literature review, the provision of a grassland area is proposed to fulfil the mitigation needs and the Applicant is of the opinion that the cited literature is applicable in determining the design and capacity of the AR HMA. For Brent geese, the rationale for this choice is described in section 9.6.2.1 of ES Appendix A9.1 -

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		Reversion Habitat Management Area of this scale, in this location, and for the particular species of birds involved?	Ornithology Technical Appendix (Examination Library Reference APP-223) and section 6.1.2.4 of the RIAA (Examination Library reference APP-026). There is a difference between the cited studies and the AR HMA in that the literature studies were based on established grassland, rather than arable reversion grassland that is required in the AR HMA. However, several of the cited literature documents involved research that had the function of informing a strategy for the development of 'alternative feeding areas' (AFAs) for Brent geese to resolve issues in relation to crop damage by foraging geese. Defra's guidance note WCA26 (2001) on Management of Damage Caused by Brent Geese was prepared by the Central Science Laboratory (CSL), based on research undertaken by CSL and the University of East Anglia. This guidance advises that: • the crop should be managed to be as attractive as possible for Brent geese; • Brent geese like crops that are rich in protein, carbohydrate and easily digestible, which can be met with young growth; • grassland is the most frequently sown crop for AFAs; • white clover is extremely attractive to Brent geese; • grass in which the sward has been kept short by grazing or cutting and clover can fulfil many of the birds' needs; • attractiveness of the grass can be enhanced by the application of fertiliser (50 kg/ha); and • Brent geese prefer to feed in fields close to the sea and prefer large fields without hedges and little disturbance. These measures are all directly applicable to the proposed AR HMA and its management prescriptions. For lapwing and golden plover, the rationale for the management of the HMA is described in section 9.6.2.2 of ES Appendix A9.1 - Ornithology Technical Appendix (Examination Library Reference APP-223) and section 6.1.2.5 of the RIAA (Examination Library reference APP-026). The assessment relies primarily on research by Gillings et al. (2007) in a study area of mixed arable farmland for which capacity in terms of bird-days was estimated for the two species together. There are no directly applicable studies of the capacity of grassland, in terms of bird-days, to support these species. The cited literature all indicates that grassland will have a higher capacity to support golden plover and lapwing than arable crops. However, in response to comments on the PEIR, the Applicant based the analysis of the required area of the AR HMA for these species based on the capacity of arable crops. Therefore whilst this literature may not be directly applicable, it is relevant and precautionary in terms of calculating the capacity of the AR HMA to host golden plover and lapwing.
1.1.27	The Applicant	Given the survey findings that there was almost no coincidence between Brent goose and the two target	The literature review presented in Appendix A9.1 - Ornithology Technical Appendix (Examination Library Reference APP-223) and the RIAA (Examination Library reference APP-026) provided details of the habitat and management preferences for the grassland to be established in the AR HMA. The

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		waders (golden plover and lapwing) in the same fields at the same time, could the Applicant confirm the extent to which the evidence used to support the design of the Arable Reversion Habitat Management Area can be relied upon to ensure that both will successfully coexist in the requisite numbers within the same mitigation area?	design of the AR HMA has cognisance of the preferred conditions for all three species and will provide suitable conditions for all three species to forage. There is no evidence of inter-specific segregation of the species and they are known to utilise the same fields at the same time (personal observations of the author, for example at grassland sites near the Solent and on the Isle of Sheppey), and including on occasions during the baseline surveys at the Development site: • 24/11/15, 340 lapwing shared arable Fields 18 and 19 with 293 Brent geese; • 16/01/18, 560 Brent geese shared grassland field 30 with 290 lapwing; • 30/01/18, 414 Brent geese shared grassland field 29 with 120 lapwing. There are further examples from the baseline surveys of synchronous use of the intertidal count sectors by these species. It is expected that the three species will coexist within the AR HMA. At the Development site, the baseline surveys also demonstrated that the different species used the same fields at different times within the same season and in different seasons, the counts of which were used to estimate the baseline usage of the site. The requisite numbers within the AR HMA could therefore also be accommodated even if they did not coexist, as the different species could use the AR HMA at different times.
1.1.27	Natural England	Could Natural England expand on the statement in its Relevant Representation [RR-826] that golden plover and lapwing feed on soil and surface invertebrates and do not compete for the same food as Brent geese and can 'potentially' be accommodated on the same piece of mitigation land. What factors does Natural England consider might determine whether lapwing, golden plover and Brent goose can be accommodated on the same piece of mitigation land?	Consultee response.
1.1.27	Natural England Kent Wildlife Trust	Are Natural England, RSPB or Kent Wildlife Trust aware of any types of inter-species competition or interaction that might restrict the	Consultee response.

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	RSPB	capability of the area to support the necessary density of all three species of birds? Do Natural England, RSPB or Kent Wildlife Trust consider that any additional evidence is required from the Applicant in this regard?	
1.1.28	The Applicant Natural England	In relation to the effectiveness of the proposed Arable Reversion Habitat Management Area, Natural England's Relevant Representation [RR-826] highlights uncertainties around the bird-days calculations for lapwing and golden plover. Could the Applicant and Natural England provide an update on discussions to resolve these uncertainties?	The Applicant's position is that the under-capacity of the AR HMA for lapwing can be provided by the over-capacity of the AR HMA for golden plovers, when based on figures of 1,000 lapwing-days per hectare and 1,560 golden plover-days per hectare. Discussions held between the Applicant and Natural England on 18th June 2019 did not conclude with an agreement that this would be certain to occur. The Applicant will re-review the literature to provide additional detail on the supporting evidence behind the rationale on this subject ahead of the Issue Specific Hearing on Biodiversity on 25 July 2019.
1.1.29	The Applicant	Noting the proposed Arable Reversion Habitat Management Area approach is not fully proven, and that it is predicted to neither substantively improve nor reduce the conservation status of Brent goose, lapwing or golden plover, has the Applicant considered a mitigation package aimed at improving the conservation status of these species, such that, if the benefits were not realised to the extent predicted, the effect would be nearer neutral as a fallback position?	A mitigation package beyond that prescribed in the AR HMA for Brent goose, lapwing and golden plover has not been proposed. The extent and management prescriptions for the AR HMA have been designed according to the best evidence available from the literature as described in Section 9.6.2 of Appendix A9.1 - Ornithology Technical Appendix (Examination Library Reference APP-223) and Section 6.1.2.4 of the RIAA (Examination Library reference APP-026), such that there can be confidence in its aim to provide sufficient and suitable foraging habitat for these species. The mitigation package provided by the AR HMA includes monitoring and remedial actions where necessary. Section 15.9 in Appendix J of the outline LBMP (Examination Library reference APP-203) outlines the monitoring protocol for the AR HMA, including the monitoring of habitat development and monitoring of breeding and wintering birds, with communication of results to the HMSG. The monitoring of the habitat is to check the status of the sward prior to the winter period, with any remedial actions in that case focussed on achieving the desired sward length ready for the winter. The aim of the bird monitoring is to determine management success or the requirement for corrective management prescriptions. Adaptive management is proposed based on the review of the monitoring results, such that the management (e.g. the water management, grazing intensity or application of fertiliser) can be varied from that initially set out, in order the achieve the best outcome for birds to use the AR HMA. This feedback process adds to the confidence that the required mitigation can be achieved.
1.1.30	The Applicant	Paragraph 163 of the RIAA [APP-026] states that the Arable Reversion Habitat Management Area will be	The ornithological assessment was made on the basis that the grassland in the AR HMA would be sowed prior to the first winter that construction of the solar panels would take place – this will either be pre-construction or during construction, depending on when construction commences.

Ref.	Question to:	Question	Applicant's Response
		established prior to construction, whereas paragraph 204 states that the Arable Reversion Habitat Management Area will be established during the construction phase. The Outline LBMP [APP-203] states that this will be established 'at the start of the construction phase, or prior to the start of the first winter of the construction phase, whichever is earlier'. The ornithological and hydrological assessments in the Environment Statement appear to rely on the conversion of arable to grassland prior to the start of construction of the solar panel tables and arrays. For the avoidance of doubt, could the Applicant confirm at what point in the programme the fields hosting the solar arrays, the Arable Reversion Habitat Management Area and each of the other Habitat Management Areas would be established, and how this was incorporated into the assessments? Could the Applicant also clarify where in the Outline LBMP or in the Outline CEMP the requirement for pre-construction sowing is secured? Could the Applicant provide a plan to show the relevant areas?	The ornithological assessment was made on the basis that grassland within the solar panel area will be sowed in each development parcel prior to the construction within the development parcel (and ideally in the autumn to provide best conditions for its establishment). This will mean that some areas may be sowed pre-construction and other areas may be sowed during construction, depending on when construction commences. For clarity, the timing of the sowing of grasslands in the different areas will vary depending on the timing of the start of construction. The Outline LBMP (Examination Library reference APP-203) will be updated before Deadline 3 to provide the proposed timetabling of the development of the AR HMA for different construction commencement scenarios, with an accompanying plan showing the relevant areas. These requirements would be secured through updating the relevant Appendices in the outline LBMP, which is the subject of Requirement 4 of the dDCO.
1.1.30	Natural England Kent Wildlife Trust RSPB	Are Natural England, RSPB, Kent Wildlife Trust and other nature conservation interests content that the Outline LBMP [APP-203] and draft Requirement 4 in the dDCO [APP-016] form a sound basis for ensuring that the necessary mitigation would be	Consultee response.

Ref.	Question to:	Question	Applicant's Response
		secured through any DCO or do they consider that there should there be more detail and assurance on the timing of seeding and establishment in the Outline LBMP?	
1.1.31	The Applicant	In some instances, effects and mitigation requirements recognised in the Outline LBMP [APP-203] rely on detail set out in the CEMP [APP-205]. Could the Applicant please confirm that the CEMP will therefore be the vehicle for securing the measures to address these impacts? Some necessary measures identified in the Outline LBMP do not appear to be translated to measures in the CEMP, so there is no apparent mechanism for them to be secured through any DCO. Could the Applicant check and confirm that all necessary measures are included (e.g. use of interceptor ditches, reptile mitigation strategy)? To help clarify how the different plans relate to one another, and what secures what, please could the Applicant provide a diagram to demonstrate the hierarchy/ relationship between the mitigation plans?	The Applicant confirms that where it is referred to in Table 1 of the Outline LBMP (Examination Library Reference APP-203), the CEMP (Examination Library Reference APP-205) will be the vehicle for securing the mitigation measures to address construction impacts. The Outline CEMP and Outline LBMP will be reviewed and updated ahead of Deadline 3. The updates will include a diagram in each document to demonstrate the hierarchy between the mitigation plans.
1.1.32	The Applicant	Could the Applicant clarify why some wildlife-related mitigation measures set out in other controlled documents are repeated in the Outline LBMP [APP-203] while others are not? For consistency with cross-references in the Outline LBMP to the Outline 'Breeding Bird Protection Plan' in the CEMP, should the Outline LBMP include cross-reference to measures	The Outline CEMP (Examination Library Reference APP-205) and Outline LBMP (Examination Library Reference APP-203) will be reviewed and updated before Deadline 3 to ensure that all applicable mitigation measures detailed within these documents are appropriately captured thereby ensuring their suitability for securing all mitigation measures.

Ref.	Question to:	Question	Applicant's Response
		designed to protect birds other than those at nest?	
1.1.33	The Applicant	Monitoring is planned for a number of the proposed management measures in the Outline LBMP, with remedial 'adaptive land management measures' introduced if the management measures do not work as predicted. Could the Applicant please explain how the effectiveness of the measures would be monitored and the triggers for, and details of, the adaptive measures in each case? How are these secured in the dDCO?	The approach taken in monitoring the effectiveness would be the same for each of the habitat management areas detailed within the Outline LBMP (Examination Library Reference APP-203), where monitoring is proposed. A suitably qualified ecologist and/or landscape architect will visit the site in spring (May) and summer (July/August) in Year 1 to check the establishment of seed mix and weeds. Further assessments will be made in late-spring (May) in Years 2, 3 and 5 to provide ongoing monitoring. The monitoring will focus on visually assessing the levels of growth of each management area to ensure it is establishing as required or, if further input is required, though none are anticipated. If necessary adaptive measures would comprise re-sowing/planting in areas where establishment isn't as desired or, removal of non-target species should for example target grassland being outcompeted by non-target ruderal species. In this way management would comprise mowing of the ruderals (at appropriate times of year) thereby removing the ruderals allowing the grasses to fully establish. These requirements would be secured through the outline LBMP, which is the subject of Requirement 4 of the dDCO.
1.1.34	The Applicant	Could the Applicant please clarify the relationship between section 5.1 and Appendix J of the Outline LBMP [APP-203]? Consultation responses and reports of discussions between the Applicant and Natural England and others suggest that a significant element of clover should be included in the grazing marsh grassland to be established in the Arable Reversion Habitat Management Area. Section 5.1 of the Outline LBMP seems to be based on the general grazing marsh grassland management prescription at Appendix A to that document. If this is the intended basis for the Arable Reversion Habitat Management Area,	Section 5.1 of the Outline LBMP (Examination Library Reference APP-203) provides an overview of the Arable Reversion Habitat Management Area (AR HMA) outlining the requirements, aims and associated timings whereas, Appendix J provides a higher level detail on the measures as set out in Table 3, Section 5.1. *Trifolium pratense* is considered to be the optimum species of clover for the AR HMA. The seed mix chosen is a reputable, tried and tested combination (Emorsgate) which has been used on multiple developments and with good success. The seed mix used can be adapted further to include a greater density of red clover and will be reviewed to ensure its suitability. The seed mix detailed in Table 7.1 of Appendix J is the intended mixture for use on the AR HMA. The Outline LBMP will be reviewed and updated to ensure consistency across all sections.

Ref.	Question to:	Question	Applicant's Response
		can the Applicant confirm that Trifolium pratense is considered to be the optimum species of clover for this purpose (as in the suggested seed mix at table 5.1 of the Outline LBMP)? Also, does the Applicant consider the proportion of clover in the suggested mix to be sufficient? Does the Applicant intend to use this mix for the Arable Reversion Habitat Management Area as well as for the Lowland Meadow Grassland Management Area, or is the intended seed mix and management plan for the Arable Reversion Habitat Management Area actually that set out at table 7.1 in Appendix J of the Outline LBMP?	
1.1.35	The Applicant	Following discussions with Natural England, could the Applicant provide an update on amendments to the Outline LBMP and other relevant documents in relation to the agreed methodology and measurement of fertiliser application to the Arable Reversion Habitat Management Area?	Updated information on the application of fertilisers, herbicides and pesticides has been obtained from the landowner. A supplementary report will be prepared that draws comparison between the baseline and proposed application of fertilisers in the AR HMA, including the potential effects of any change on other ecological interests including the Ramsar ditch communities. Discussions with Natural England regarding the method and measurement of fertiliser application are continuing. The principles and quantities of fertiliser application have been discussed and will be the subject of agreement in a further Statement of Common Ground between the Applicant and Natural England, expected ahead of Deadline 3. The parameters to govern adaptive management of the AR HMA to be able to adjust the management to achieve the aims of its implementation are the subject of further discussion and will result in updates to the Outline LBMP to set out in more detail the mechanisms for undertaking adaptive management. The method and measurement of fertiliser to the area beyond 10 m of the ditches and wet field boundaries will be secured by updating Appendix J of the outline LBMP (Examination Library Reference APP-203). This will be secured in the outline LBMP, and final LBMP, via Requirement 4 of the dDCO.
1.1.36	The Applicant	The Environmental Statement [APP-043] suggests that the maintenance of the grassland in the solar arrays and	The Operation and Maintenance Operator will be responsible for managing the grazing regime as it is critical to the successful delivery of the outline LBMP (Examination Library Reference APP-203), and the control of timing and location of grazing will need to be managed as part of that plan.

Ref.	Question to:	Question	Applicant's Response
		some Habitat Management Areas will rely on sheep grazing and that the current landowner will be responsible for the implementation of the grazing regime. Could the Applicant explain how this management could be secured in any DCO, how the arrangements would work in practice, and the extent to which this management could be relied upon (for example if it proved not to be economically viable)? Could the Applicant please explain how the grazing stock would be managed to avoid interference with the security measures within the solar array, such as the passive infrared sensor activated lights and alarms? Could any activation of these result in impacts on sensitive receptors (e.g. bats, nearby residents) beyond those assessed in the Environmental Statement and RIAA?	Whilst the current landowner will have the option to graze sheep onsite, it is not the case that the current landowner will be responsible for the implementation of the grazing regime. If the landowner chooses not to graze then the Operation and Maintenance Operator would typically ask a local shepherd to sign a grazing licence. Sheep grazing is always the most cost-effective form of grounds maintenance and has been successfully implemented on all of Wirsol's UK solar parks. Grazing is required, and will be secured and managed through the LBMP which is the subject of Requirement 4 of the dDCO. The analytics detection system can be configured to allow sheep to be grazed on site whilst the CCTV system is still active. To achieve this, two detection zones will be configured through the video analytics; one to be outside the fence and one to be inside the fence. This will allow sheep to graze freely inside the fence. However, should an intruder trigger both the zones outside and inside the fence, this will then create a trigger from the system to the monitoring station. The same principles apply to security lighting on transformers within the solar park where lighting can be programmed to operate either manually (i.e., can be turned off in areas when sheep are grazing) or via PIR that can be calibrated to detect humans but not sheep. Operational lighting is controlled by Requirement 2(1)(g) of the dDCO. Security systems can be configured to apply to certain areas of the site to coincide with the grazing regime, as sheep will be contained within temporary stock fencing as part of the controlled grazing proposed in the outline LBMP.
1.1.37	The Applicant	Could the Applicant confirm if the application of fertiliser to the Arable Reversion Habitat Management Area described in the Outline LBMP [APP-203] is likely to be required every year (subject to monitoring) or is this a one-off event? In its Relevant Representation [RR-826], Natural England suggests that 'Experimental manipulation of	The Applicant confirms that application of fertiliser in the AR HMA is required annually. Achieving the condition of the grass in the AR HMA would be achieved by implementing the management measures set out in Appendix J of the outline LBMP (Examination Library reference APP-203). Vickery *et al.* (1994) [Vickery, J.A., Sutherland, W.J. and Lane, S.J. (1994). The management of grass pastures for Brent geese. *Journal of Applied Ecology* 31: 282-290] found no significant difference in the intensity of grazing by Brent geese between cutting vs grazing, grazing with cattle or sheep, or between cutting two, three, four or five times. The preferred option for maintaining the short sward in the AR HMA that is required by the time the geese arrive at the site in the autumn is to graze the grassland with cattle, sheep, or both. Monitoring of the sward will be undertaken according

Ref.	Question to:	Question	Applicant's Response
		management prescriptions for Brent geese and accurate survey has shown that grass cut five times and fertilised with 50kgN/ha can support 2097 goose-days/ha.' The Outline LBMP (Table 3 and Appendix J [APP-203]) proposes to manage the grassland within the Arable Reversion Habitat Management Area by cattle or sheep grazing or by mechanical cutting. Could the Applicant explain how the maintenance of the grass in a condition equivalent to the cutting frequency specified by Natural England would be assured, and how this is secured through the dDCO?	to the prescription set out in Appendix J of the outline LBMP. The Applicant will update the outline LBMP ahead of Deadline 3 to include more detail on the monitoring plan which will include a visit during each autumn period in monitoring years to check that the desired sward length has been achieved. Mechanical cutting would then be undertaken if required. These requirements would be secured through updating Appendix J in the outline LBMP, which is the subject of Requirement 4 of the dDCO.
1.1.38	The Applicant	The RIAA [APP-026] includes a commitment 'to maintain an undisturbed (no scaring) area around the refuge in order to maximise its potential to provide resources for brent geese.' Could the Applicant confirm if this is a mitigation measure (amongst others) which has been relied upon in the RIAA to reach the conclusion of no adverse effect on integrity of the Swale SPA/ Ramsar site? Could the Applicant point to where the application documentation describes and delineates the area involved, how the measure would be implemented in practice, and how it is secured through the dDCO?	Deliberate scaring of geese is typically carried out as an arable farming practice to protect crops from damage by foraging geese, although no such practices have been undertaken at Cleve Hill in recent years. With the development of the solar park, there will be no local arable fields surrounding the AR HMA and therefore deliberate scaring as a farming management measure will not occur. As such, it is not a mitigation measure that is necessary to protect geese that use the AR HMA from disturbance and it is not necessary to secure such a measure through the dDCO.
1.1.39	The Applicant	Table 3 in the Outline LBMP [APP-203] states that winter monitoring surveys of the Arable Reversion Habitat Management Area would take place during years 1, 2, 3, 5, 10 and 15 post-establishment. This appears to be	The Outline LBMP (Examination Library reference APP-203) will be reviewed and updated before Deadline 3 to ensure consistency across all sections. • Table 3 will be updated to say monitoring will be in Years 1, 2, 3, 5 (after which the monitoring schedule will be reviewed). • Establishment will mean that the AR HMA has grown and established to the desired

Ref.	Question to:	Question	Applicant's Response
		inconsistent with Appendix J, section 15.9, of the Outline LBMP, which states that wintering bird surveys would take place in Years 1, 2, 3 and 5 (after which the monitoring schedule will be reviewed). Could the Applicant explain: • The proposed programme for monitoring the Arable Reversion Habitat Management Area? • What exactly is meant by 'establishment' of the Arable Reversion Habitat Management Area? • Why monitoring of the Arable Reversion Habitat Management Area throughout the lifespan of the Proposed Development is not considered necessary? • The proposed remedial actions? (The Outline LBMP explains that the results of the monitoring will inform the need for any remedial actions, which would be fed back to the 'operator'. If remedial measures are determined to be necessary, how would the details of such measures be agreed with relevant consultees including Natural England?)	level/quantum across this HMA i.e. it has grown to a level where it is meeting its desired function. • It is felt that monitoring across years 1-5 will be sufficient time in which the habitat will have appropriately established (as defined above) and therefore provide confidence that the management prescriptions have worked. With this confidence it would no longer be necessary to undertake monitoring across the lifetime of the project as the habitat will be established and self-maintaining. • The outline LBMP is to be amended to say, the need for any remedial actions would be fed back to the 'operator' and appropriate consultees where necessary.
1.1.40	The Applicant	Could the Applicant please clarify the difference between the two proposals for shelterbelt planting in the Outline LBMP [APP-203]? (Appendix D of the document suggests planting at 1m centres, section 10.7 suggests planting at 2m centres.)	This is a typographical error. Section 10.7 of the Outline LBMP (Examination Library reference APP-203) will be updated before Deadline 3 to refer to planting at 1 m centres.
1.1.41	The Applicant	The Ecology Chapter of the ES [APP-038] notes that that marsh frog (an invasive species listed under Schedule 9 of the Wildlife and Countryside Act	No treatment measures are proposed. Works are not expected to result in capture of any present marsh frogs therefore release/escape into the wild as a result of the works is not anticipated. In the unlikely event that any were caught, they would be humanely killed by suitably certified personnel and in doing so, ensure no breach of legislation will occur.

Ref.	Question to:	Question	Applicant's Response
		1981) is present in the drainage ditches within the application site. Given the requirements of section 14(1) of the Wildlife and Countryside Act 1981, is the Applicant intending to undertake any control measures? If not, why not?	
1.1.42	The Applicant	Could the Applicant expand on the proposal to use temporary roadway (e.g. plastic matting) during construction to prevent erosion and run-off, confirm where in the documents this is set out, and explain how this is secured through the dDCO. Could the Applicant advise if measures will be required on the development site to protect existing trees and hedges during construction, and, if so, where and how these are described and secured through the dDCO.	The predominant purpose of the temporary roadway (track matting) is to provide a transport route for the construction of the heaviest items such as transformers and their foundations. The mats provide a much larger surface area for the tracks of the transport vehicles, reducing the risk of rutting that could lead to soil erosion and run-off, particularly during wet weather. Other, lighter items such as solar PV modules, inverters and mounting structures have a reduced risk of causing rutting during transportation, with similar impacts to those caused by agricultural vehicles in the existing arable baseline. The parameters governing the use of track matting for the installation of transformers can be secured through the Construction and Environmental Management Plan, which is required under Requirement 10 of the dDCO. Reference to the use of temporary roadways will be included in a future update to the outline CEMP (Examination Library Reference APP-205) and submitted to the Examination for deadline 3. There are very few existing trees and hedges on the Development site, and those that do exist are predominantly on boundaries away from construction activities. Therefore no measures will be required onsite to protect existing trees and hedges. In any case, the deer fencing is one of the first activities onsite to secure the site and define a working area well away from any trees or hedges. If landscaping is implemented during construction, measures may need to be put in place to protect new hedgerows and trees that have been planted from construction activities. This may also include stock protection during the initial establishment of landscaping. This requirement would be secured and controlled through the LBMP, under Requirement 4 of the dDCO.
1.1.43	The Applicant	The proposed Freshwater Grazing Marsh Habitat Management Area forms part of the Swale SSSI. Ditch management, vegetation management and accessing the area are provided as example of activities undertaken as	The landowner has provided details of activities undertaken under the existing land management regime. In addition to those listed in the question, the landowner has confirmed that the land is grazed by livestock, with this generally being cattle in the summer months and sheep in winter. There are no formal agreements in place and the land is not entered into any environmental agreements. The Applicant requested any information held by Natural England in respect of the land management.

Ref.	Question to:	Question	Applicant's Response
		part of the existing land management regime in the Environmental Statement and the response to s51 advice [AS-001]. Could the Applicant: • provide further details of the activities undertaken under the existing land management regime and any extant management agreements with Natural England or others; and • confirm that continuation of the existing management regime could not lead to any detrimental impacts on the SSSI units?	Natural England responded with a document from 2005 setting out Natural England's views about management of the Swale SSSI. This document is included as Appendix 9. The Applicant can confirm that continuation of the existing management regime is not expected to lead to detrimental impacts on the SSSI units, however the Applicant also notes with reference to Appendix 9 that beneficial effects could be secured through changes to the land management.
1.1.44	The Applicant	The Environmental Statement notes the need to use 'mammal-friendly' culverts in watercourse crossings in order to avoid impacts on riparian habitats and wildlife, including protected species such as water vole. Has the Applicant considered the potential impact on such wildlife of ditch and culvert maintenance during the lifetime of the Proposed Development and could any significant effects occur in this regard?	Maintenance of the ditch network is currently undertaken under the baseline management. The design of the culverts is yet to be confirmed however; this will be undertaken with protected species such as water voles in mind thereby ensuring all requirements under UK legislation are adhered to. Ditch and culvert maintenance will be required and which would only be undertaken at appropriate times of the year and following sensitive methodologies as set out in section 13.9 of Appendix H of the Outline LBMP (Examination Library reference APP-203) to avoid adverse effect on aquatic/riparian species. No significant effects are expected in this regard.
1.1.45	The Applicant	In the Applicant's response to Relevant Representations [AS-009], it is noted that negotiations and work are ongoing with Natural England and the Habitat Management Steering Group on the various management plans and prescriptions, including the promotion of extensive reedbed systems, and the inclusion of relevant provisions in a future iteration of the Outline LBMP. Could the Applicant provide an update on the current situation regarding progress on agreeing the management and	The management and monitoring prescriptions have been the subject of further discussion and the Outline LBMP (Examination Library reference APP-203) will be updated by Deadline 3 to reflect this including additional detail where necessary.

Ref.	Question to:	Question	Applicant's Response
		monitoring prescriptions for the proposed Arable Reversion Habitat Management Area, Freshwater Grazing Marsh Habitat Management Area, Lowland Grassland Meadow Habitat Management Area (and the other Habitat Management Areas) with Natural England, the Kent Wildlife Trust, the RSPB and any other relevant consultees? Any necessary updates to the Outline LBMP should also be provided.	
1.1.45	Natural England Kent Wildlife Trust RSPB	Are Kent Wildlife Trust, Natural England and the RSPB content that the LBMP is an appropriate means of securing the monitoring of the Habitat Management Areas and provision of any necessary remedial measures?	Consultee response.
1.1.46	The Applicant	Section 9.1 of Natural England's relevant representation [RR-826] notes that the Proposed Development may result in a loss of habitats supporting farmland birds. Could the Applicant explain if any compensation is proposed for these species, in line with the Government policy aims set out in paragraph 175 of the NPPF?	Beyond the habitat management measures proposed and described in the outline LBMP, no further compensation is proposed in relation to farmland birds. The assessment in sections 9.5.3.26 and 9.5.3.27 of ES Chapter 9 - Ornithology (Examination Library reference APP-039) concludes that changes in the breeding and wintering farmland bird communities will occur, with some species benefitting and others not. The overall long-term effect on the breeding farmland bird community was assessed as positive but uncertain, whilst the long-term change in the wintering farmland bird community was assessed as having some adverse low magnitude effects and some positive low magnitude effects. The Applicant has undertaken a Biodiversity Metric Calculation for the Development using the DEFRA Biodiversity Metric methodology, which is submitted to the Examination at Deadline 2 as document 10.6.5, which concludes that there is a net gain in biodiversity as a result of the Development. The Development therefore accords with the NPPF in this regard.
1.1.47	The Applicant Environment Agency	In his Relevant Representation, Mr Hatchwell [RR-148] refers to a European eel population on the proposed development site. Could the Applicant and the Environment Agency confirm whether the drainage ditches	The Applicant understands from the Environment Agency that ditches to the east of the Application site contain fish populations (including European eels). If fish are present, the Development would result in beneficial likely significant effects on these species through the water quality improvements described in section 8.5.1.1 of ES Chapter 8 - Ecology (Examination Library reference APP-038), proposals to increase water levels in ditches within the site and the fish-friendly nature of ditch interventions.

Ref.	Question to:	Question	Applicant's Response
		and other watercourses on and around the application site contain fish populations (including European eels) and if so, whether the Proposed Development could result in any likely significant effects on these species? The Environmental Statement explains that mammal-friendly box-section culverts would be utilised for new and upgraded culverts [APP-035]. Can the Applicant explain how safe passage through the culverts of any fish and eel populations would be ensured?	The detailed design for the culverts is yet to be undertaken however, the culverts will be designed to ensure safe passage in accordance with current EA guidance provided in Appendix 10. Box culverts have also been put forward as these are open natured and will therefore allow continued access through them and therefore across the wider ditch network. Appropriate design of the culverts and timing of the construction activities will therefore ensure that there are no adverse effects or non-compliance with applicable legislation such as the Eel Regulations (2009).

2.3 Compulsory Acquisition, Temporary Possession and Other Land or Rights Considerations

Table 2.3: Applicant's responses

Ref.	Question to:	Question	Applicant's Response
1.2.1	The Applicant	Could the Applicant explain why the southern access route option cannot be committed to and the northern option discounted, given that this is a preferable option for ecological receptors?	The southern option may be perceived as preferable from an ecological perspective, but other factors must considered, e.g., the statutory tests applicable to compulsory acquisition, and regard to existing access needs/rights of owners/occupiers and electrical infrastructure in and over land. The Applicant continues to negotiate with existing landowners/occupiers to ascertain the most feasible access route and hopes to be able to make and confirm its decision in respect of the access options during the Examination, subject to those negotiations. To date, the technical assessments have proceeded on the basis of determining the worst-case parameters from these two options for the access for the purposes of EIA. Therefore, if the southern option is ultimately used, the effects of the Development will be the same, or of a lesser magnitude from those predicted in the ES.
1.2.2	The Applicant	Given the definition used for 'open space' in the Statement of Reasons, could the Applicant advise why the Statement of Reasons, Book of Reference and the Open Space Plan consider the Saxon Way as 'open	The public rights of way across and along the boundary of the development site do not constitute open space as they are solely used for access. It is not standard practice under the Planning Act 2008 or the Acquisition of Land Act 1981 to consider public rights of way to be open space. In this case the area of open space comprises the existing flood defence (comprising a wall, mounted on a vegetation covered earth bund) which includes the Saxon Shore Way public footpath. This is a

Ref.	Question to:	Question	Applicant's Response
		space' but not the other public rights of way across and along the boundary of the development site.	broad area of land and there is no delineation between the edge of the defence wall and the boundary of Plots 1/04, 2/04, 3/04, 3/05, 3/09 and 4/07. The Applicant considers that any of this land (including Saxon Shore Way) could be used by the public for recreational activities typically associated with the beach and coastal areas (such as bird watching and picnicking). The Applicant has therefore taken a very conservative approach and regarded the land to be open space.
1.2.3	The Applicant	Could the Applicant provide an update on efforts and enquiries to establish interests identified in the Book of Reference as 'unknown', as introduced at section 7.14 of the Statement of Reasons.	The term 'Unknown' has been included in the Book of Reference in respect of plots of land that are not registered at the Land Registry and where a full epitome of title has not been provided to the Applicant. These plots are described in detail in the table included as Appendix 11 but are typically 'slivers' of land that are omitted from abutting registered titles and were identified following detailed review of the titles affected by the Project. As part of the diligent inquiry process, Land Information Questionnaires were issued to adjoining landowners but these did not yield any responses that assisted in clarifying ownership of these sections of land, nor did the site notices that were erected near to the unregistered plots of land for the S.42 consultation and S.56 notification exercises. The Applicant has produced plans identifying the land that is unregistered and provided the plans to the landowners either side of the unregistered plots, and the Applicant is continuing to engage with landowners to confirm the extent of their ownership. For the purposes of the Book of Reference, the Applicant has taken a very conservative approach and added an "Unknown" entry in addition to the name of the person that the Applicant assumes to be the owner. For example, where the sliver was a ditch (the case for all but one plot) the assumption was made as per the 'riparian ownership rules,' that the owners of the adjacent land (where different) is assumed to own the half-width of the ditch (or waterway). For plot 3/12, the Applicant understands that the land is occupied by the Seasalter Chalet Owners Association (SCOA) as the sliver is contiguous with adjacent land owned by SCOA and forms part of the same area of land secured by SCOA by way a fence and a locked gate. The Applicant has therefore assumed that the SCOA is the owner of the land but also included an "Unknown" entry in the Book of Reference as the Applicant has not been able to obtain any title evidence to confirm the ownership status. For Category 2 interests, the Applicant has taken a similarly conservative approach and included those with rights over the adjacent land in addition to an "Unknown" entry. The Applicant has engaged with all possible owners and occupiers of the 'Unknown' land and continues to undertake diligent inquiry to ensure that the owners of unregistered land, and those with

Ref.	Question to:	Question	Applicant's Response
			an interest in such land, are identified where at all possible.
1.2.4	The Applicant	Given the proximity of some residential and business receptors to the development site, is the Applicant confident that there are no category 3 people outside the development site that might make a claim, and that Part 2b of the Book of Reference can remain empty?	Part 2 of the Book of Reference details the names and addresses for service of each person within Category 3 that the Applicant considers would or might make a relevant claim as defined by Section 57 of the 2008 Act. A relevant claim could be made pursuant to Section 10 of the Compulsory Purchase Act 1965, Part 1 of the Land Compensation Act 1973 or Section 152(3) of the Planning Act 2008. Part 2a list those persons with an interest in the Order land that the Applicant considers would or might make a relevant claim and Part 2b lists those persons without an interest in the Order land. For the reasons set out below, the Applicant does not consider that there are any persons without an interest in the Order land that would or might make a relevant claim. **Section 10 of the Compulsory Purchase Act 1965 (Section 10)** For those persons without a property interest that is being acquired, a Section 10 claim can only be brought if the construction of the works results in a reduction in the value of the claimant's land as a result of the physical interference with a legal right in connection with the claimant's property. The claim must meet the legal tests known as the McCarthy Rules and in summary a claim only arises if the claimant would have had a claim in nuisance but for the statutory authority of the undertaker to carry out the authorised development. The Applicant has considered the conclusions of the assessments set out in the Environmental Statement (ES) [APP-030 to APP-048] relating to impacts of the Project during construction in order to establish whether someone would or might make a relevant claim. In respect of noise, the ES concludes that the construction impacts are of less than moderate significance and not significant in terms of the EIA Regulations (see paragraph 131 of Chapter 12 of the ES [APP-016]). Effects of noise from construction traffic are assessed as minor for Seasalter Road and negligible on all other roads, both of which are not significant in terms of the EIA Regulations (see paragraph 168 of Chapter 12 of the ES). In respect of vibration, the effect of vibration due to construction activities is assessed as minor or negligible, and not significant in terms of the EIA Regulations (see paragraph 158 of Chapter 12 of the ES). In respect of emissions, Tables 16.13 and 16.16 of Chapter 16 of the ES [APP-046] summarises the impacts of construction dust with and without mitigation. The effects of construction dust are assessed as negligible which is not significant in terms of the EIA Regulations. In respect of emissions from construction vehicles and Non Road Mobile Machinery, the ES concludes in paragraphs 119 and 134 of Chapter 16 that the effects are negligible which is not significant in terms of the EIA Regulations.

Ref.	Question to:	Question	Applicant's Response
			As there are not anticipated to be any significant effects as a result of the construction of the authorised development, the Applicant considers it very unlikely that any residential or business properties in proximity to the authorised development would be eligible to make a relevant claim under Section 10. **Part 1 of the Land Compensation Act 1973 (Part 1)** Under Part 1, claims may only be made if there is a diminution in value of property as a result of physical factors such as noise, vibration, smell, fumes, smoke and artificial lighting once the authorised development is operational. During operation the Project will not emit any smells, fumes, smoke or other discharges (see paragraph 9 of Chapter 16 of the ES [APP-046]. Lighting will be used during the operational phase but will be kept to a minimum and is associated with the compound and transformer elements within the solar panel areas and will be controlled by operatives and will have PIR (Passive Infra-Red) motion sensor activated security and emergency lighting. The lighting will be fixed to the plant itself rather than standalone. The likely effect of this will be limited as there are no properties that would have a view of the compound (see paragraph 424 of Chapter 7 of the ES [APP-037]). In respect of noise, the primary sources of noise are from the inverters across the site in the PV array, the substation and the battery array. With the mitigation measures set out in section 12.6.2.1 of Chapter 12 of the ES [APP-016] in place, the residual effects at the nearest receptors would be negligible or of minor effect (in the worst case), which would be not significant under the EIA Regulations. Requirement 14 of the dDCO ensures that the operational noise rating levels set out in the ES are complied with. As there are not anticipated to be any significant effects as a result of the operation of the authorised development, the Applicant considers it very unlikely that any residential or business properties in proximity to the authorised development would be eligible to make a relevant claim under Part 1. **Section 152(3) of the Planning Act 2008** In order to make a claim pursuant to s152(3) of the Planning Act 2008, the same rules and principles that apply to a Section 10 or a Part 1 claim apply. For the reasons set out above, the Applicant considers that it is unlikely that any residential or business properties in proximity to the authorised development would be eligible to make a relevant claim under s152(3). Having considered the conclusions of the assessments of the operational impacts of the Project (as set

Ref.	Question to:	Question	Applicant's Response
			out in the ES) and having sought the expert advice of the Applicant's land agents (Gateley Hamer), the Applicant does not consider that there are any properties whereby a successful relevant claim could be made as a result of the construction or operation of the Project. The Applicant notes that the fact that no qualifying properties or interests having been identified for inclusion in Part 2b in the Book of Reference does not prevent a relevant claim being made by a person who considers that the construction or operation of the authorised development has resulted in a diminution of value of their property.
1.2.5	The Applicant	Could the Applicant explain in detail why: (i) the proposed Freshwater Grazing Marsh Management Area; (ii) the Lowland Meadow Grassland Management Area; and, (iii) the maintenance of the existing coastal defences, are considered to be: • 'development' (within the meaning of s55 of TCPA1990 and for the purposes of s115(2) of PA2008); • 'Associated Development' in accordance with the guidance in Planning Act 2008: Guidance on associated development applications for major infrastructure projects (DCLG, April 2013); and, • how they satisfy the requirements of s122(2) of PA2008 in relation to consideration for Compulsory Acquisition powers.	The creation of the Freshwater Grazing Marsh Habitat Management Area (FGM HMA) and the Lowland Meadow Grassland Habitat Management Area (LGM HMA) and the works required to maintain the existing flood defence may include engineering operations (such as earth works, means of access and drainage) that fall within the definition of "development" for the purposes on s55 of the TCPA 1990. In addition, the works required to maintain the existing flood defence constitute an activity requiring a marine licence under the MCAA 2009. Paragraph 5(i) of the Guidance on Associated Development referred to states that there must be "a direct relationship between associated development and the principal development. Associated development should therefore either support the construction or operation of the principal development, or help address its impacts". Annex A of the Guidance includes examples of associated development undertaken for the purpose of addressing impacts, this includes landscaping, flood defences and flood mitigation measures, measures to prevent coastal erosion and the creation of compensatory habitats. The proposed FGM HMA and the LGM HMA are described in section 5.4.5 and Table 5.5 of Chapter 5 (Development Description) of the ES [APP-035]. The FGM HMA is located immediately to the east of the proposed Arable Reversion Habitat Management Area (AR HMA) and is part of the existing Swale SSSI, SPA and Ramsar site. In order to ensure that the AR HMA functions sufficiently to mitigate the impacts of the Development, it is necessary for the Applicant to control and manage the functionality of the FGM HMA. For example, the grazing, vegetation cover and water control structures on the FGM HMA need to be managed appropriately so as to control any interactions with the AR HMA. The inclusion of the FGM HMA within the Order limits has been discussed with the Habitat Management Steering Group and the Applicant understands that the Habitat Management Steering Group supports the proposal for the FGM HMA to be under the Applicant's control. The land proposed for the LGM HMA originally formed part of the solar park and panels were proposed

Ref.	Question to:	Question	Applicant's Response
			to be located in this area. Following consultation feedback and iterative design as part of the EIA process, the solar panels proposed in this area were removed and set back. This land is now proposed to be managed as lowland meadow as a priority habitat type in order to mitigate landscape and visual impacts of the Development, including from public right of way ZR488, properties at Cleve Hill, Graveney and viewpoints around the heritage assets associated with the Graveney Church conservation area. Paragraph 262 of Chapter 7 (LVIA) of the ES [APP-037] refers to the lowland meadow as part of the mitigation measures for the Development. Paragraph 375 of Chapter 7 of the ES sets out the assessment of Viewpoint 8 and explains how the LGM HMA will screen and embed the Development within the landscape which will minimise the effect on views of the Development. It is necessary for the Applicant to be able to control and manage this land to ensure that the mitigation can be delivered. The works required to maintain the existing flood defence are required to support the operation of the principal development (i.e. to protect it from flooding) for the reasons set out in section 5.4.6 of Chapter 5 (Development Description) of the Environmental Statement [APP-035]. The Applicant therefore considers that Work No. 8 and Work No. 9 in the dDCO constitute associated development. Section 122(2) of the PA 2008 states that compulsory acquisition powers can be sought for land required for development to which the development consent relates or for land required to facilitate or is incidental to that development. For the reasons set out above, the Applicant considers that Work No. 8 and Work No. 9 constitute associated development and therefore are development to which the development consent relates. In any event, the land and rights required for Work No. 8 and Work No. 9 are also required to facilitate or are incidental to Work No. 1 and Work No. 2. For the reasons set out in Section 7 of the Statement of Reasons [APP-019] the Applicant considers that the tests set out in s122(2) have been satisfied. The Applicant also refers to its responses to questions 1.4.13 and 1.4.52 below.
1.2.6	The Applicant	The Applicant seeks rights in any DCO to 'inspect, maintain, repair, alter, remove and reconstruct the flood defences…' Under what circumstances does the Applicant consider that the powers of 'alteration' or 'removal' would be necessary and how could third parties be assured that any such	The Applicant refers to its response to 1.4.17 below.

Ref.	Question to:	Question	Applicant's Response
		action would not lead to them being affected by coastal flooding?	
1.2.7	The Applicant	Could the Applicant provide an update on Appendix A of the Statement of Reasons in terms of negotiations to acquire the remaining land and rights by voluntary agreement (i.e. outside the optioned area)?	The Applicant has actively sought to agree the acquisition of land or rights over land with all affected parties included within the dDCO. In respect of land outside of the optioned area (as referred to in the question), all parties have had Heads of Terms issued to them and they have been provided the opportunity to procure professional advice to assist in negotiations, the reasonable cost of which the Applicant has offered to pay. The Applicant has made good progress in reaching agreements, and the expectation is that the Applicant will have entered into private treaty agreements with the majority, if not all, landowners prior to the close of Examination. An update on Appendix A of the Statement of Reasons is set out in Appendix 12 (the updated text is shown in red).
1.2.8	The Applicant	Could the Applicant provide an update on s135 negotiations with the Crown Estate Commissioners over their consent to the proposed inclusion of land owned by the Crown or subject to Crown Interests in the DCO?	The Applicant has engaged positively with The Crown Estate since May 2018 and The Crown Estate's tenants (Kent Wildlife Trust). The parties have agreed the basis for an agreement and draft Heads of Terms have been issued to The Crown Estate. Engagement on S.135 is to be undertaken in parallel between the parties' respective legal advisors, and terms for a private treaty agreement (as is required) will be finalised prior to the close of the Examination.
1.2.9	The Applicant	Could the Applicant provide an update on Appendix B of the Statement of Reasons in terms of agreeing Protective Provisions with the various affected Statutory Undertakers?	Negotiations are progressing with: • London Array Limited (note joint update issued by email to the ExA by Pinsent Masons on 21 June 2019); • Blue Transmission London Array Limited (a meeting is scheduled for week commencing 24 June 2019); and • National Grid (the terms of protective provisions and side agreement are close to being finalised).
1.2.10	The Applicant	The dDCO (as explained in the Statement of Reasons) seeks rights under Work No 8 to 'create, manage, alter, improve and maintain a habitat management area including rights of access without or without vehicles, plant and machinery for all purposes in connection with the construction, use, maintenance and decommissioning of the authorised	The compulsory acquisition of private rights/interests over land in relation to Work No 8 would not obviate the need for the undertaker to comply with the Wildlife and Countryside Act 1981 in relation to the SSSI notification, or any other statutory consent process. Request for permission for works or an activity on an SSSI is listed as one of the additional consents that may be required in Consents and Licenses Required Under Other Legislation [APP-255].

Ref.	Question to:	Question	Applicant's Response
		development.' Does the Applicant believe that any of these rights could be taken to disapply the requirements of the Wildlife and Countryside Act 1981 in relation to the SSSI notification?	
1.2.11	The Applicant	Could the Applicant please complete the attached Compulsory Acquisition Objections Schedule and add or delete any entries that it believes would be appropriate, giving reasons for any additions or deletions?	The Compulsory Acquisition Objections Schedule has been submitted to the Examination at Deadline 2 (as document 10.4).

2.4 Cultural Heritage

Table 2.4: Applicant's responses

Ref.	Question to:	Question	Applicant's Response
1.3.1	The Applicant	Could the Applicant please explain why the built heritage assessment allocates a significance value of 'Moderate' to conservation areas that incorporate grade I and grade II* listed buildings that would merit 'High' value as individual receptors.	There are a number of reasons. Firstly, the designation (albeit conferring legal protection under national law) is administered at a regional/local level. The ES chapter methodology considers Conservation Areas to be of regional importance and this is reflected by a "moderate" level of importance/value for purposes of the EIA matric based approach. Secondly, the Applicant has taken into account that not all parts of a conservation area have equal value or significance (NPS EN-1, Para 5.8.16). The value accorded here represents an overall value. Lastly, the Conservation Area itself may not have such value without the Listed Buildings within it. The Listed Buildings have been assessed with regard to their individual value, and in a similar way, so has the Conservation Area itself. In any case, the assessment of the level of effect on the heritage significance of the area would not change. The magnitude of impact was considered to be "low", on an asset of "moderate" value, with a score of "minor" significance. Even were the level of value set to "High", the magnitude of effect is still considered to be "low" resulting in an effect of "minor" significance (see the matrix presented as Table 11.4 in ES Chapter 11 - Cultural Heritage and Archaeology (Examination Library reference APP-041).
1.3.2	The Applicant	Could the Applicant please explain what plans are in place to identify and deal with any unexploded ordnance on the application site and how these will	The Development site has been assessed as 'low' risk in a preliminary UXO risk assessment contained in section 5.0 of the Phase 1 Preliminary Site Assessment (Examination Library reference APP-229). Although this work has identified that the Development site is in a low risk area, due to the presence

Ref.	Question to:	Question	Applicant's Response
		integrate with the proposed archaeological Written Scheme of Investigation?	of military history within and close to the Development site (as reference in the Archaeological DBA (Examination Library reference APP-230)) prior to the commencement of construction, if the appointed construction contractors deem it to be necessary, a detailed UXO risk review will be undertaken to ensure the health and safety of construction workers onsite. Geophysical or magnetometer surveys of the Development site are not proposed as part of the archaeological WSI. There is therefore limited integration between any UXO survey and archaeological work onsite. If the pre-construction UXO risk review identifies any requirement for intrusive investigations, these will be undertaken in accordance with the archaeological WSI (secured under Requirement 9 of the dDCO) which will be updated to take account of the requirement. The Outline WSI will be updated ahead of Deadline 3 to ensure that this requirement is captured in the discharge of pre-construction requirements.
1.3.3	Kent County Council Swale Borough Council	Regarding the WWII pillbox (an undesignated heritage asset) on the application site, the Cultural Heritage assessment in the Environmental Statement [APP-041] concludes that no mitigation beyond that incorporated into the design of the Proposed Development can be suggested; the solar panels will occupy all of the land to the north of the asset, which represents the 'firing line' of the pillbox. Can Kent County Council and Swale Borough Council confirm if they are in agreement with this conclusion, or whether they consider there are any additional mitigation measures that might reduce the significance of effect on the WWII pillbox on the development site? Do Kent County Council and Swale Borough Council support the proposals to use the pillbox as a bat roost?	Consultee response.

Ref.	Question to:	Question	Applicant's Response
1.3.4	The Applicant Historic England	In its Relevant Representation [RR-778], Historic England states that the Proposed Development would cause harm to several listed buildings including the Grade I listed All Saints Church in Graveney, the Grade II listed Sparrow Court and Graveney Court and to the Graveney Conservation Area, which encompasses the core of the medieval settlement. Historic England considers that the harm to these assets may in some instances be greater than that assessed in the Environmental Statement. The Applicant has responded to these points in [AS-009], stating that the Environmental Statement assessment [APP-041] found the harm to these assets to be less than substantial (and not significant). Can the Applicant and Historic England comment on the extent to which this difference of opinion relates to the application of professional judgement, or more fundamentally due to the application of the assessment methodology?	The Applicant understands that Historic England consider the level of harm to the significance of these assets to be "less than substantial". However, they have applied a more nuanced judgement within that, and consider that the level of harm within the sliding scale of harm represented by "less than substantial" is in the middle of that scale, hence "moderate". Historic England and the Applicant agree that the level of Harm is therefore less than substantial. The Applicant did not apply a nuanced judgement in respect of their assessment of less than substantial harm with respect to the Listed Buildings, but did consider that any harm to the significance of the Conservation Area of Graveney to be less than substantial and at the lower end of the scale.

2.5 Draft Development Consent Order

Table 2.5: Applicant's responses

Ref.	Question to:	Question	Applicant's Response
1.4.1	The Applicant	Could the Applicant explain how exclusions from the statutory definition of commencement in draft Article 2 can be justified? How could the Examining Authority and Secretary	Pre-construction surveys and investigations may need to be undertaken (as specified in the Outline Landscape Biodiversity Management Plan [APP-203]) in advance of "commencement" in order to inform the discharge of pre-commencement Requirements/conditions. For example, some ecological surveys are required to be undertaken at specific times of year and therefore, to allow the commencement of construction works outside of this optimum 'survey period', the surveys may need

Ref.	Question to:	Question	Applicant's Response
		of State be certain that early works such as site clearance and laying of services do not damage unknown archaeology or nature conservation interests and render draft Requirements 7, 9 and 13 ineffective?	to be undertaken in the preceding year. The Applicant considers that the approach provides more flexibility to undertake these activities without the need to trigger the various pre-commencement requirements in the dDCO [APP-016]. Many of the activities in question will be undertaken in parallel with work to discharge these requirements, and as such this also helps the Applicant to shorten its implementation timetable. The Applicant notes that other projects have adopted wording which mirrors or is similar in scope to that in the dDCO, including the East Anglia Offshore Wind Farm Order 2017, the Glyn Rhonwy Pumped Storage Generating Station Order 2017, the Dogger Bank Teesside A and B Offshore Wind Farm Order 2015 (see paragraph 7.2.46 of the Examining Authority's recommendation which accepted site clearance on the basis that this is necessary for some preparatory works), and the Dogger Bank Creyke Beck Order 2015. The Applicant is however content to amend the dDCO so that these conditions must be complied with prior to any works commencing, including those in the pre-application phase.
1.4.2	The Applicant	The definition of 'maintain' in draft Article 2 is unclear. It currently implies that some activities ('inspect, upkeep, repair, adjust and alter') could be carried out beyond the extent assessed in the Environmental Statement. Could the Applicant explain what is intended and provide clarification?	The Applicant notes the ExA's comments and will make the following amendment to the next version of the dDCO for Deadline 2: "maintain" includes inspect, upkeep, repair, adjust, alter, remove, reconstruct and replace to the extent assessed in the environmental statement; and "maintenance" must be construed accordingly;
1.4.3	The Applicant	Could the Applicant check if the definition of 'Requirements' in draft Article 2 should refer to Part 2 of Schedule 1 rather than Part 3?	The Applicant confirms that this should refer to Part 2 of Schedule 1 and will amend the next iteration of the dDCO to be submitted at Deadline 2 accordingly.
1.4.4	The Applicant	Does the Applicant believe that, for clarity, draft Requirement 10 of the dDCO should explicitly specify the plans that sit within the CEMP?	The Applicant considers that the current approach is sufficient, as compliance with the OCEMP would necessarily require provision and approval of the further plans which are specified within it. However, the Applicant notes that the host authority, Swale Borough Council, has also raised concerns in this regard. Therefore, the Application proposed the following amendment in the next iteration of the dDCO for Deadline 2: Sub-para (2) to be renumbered sub-para (3). New sub-para (2) to read:

Ref.	Question to:	Question	Applicant's Response
			"(2) The construction environmental management plan must include the following documents relevant to the phase of the authorised development in respect of which it is submitted [insert list of docs]";
1.4.5	The Applicant	Could the Applicant provide a more precise definition of 'cessation of commercial operation of the authorised development' in draft Requirement 13 of the dDCO?	The Applicant assumes this is a reference to this term in Requirement 15 of the dDCO [APP-016]. The Applicant will provide amended wording for this requirement for the updated dDCO to be provided at Deadline 2, following discussions with the Environment Agency. This provision inserts a 40-year life span on the permitted development if the Environment Agency has by that time committed to managed realignment of the flood defence, and has fulfilled certain criteria in relation to this. This wording assists with the ExA's query, as it would not include reference to cessation of commercial operation, rather set a period of 40 years from commissioning of the Authorised Project.
1.4.6	The Applicant	Could the Applicant update draft Requirement 13 of the dDCO (European Protected Species) to reflect the Conservation of Habitats and Species Regulations 2017 (which consolidate the 2010 Regulations)?	The Applicant will update this provision in the next iteration of the dDCO to be provided at Deadline 2.
1.4.7	The Applicant	The approach to deadlines proposed in draft Article 5 does not previously appear to have been accepted by a Secretary of State. For what reason does the Applicant believe that this could be justified here?	The version of Article 5 included in the dDCO, which refers to deadlines, has been promoted in the DCO applications for: (a) the Hornsea Project Three Offshore Wind Farm Order (PINS Ref: EN010080), which completed its examination on 2 April 2019 ("Hornsea 3"); and (b) the Norfolk Vanguard Offshore Wind Farm Order (PINS Ref: EN010079), which completed its examination on 10 June 2019 ("Norfolk Vanguard"). The deadlines are justified because there is currently no timetable or process set out in statute, guidance or otherwise relating to an application for the transfer of benefit of a DCO. This is not helpful to parties wishing to give effect to such a transfer. Therefore, the deadlines and structure of process have been promoted in the interests of administrative expedience, transparency and certainty. Further submissions in this regard can be found in the examination libraries for Hornsea 3 (see response to FWQ 1.13.17 [REP1-122] and Norfolk Vanguard, in particular the response to first written question 20.13 [REP1-007].

Ref.	Question to:	Question	Applicant's Response
1.4.8	The Applicant	Does the Applicant believe that the dDCO documentation provides sufficient control over noise effects during construction to justify the defence against proceedings in respect of statutory nuisance provided by draft Article 7?	The Environmental Statement Chapter 12 (Noise and Vibration) [APP-016] assessed all likely noise impacts from the development, however, no significant effects were predicted following implementation of appropriate mitigation. Requirement 14 of the dDCO [APP-016] requires that prior to commencement of development a plan to be approved by the relevant planning authority setting out how the design of the authorised development has incorporated mitigation for noise. The Applicant therefore considers that adequate control over noise effects, and that a nuisance will not occur. However, it has included Article 7 in the dDCO to cover the potential for any accidental nuisance that may be caused by the Authorised Development.
1.4.9	The Applicant	In relation to compensation for the suspension of public rights of way, could the Applicant explain the absence of equivalent provisions under draft Article 11 as those included for draft Article 10?	The Applicant advises that this is a drafting error, and Article 10(6) should refer to a private right of way, not public right of way. An appropriate revision will be made to the next version of the dDCO for Deadline 2.
1.4.10	The Applicant	Given Parliamentary approval of the temporary possession regime under the Neighbourhood Planning Act 2017, does the Applicant believe that the wording of draft Articles 24 and 25 should be modified to more closely reflect the incoming statutory regime? It is noted that: • 3 months' notice will be required under NPA2017, substantially longer than the 14 days required under Article 25(2). Other than prior precedent, what is the Applicant's justification for the suggested 14 days' notice? • Under NPA2017, the notice would also have to state the period for which the acquiring authority is to take possession. Does the Applicant agree that such a requirement should be included?	The Applicant does not consider that the drafting of Articles 24 and 25 should be modified to more closely reflect the temporary possession regime under the Neighbourhood Planning Act 2017 in the dDCO. The Applicant notes that the provisions relating to temporary possession in the Neighbourhood Planning Act 2017 have not yet come into force and that regulations required to provide more detail on the operation of the regime have not yet been made (or even consulted on). The Applicant is of the view that it is not currently possible to understand or reflect accurately the temporary possession provisions as intended by Government in respect of DCOs. For example, whilst the notice period is set out in section 20(3) of the Neighbourhood Planning Act 2017, it is not yet known whether this particular provision will apply to DCOs or whether there will be any transitional arrangements. As such, it is considered appropriate to apply the 'tried and tested' temporary possession regime which has been included in numerous DCOs and Orders made under the Transport and Works Act 1992 to date. A similar provision was included, for the reasons outlined above, in the Silvertown Tunnel Order 2018 (see Article 3(1)(p)), the Eggborough Gas Fired Generating Station Order 2018 (see Article 26(12)), the A19/A184 Testo's Junction Alteration Development Consent Order 2018 (see Article 2(7)), the Port of Tilbury (Expansion) Order 2019 (Article 3(g)), the Millbrook Gas Fired Generating Station Order 2019 (see Article 27(13) and Article 28(12)). The Applicant notes that there are no residential properties within the Order land and therefore

Ref.	Question to:	Question	Applicant's Response
		• Powers of temporary possession are sometimes said to be justified because they are in the interests of landowners, whose land would not then need to be acquired permanently. The NPA2017 provisions include the ability to serve a counter-notice objecting to the proposed temporary possession so that the landowner would have the option to choose whether temporary possession or permanent acquisition was desirable. Does the Applicant agree that draft Articles should make such provision (whether or not in the form in NPA2017)?	considers that 14 day notice period set out in Articles 24 and 25 of the draft DCO remain appropriate.
1.4.11	The Applicant	Why does the Applicant believe that draft Requirement 14 is necessary, given the existence of the statutory protection and licensing schemes for European Protected Species? If the Applicant believes this Requirement is necessary, how does the Applicant propose to ensure that corresponding surveys and licensing are implemented for other legally protected species?	The Applicant assumes this is a reference to Requirement 13 of the dDCO [APP-016]. Requirement 13 is not intended to replace the EPS licencing regime, but ensure an application for a licence is made at the appropriate stage of the authorised development. The licencing regime would then govern that application. In the experience of those advising the Applicant, this Requirement is one that has been commonly sought by SNCBs in relation to previously made DCOs. If in respect of this dDCO, they do not require it, then the Applicant would be willing to delete it.
1.4.12	The Applicant	Could the Applicant update Requirement 15 of the dDCO to include the Environment Agency as a consultee to the Decommissioning and Restoration Plan, as requested by the Environment Agency in its Relevant Representation [RR-507]?	As noted in response to 1.4.5, the Applicant will amend this requirement following agreement with the EA.
1.4.13	The Applicant	Powers are sought in the dDCO under Work No. 8 for earth works, means of access and drainage in the Freshwater Grazing Marsh Habitat Management Area. The Environmental Statement	The Applicant's letter dated 22 January 2019 responded to PINS' Section 51 advice. That letter explained that the reference in the ES/RIAA to no development proposed in the FGM HMA meant that no part of the solar and energy storage facility, or related electrical infrastructure, is proposed within the FGM HMA. The reference did not mean to imply that no "development" within the meaning of the TCPA 1990 or PA08 would be undertaken. That ambiguity has hopefully now been clarified.

Ref.	Question to:	Question	Applicant's Response
		suggests that there will be no development in this area. The Applicant's letter of 22 January notes that these activities are already going on without need for consent, so could the Applicant explain why such a power would be needed in any DCO going forward?	The Applicant understands that earth works, means of access and drainage are currently being undertaken under the existing land management regime by those owning/occupying the land and those with access over it, under permitted development rights or established lawful use, but the position is not entirely clear. Given the importance of the FGM HMA in terms of mitigation and HRA, the Applicant wishes to ensure that it has the powers it needs to manage that area effectively. Without those powers the Applicant's ability to provide the FGM HMA would be prejudiced.
1.4.14	The Applicant	The Applicant seeks rights in the dDCO to 'inspect, maintain, repair, alter, remove and reconstruct the flood defences…' Under what circumstances does the Applicant consider that the powers of 'alteration' or 'removal' would be necessary and how could third parties be assured that any such action would not lead to them being affected by coastal flooding?	The Applicant notes that the ExA has quoted from Schedule 5 of the dDCO [APP-016], this being listed as a purpose for which rights may be acquired in the land where the flood defence is situated. In answering the ExA's question, the Applicant would refer to the list of activities authorised under Work No.9 in Schedule 1 of the dDCO. This sets out all of the activities that the undertaker would be permitted to undertake under the powers granted by the DCO. This does not include powers to remove the flood defence in its entirety. The Applicant refers to paragraph (aa)(iii) which requires that maintenance activities do not provide an overall increase or reduction in flood level. Given the amount of electrical infrastructure that it would be locating adjacent to the flood defence, the Applicant, or a future successor undertaker, would have a substantial commercial interest in ensuring that effects from coast flooding are managed properly. The Applicant has included the acquisition of new rights to alter and remove the flood defence to ensure that it has the necessary property rights to carry out any activity required for the maintenance of the flood defence. It is possible that some of the activities required to maintain the flood defence in the future may result in the removal and subsequent reconstruction of some parts (for example in a storm event). Such works may not form part of the authorised development (as defined in Schedule 1) and the Applicant may need to obtain additional consents, for example a Marine Licence. The inclusion of such rights in Schedule 5 does not obviate the need to obtain such consents. Section 122(2)(b) of the PA08 enables a development consent order to include the power to compulsory acquire new rights to facilitate, or that are incidental to, the development. The Secretary of State has the necessary vires to grant compulsory acquisition powers for development that is not being authorised in the development consent order, this has been demonstrated in the Hirwaun Generating Station Order 2015 and the Wrexham Gas Fired Generating Station Order 2017 where compulsory acquisition powers were granted in respect of development that was being consented separately under the TCPA 1990.

Ref.	Question to:	Question	Applicant's Response
			The Applicant considers that the new rights being sought in Schedule 5 of the dDCO are necessary to protect the future operation of a nationally significant infrastructure project and are no more than is reasonably required and are proportionate.
1.4.15	The Applicant	In Part 1 (1) of Schedule 1 of the dDCO and section 2.14 of the Explanatory Memorandum, could the Applicant expand on the difference or overlap between 'boundary treatments' and 'fencing'?	The Applicant is of the view that the reference to fencing in Part 1(1)(a) is to permanent perimeter fencing, whereas that in Part1(1)(e), boundary treatments, relates to temporary fencing possibly required during construction and additional enclosures within the perimeter fence, such as an additional security fencing within the electrical compound, enclosures around specific elements of the substation, temporary (and potentially permanent or semi-permanent) stock proof fences proposed for livestock management within areas of the site proposed to be grazed.
1.4.16	The Applicant	Could the Applicant please check the draft Requirements set out in the dDCO and the Explanatory Memorandum and ensure consistency between the two?	The Applicant has checked the two documents and notes that in the Explanatory Memorandum an additional Requirement, 6 on Highway Accesses, was included in error. The remaining requirements are correct albeit those noted as 7 onwards should be reduced in number by one to reflect the application draft DCO.
1.4.17	The Applicant	Why does the Applicant consider that DCO powers are necessary for any necessary maintenance works to the existing coastal defences, and have any alternative approaches to consenting of maintenance been considered? The Applicant seeks DCO powers to compulsorily acquire rights to access and maintain the existing coastal defences. If awarded, does the Applicant believe that any Protective Provisions would be necessary to protect the interests of the owners of the existing coastal defences, for example if they should they fail because of inadequate maintenance? Could the Applicant explain how the proposed DCO powers to acquire rights over the existing coastal	The ExA will be aware of the Environment Agency's proposal within its Medway Estuary and Swale Strategy ("MEASS") for managed realignment of the coastline within the area where the site is located. This would occur from year 20 of the MEASS, 2039. However the EA indicated that this could change to a strategy of delaying the managed realignment for between 50 and 100 years, with no active intervention, meaning that it would not maintain the flood defences, leaving them to degrade rather than be removed. The EA have indicated that it is open for landowners to maintain or construct new flood defences during the no active intervention period. The maintenance powers are therefore sought in order for the undertaker under the DCO to be able to assume maintenance of the flood defences to protect the authorised development should the EA carry out the strategy outline above. In other words, if the EA decides not to maintain the flood defence, the Applicant requires the powers and rights to be able to do for the benefit of the project. Given the large capital expenditure required for the authorised development, the undertaker would have a strong commercial incentive to maintain the flood defence, perhaps a stronger incentive than other landowners/occupiers who would not have the resource, powers and rights to do so. Therefore, the Applicant does not consider that protective provisions are necessary or justified. For the avoidance of any doubt, if the EA does not maintain the flood defence then the Applicant is

Ref.	Question to:	Question	Applicant's Response
		defences and the acquisition of all interests in the main development area can be formulated to ensure that these could not frustrate the Environment Agency's ambition to undertake managed realignment at the site in 40 years' time?	purely seeking the power to protect the Project. The Applicant is not seeking, nor should it be obliged, to take on the EA's role and duty to protect other landowners (although other landowners may benefit from the Applicant's maintenance). The Applicant considers that the dDCO is the correct place for these powers to be granted as it will provide a single permit for all future activities related to the site. Alternatives to this approach have been considered, for example, the potential for the undertaker to enter into some form of contribution agreement with the EA, e.g. an agreement securing payment from the undertaker to the EA in return for the EA committing to, and carrying out, maintenance of the flood defence. That alternative approach may prove feasible in due course. However, at this stage the Applicant must adopt a prudent and precautionary approach to ensure it has the powers it needs to protect and maintain the authorised development. This is also critical to the Applicant being able to procure insurance cover for the authorised development. As set out in the response to question 1.4.5, the Applicant has agreed with the EA a revised version of Requirement 15 that would allow managed realignment to go ahead, subject to certain conditions being met, 40 years after commissioning of the project. Therefore the EA's managed realignment ambition would not be frustrated.
1.4.18	Environment Agency	Could the Environment Agency confirm whether the assumptions in the Environmental Statement with regards to managed realignment at the site in the MEASS are correct? Could the Environment Agency confirm the current status of the MEASS and if the final version has been published?	Consultee response.
1.4.19	The Applicant MMO	Could the Applicant and the MMO provide an update on the position in relation to the alternative approaches to a Marine Licence in the dDCO (deemed Marine Licence or Marine Licence exemption, and detailed wording)?	The Applicant and the MMO are preparing an SoCG. They have continued discussions regarding the alternative approaches. The Applicant has agreed to remove references to the Marine Licence exemption from the dDCO and to solely pursue a DML within the dDCO. The MMO is supportive of this decision and is in continuing dialogue with the Applicant to agree amendments to the DML to address residual points raised in the RR. Due to the MMO's staff unavailability, a fully agreed SoCG may not be available at Deadline 2. If so,

Ref.	Question to:	Question	Applicant's Response
			the Applicant and the MMO expect to reach agreement on all matters and submit an SoCG reflecting this by Deadline 3.
1.4.20	The Applicant	Could the Applicant explain the rationale for the delineation of the Order limits along the northern boundary of the site?	The Order limits along the northern boundary of the site is either 15 m seaward of the concrete toe of the defence structure (where it could be observed, inferred from adjacent defence structures or located on available mapping) or at Mean High Water Springs as marked on Ordnance Survey Mastermap, whichever is further landward. Having the extents of the Order limits relative to the flood defences in order to give the Applicant the ability to maintain the defences was discussed in meetings with the EA and agreed via a letter from the Applicant to the EA dated 13 April 2018 and a response from the EA dated 8 May 2018. This correspondence is included as Appendix 13 to this document. The land over which compulsory acquisition powers are being sought is no more than is necessary to carry out the anticipated flood defence maintenance works.
1.4.21	The Applicant	Could the Applicant explain how documents including the Outline Design Principles and the Outline CEMP could be properly secured in any DCO? Does the Applicant believe that the dDCO should be amended to include reference to the specific documents and plans that are relied upon for mitigation assumed in the assessment in the Environmental Statement?	The outline design principles are to be a certified document under Article 34 of the dDCO, and would have to be followed in accordance with Requirement 2. The Outline CEMP, which will also be a certified document under Article 34, will provide the basis for the final, detailed CEMP to be provided under Requirement 10. This method, of providing certified documents relied upon in the DCO, either themselves or as the basis for a final detailed scheme to be approved, is an established means of dealing with such matters in made DCOs (see for example the Millbrook Gas Fired Generating Station Order 2019 (for a number of requirements), The M20 Junction 10a Development Consent Order 2017 (regarding Requirement 3, for a Construction Environmental Management Plan), The A19/A184 Testo's Junction Alteration Development Consent Order 2018 (regarding Requirement 4, for a Construction Environmental Management Plan) and The East Anglia THREE Offshore Wind Farm Order 2017 (for a number of requirements)). The Applicant considers that all necessary plans relied upon for mitigation in the ES have been secured within the dDCO. Discussions are however ongoing regarding outline documents and the Applicant will as such consider whether there is a need to combine, separate or augment documentation during the Examination.
1.4.22	The Applicant	The dDCO does not specify a time limit for the operational lifespan of the Proposed Development. In its	As set out in the response to question 1.4.5, the Applicant has agreed with the EA an amendment to Requirement 15 that would allow managed realignment to go ahead, subject to certain conditions being met, 40 years after commissioning of the project.

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		Relevant Representation [RR-507], the Environment Agency requests that a 40-year time limit is placed on the Proposed Development, so that its plans for managed realignment at the site could be implemented in pursuit of its Habitats Regulations obligations. The Environment Agency's position is supported by Natural England, as stated in its Relevant Representation [RR-826]. The Applicant indicates (in its response to Relevant Representations[AS-009] and in the Statement of Common Ground with the Environment Agency [AS-017]) that it would accept such a time limit. Could the Applicant provide suggested wording for a dDCO Requirement, or a re-wording of the dDCO, to specify a 40-year time limit on the Proposed Development?	Proposed drafting has been included in the next iteration of the dDCO submitted at DL2.
1.4.23	Environment Agency	Is the Environment Agency content with the decommissioning strategy for the Proposed Development [APP-206] in relation to leaving a suitable site for the proposed, future managed retreat works?	The Applicant believes that the EA is content in this regard.
1.4.24	The Applicant	Could the Applicant confirm if the measures in the Outline Decommissioning and Restoration Plan [APP-206] are relied on to conclude no adverse effects on the integrity of the Swale SPA and Ramsar site during decommissioning of the Proposed Development?	The Applicant confirms that measures described in the outline Decommissioning and Restoration Plan (DRP, Examination Library Reference APP-206) are required to conclude no adverse effects on the integrity of The Swale SPA and Ramsar site during decommissioning of the Development. Paragraph 4 of the outline DRP sets out that a Decommissioning Environmental Management Plan (DEMP) will include similar measures to those included in the Outline CEMP (Examination Library reference APP-205) submitted with the Application, including measures to control the risk of pollution and noise. The outline DRP therefore provides the mechanism by which there can be certainty that control measures will be implemented during decommissioning to prevent significant effects of noise disturbance, dust and hydrological changes to SPA breeding and wintering birds.

Ref.	Question to:	Question	Applicant's Response
1.4.25	The Applicant	Can the Applicant provide an update to [APP-255] with some indication of when it would apply for the Environmental Permit(s)?	The Applicant would apply for such permit(s) following grant of the DCO prior to construction.
1.4.25	Environment Agency	Can the Environment Agency confirm whether there is anything to suggest that the necessary Environmental Permit(s) would not be issued?	The Environment Agency stated in an email on 9 November 2018: "We cannot legally predetermine the outcome of any permit application. As such we do not currently foresee any impediment to the grant of a permit but this will be subject to the assessment of the permit application."
1.4.26	The Applicant	Could the Applicant explain the assumptions that have been taken into account in defining the 'realistic' worst-case design parameters for the Candidate Design? [APP-251], [APP-032], [APP-035], [APP-053]. Could the Applicant explain how the Candidate Design relates to the powers that would be authorised through any DCO?	The realistic worst-case design parameters have been set following initial consideration of the likely significant effects of the Development. The realistic worst-case parameters therefore respond to factors such as visibility of the Development (i.e., height of key components), the areas in which development will take place and the minimum distances to environmental receptors and the appearance of certain, visible elements of the scheme, where changes to parameters have the potential to affect the assessment conclusions. Solar PV and energy storage developments are relatively simple technology, and there are relatively few components which have the potentially to affect the conclusions of the ES. Generally the consideration of effects relates to the number of components, their characteristics and function or their scale and extent. Defining these parameters has therefore been the focus of the realistic worst case design parameters. Broader design parameters have been set where variation within those parameters will not affect the outcome of the assessment. An example of this is where more slightly smaller solar PV modules, or less larger modules, within the broad parameters set out, such as a total surface area of PV modules, is not considered to affect the assessment conclusions. The candidate design is encapsulated in the Environmental Statement, and therefore forms the basis for reference to this document in the dDCO (most particularly the powers to amend under Requirement 17(2), and condition 7 of the Deemed Marine Licence). In addition, given that the dDCO retains flexibility on design, which is to be approved later under Requirement 2 in accordance with the Design Principles, the Candidate Design forms the basis for this and the final design that may be submitted for approval by the Applicant.
1.4.27	The Applicant	Could the Applicant please clarify whether the 'Maximum Surface Area of Solar PV Modules within Field (ha)' (Outline Design Principles, Appendix	The 'Maximum Surface Area of Solar PV Modules within Field (ha)' refers to the actual total surface area of panels. At an 8 degree angle of tilt from horizontal, the 'helicopter view' horizontal plan area measurement

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		A) refers to the cumulative 'helicopter view' horizontal plan area measurement, or to the actual total surface area of panels.	would be approximately 1% less than the surface area of the Solar PV Modules.
1.4.28	The Applicant	Could the Applicant confirm if all the modules in a field would be erected to the same height, such that the level of the upper surface of the panels will appear 'flat' or will the top height follow the contours such that there will be variation according to the small topographic variations within the field?	The top height will follow the contours such that there will be variation according to the small topographic variations within the field.
1.4.29	The Applicant	Appendix A of the Outline Design Principles refers to individual solar array fields by way of letters (A, B, C, etc). The maps provided in the document do not label fields as such, and there is no apparent cross-reference to any other plan or map that would help the reader to identify which field is which. Could the Applicant clarify?	Appendix A of the Outline Design Principles document (Examination Library reference APP-251) will be revised to include field references and the document will be submitted prior to Deadline 3 to include solar array field references and other updates required.
1.4.30	The Applicant	In Table 5.1 of the Outline Design Principles, it states that 'the minimum separation at the central ridge of the array tables will be 300 mm.' Does the Applicant expect there to be places where this separation is greater, and if so, to what extent and under what circumstances?	The Applicant does not expect there to be places where this separation is greater, within reasonable construction tolerances. The final design will be secured through Requirement 2 of the dDCO.
1.4.31	The Applicant	Could the Applicant confirm if the flood protection bund will be installed if Works No. 2 comprise solar panels rather than battery storage?	The flood protection bund is proposed to offer protection under a flood defence breach scenario to both the Development Substation and the Energy Storage facility. Therefore, if Works No. 2 comprises solar panels rather than energy storage, the flood protection bund will still be installed in order to protect the Development Substation, but it may be reduced in scale.
1.4.32	The Applicant	Could the Applicant confirm how the dimensions (other than top height) of	The bund dimensions are controlled by Requirement 2 of the dDCO, which requires details of the scale, and other relevant features, of the authorised development to be submitted to the relevant

Ref.	Question to:	Question	Applicant's Response
		the new flood defence bund are controlled through the dDCO?	planning authority for approval prior to commencement of development.
1.4.33	The Applicant	Could the Applicant confirm if there are any construction impacts associated with temporary construction compounds that are not dealt with in the Environmental Statement and RIAA?	The temporary construction compounds are hubs of construction activity generally located at the closest point in a field not under construction to the field that is under construction. The temporary compounds would be formed of track matting or similar and predominantly be located adjacent to the spine road or closest to it (e.g., in the south eastern fields). The use of temporary compounds as temporary storage, welfare and logistics hubs for the construction of each field falls within the range of construction activities assessed in the ES and RIAA. Therefore there are no additional impacts associated with their use that have not been assessed in the ES or RIAA.
1.4.34	The Applicant	Could the Applicant advise as to whether the pyranometers discussed in Chapter 5 of the Environmental Statement [APP-034] need to be included in the Outline Design Principles, and if their impact has been assessed in the Environmental Statement?	Between 10 and 15 pyranometers are expected to be installed across the Development site towards the centre of fields. Plate 5.5b of ES Chapter 5 (APP-035) shows a typical pyranometer with dimensions of approximately 150 mm square. It is unlikely pyranometers will be readily discernible from publicly accessible areas and a small number is proposed. The Environmental Statement has assessed their impact in so far as they form part of the Development's candidate design. At the dimensions and numbers that are inherent in their utility on a solar park, there are no likely significant effects as a result of their deployment. The Applicant would be willing to place a limit on the total number of pyranometers across the Development site if the ExA considers this to be necessary.
1.4.35	The Applicant	Could the Applicant confirm the worst-case parameter taken into account in the EIA for depth and number of piles and confirm that these were included in the assessments? As no Rochdale envelope seems to be set for these in the Outline Design Principles [APP-251], could the Applicant also please confirm how it is intended to secure the related parameters in any DCO?	Table 5.1 of ES Chapter 5 - Development Description (APP-035) includes a parameter for the depth of piles of 1 to 2 m below ground level. This is derived from onsite push/pull testing undertaken in February 2018 which concluded final ramming depths of 1.4 to 1.6 m, with some allowance for future variation following detailed design. There is no assessment where the difference between a pile depth of 1 and 2 m would result in a different outcome. The expected design parameters for the piles will be subject to the submission of detailed design required by dDCO requirement 2(1)(b) Scale.

Ref.	Question to:	Question	Applicant's Response
1.4.36	The Applicant	Could the Applicant confirm the worst-case parameters taken into account in the EIA for depth and width of trenches to accommodate the grid connection and other cabling and confirm how these were included in the assessments?	The worst-case parameters relating to the trench for the grid connection cable are set out in Table 5.3 of ES Chapter 5 - Development Description (APP-035). One trench with an approximate depth of 1.4 m and width of 1.3 m is anticipated and these are the 400 kV grid connection trench parameters used in the assessments. Other cabling is described in Table 5.1 of ES Chapter 5 - Development Description (APP-035). This cabling includes cabling secured to the mounting structures and underground cabling. Paragraph 65 of Chapter 5 describes the parameters for other cabling, with trenches of between 0.5 m and 1.1 m depth, proposed, or 1 m below ditch bottoms where ditches are required to be crossed. The width of cable trenches is variable, by type of cable proposed and numbers of cables in each trench. The trench construction typically consists of a layer of fine sand of approximately 75 mm in the base of the trench which is then backfilled with all of the excavated material. This construction applies to all cable trenches onsite. These are the parameters that have been used in the assessments. Similar activities are undertaken as part of the arable baseline and the construction and operation of trenches of variable width as specified above will not result in likely significant adverse effects.
		As no Rochdale envelope seems to be set for these trenches in the Outline Design Principles [APP-251], could the Applicant also please confirm how it is intended to secure parameters relating to width, depth, length and route in any DCO?	The detailed design of cable trenches is subject to Requirement 2 of the dDCO.
		The Environmental Statement suggests that cable trenches would be backfilled with excavated material and fine sand. Could the Applicant confirm if the hydrological assessment reported in the Environmental Statement considered the possibility of such backfilled trenches having different drainage characteristics to the existing ground and acting as 'French drains'?	The fine sand component of the backfill is typically a blinding layer laid in the base of the trench in order to provide a level surface on which to lay the cables. The depth of this layer can be variable but is typically approximately 75 mm deep. The trench is then backfilled with all of the excavated material. The ES did not consider the possibility of such backfilled trenches acting as French drains. This is not likely due to the relatively low permeability of fine sand (French drains typically utilise more permeable gravel or rock fill), relative similarities in porosity between fine sand and clays, the small quantities of sand utilised, the enclosed nature of cable trenches (i.e., they would be level and would not drain to a specific location) and the use of excavated material for backfill with the same characteristics as surrounding ground.

Ref.	Question to:	Question	Applicant's Response
		Could the Applicant confirm if the EIA made any allowance for surplus excavated spoil from the site, and if so, point to where it addresses any impacts associated with dealing with it?	The EIA did not allow for surplus excavated spoil from the site. There is expected to be a net import of material to site. Excavated material is expected to consist of topsoil and clays. The flood protection bund is expected to require significant quantities of both of these materials as well as imported materials to construct. The construction of the flood protection bund is expected to utilise approximately 85% site won material.
1.4.37	The Applicant	Could the Applicant confirm how the number and dimensions of the small mounds of site-won spoil mentioned in the Environmental Statement [APP-035] are controlled through the dDCO?	ES Chapter 5 - Development Description (Examination Library reference APP-035) states: "Earthworks onsite (e.g., transformer foundation excavations) may result in small surplus of material in areas of the Development site. This material will be reused in landscaping and restoration of the Development site during and after construction. If there remains a surplus post construction, small mounds of site won material of up to 3 m in height may be formed in vacant areas of the Development site to provide a range of habitats for certain species, to be agreed with habitat management consultees in advance, through implementation of Technical Appendix A5.2: Landscape and Biodiversity Management Plan." The final number and dimensions of the small mounds of site won spoil will be controlled through the Landscape and Biodiversity Management Plan, which is secured by Requirement 4 of the dDCO. The Outline LBMP, which the LBMP must be in accordance with, will be updated before Deadline 3 to include parameters for these mounds including dimensions, number, and appropriate locations.
1.4.38	The Applicant	Could the Applicant confirm the maximum extent of land occupied by Works No.3 and provide an opinion on whether this should be a matter for inclusion in the Outline Design Principles?	Works No. 3, the Development Substation will not occupy land outside of Works No, 2 and 3 as shown on the Works Plan (APP-007). Whilst the Development Substation component of the electrical compound is not expected to exceed the dimensions shown on ES Figure 5.7a, the Development Substation and Energy Storage Facility are expected to include some overlap in utilisation, e.g., the site office building would service both facilities, therefore it is not considered necessary to limit the dimensions of either the Energy Storage Facility or the Development Substation component of the Electrical Compound further than the extents shown on the Work Plan. The Outline Design Principles document under Work No. 2 refers to 10 ha as the total area of Works No. 2 and 3 as shown on the Works Plan.

Ref.	Question to:	Question	Applicant's Response
1.4.39	The Applicant	Could the Applicant confirm how the dimensions and design of the northern access route, southern access route and the spine road are controlled through the dDCO?	In terms of the choice/election of the northern and southern accesses, the Applicant hopes to be able to make and confirm this during the Examination, subject to negotiations with landowners. In terms of the detailed design, the Applicant refers to its response to question 1.4.32. Requirement 2(1)(f) specifically requires that details of vehicular and pedestrian accesses be provided for approval prior to commencement of development.
1.4.40	The Applicant	Could the Applicant please explain why the construction compound deluge system, site office, storage and welfare building are not included in the Outline Design Principles [APP-251]?	The Outline Design Principles (APP-251) includes design principles which relate to all components of the Development Substation (Table 5.1, Work No. 3).
1.4.41	The Applicant	Could the Applicant clarify the relative heights of the new flood bund and the substation as set out in Table 5.1 of the Outline Design Principles [APP-251] from a common basis of measurement?	The crest of the new flood protection bund will be at 5.316 m above ordnance datum (AOD) as set out in Table 5.1, Work No. 2 of the Outline Design Principles (APP-251). The finished ground level of the electrical compound within the flood protection bund is expected to be below existing ground level (as site won material is expected to be used in the construction of the bund). Existing ground levels at the location of the electrical compound are approximately 1 to 2 m AOD. The finished floor level of the electrical compound is expected to be between approximately 0.5 m and 0.8 m AOD. The components of the development substation will be a maximum of 12.8 m in height above (finished) ground level (0.8 m AOD). This equates to a maximum height of substation equipment of 13.6 m AOD.
1.4.42	The Applicant	Table 5.2b of the Environmental Statement on page 5-16 [APP-035] suggests that the maximum height of the converters for the containerised storage solution would be 12,200mm. Could the Applicant confirm if this correct, and the maximum height assumed in the LVIA reported in the Environmental Statement?	This is a typographical error. The correct height is 2,890 mm. The LVIA assumes the correct height of 2,890 mm (i.e., this component would not extend above the flood protection bund).

Ref.	Question to:	Question	Applicant's Response
1.4.43	The Applicant	Could the Applicant confirm that the elements of the substation listed in table 5.2b on pages 5-18 to 5-20 of the Environmental Statement [APP-035] are intended to be subject to the Rochdale envelope limits set out in the final column of the table on page 5-17?	Table 5.2b relates solely to the Energy Storage Facility. All components of the Energy Storage Facility are subject to the Rochdale envelope limits set out in the final column of the table on pages 5-15 to 5-17 (i.e., the components of the energy storage facility will not be higher than the top of the flood protection bund). Table 5.2c sets out the parameters used for the Development Substation.
1.4.44	The Applicant	Could the Applicant confirm the basis of the worst-case visual assessment carried out for the substation, and specifically if it was assumed that all equipment would be of a height of 12.8m AGL and thus if a 'block' with those dimensions was assessed when setting the theoretical ZTV?	The worst-case visual assessment was carried out for the worst-case, highest substation parameters in Table 5.2c of ES Chapter 5 - Development Description (Examination Library reference APP-035) based on all equipment within the substation being of a height of 12.8m AGL (based on a finished floor level of 0.8 m AOD). A block with those dimensions was assessed when setting the theoretical ZTV. These dimensions were also used for the production of photomontages across the Site.
1.4.45	The Applicant	Could the Applicant clarify which flood protection bund is referred to in the functional habitat management land calculation in table 5.5 of the Environmental Statement [APP-035]?	This refers to the flood protection bund proposed as part of the Development which encloses the electrical compound.
1.4.46	The Applicant	Draft DCO Requirement 13 states that the Undertaker must submit to the Relevant Planning Authority a Special Protection Area Construction Noise Management Plan for approval before commencement of each phase of the Authorised Project. As this is material to the Habitats Regulations Assessment by the Secretary of State, does the Applicant believe that the proposed approach will be acceptable to the Secretary of State? (For example, compare Requirement 7 of the Testo's Junction DCO which requires approval by the Secretary of State following consultation with Natural England, rather than the local	The relevant planning authority (here, Swale Borough Council) is the body responsible for enforcement under Part 8 of the PA08 and the approval of reserved matters under the dDCO. When determining the SPA CNMP, as a matter of law and practice, the RPA would be required to have regard to the ES, and the HRA undertaken by the SoS. Therefore, there is no need to revert to the SoS and the SoS can be confident that the RPA would determine the SPA CNMP in accordance with the HRA and relevant legislation. Regarding the example of the Testo's Junction DCO, we note that this was a DCO for a strategic road network road. Such DCOs, unlike for other types of development, or non-strategic roads, often have the Secretary of State as the approving body for all requirements, rather than the RPA. Other examples of this practice include other strategic road DCOs such as The M20 Junction 10a Development Consent Order 2017, and The M4 Motorway (Junctions 3 to 12) (Smart Motorway) Development Consent Order 2016. This a therefore a convention associated with highways schemes, and not necessarily a practice followed in all made DCOs.

Ref.	Question to:	Question	Applicant's Response
		planning authority.)	
1.4.46	Natural England	Is Natural England satisfied with this approach and do they consider that sufficient detail is available to demonstrate that the necessary measures could be delivered?	Consultee response.
1.4.47	The Applicant	Requirement 17 (or 18, depending on which document is referred to) relates to 'Amendments to approved details'. This carries through to draft Requirement 2, allowing the finally approved design to vary from the Outline Design Principles [APP-251] (draft Requirement 2 (2) (c)). Does the Applicant believe that this Requirement should be clarified to ensure that the local planning authority can only vary schemes approved by that local planning authority, and any other person can only vary schemes approved by that other person? (i.e. is it acceptable to have something which is approved by the Secretary of State being varied by the local planning authority or another person?)	The dDCO follows the same approach to drafting as prescribed is several made DCOs, i.e. a series of "outline" documents and plans are certified by the Secretary of State as part of the DCO (if made). Those outline documents prescribe at a high level the necessary mitigation measures identified by the Applicant, through consultation and during Examination. Final versions of those outline documents will be submitted to the ExA at the end of the Examination and will reflect all amendments agreed during that Examination. Assuming the DCO is granted, certain Requirements prescribe that final or detailed documents and plans require approval and must accord with the certified outline documents. This offers the flexibility to capture in those final documents new or amended mitigation measures that are deemed necessary based on the final approved design of the authorised development. This is typically considered advantageous by relevant planning authorities, the MMO, SNCBS and those stakeholders engaged in the process. Requirement 17 of the dDCO relates to the amendment of approved details. It limits the extent to which the relevant planning authority (Swale) may approve such amendments. R17(2) states: "Any amendments to or variations from the approved details must be in accordance with the principles and assessments set out in the environmental statement. Such agreement may only be given in relation to immaterial changes where it has been demonstrated to the satisfaction of the relevant planning authority or that other person that the subject matter of the agreement sought is unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement". In other words, if the Applicant sought the approval amendments to previously approved details, Swale could only do so if the changes proposed fell within the impacts assessed in the Environmental Statement ("ES"), or are not materially different. Therefore, the approach taken to drafting Requirements does offer some flexibility, which is advantageous to all parties, but this is appropriately limited by reference to the ES. The RPA is familiar with determining conditions attached to planning permissions granted for "EIA

Ref.	Question to:	Question	Applicant's Response
			development" and "HRA development", and thus the need to have regard to an ES when doing so. As the enforcing body under the PA08 the RPA with responsibility for determining application to discharge Requirements, it is well placed, perhaps even better placed than the SoS, to consider amendments to already approved documents. Moreover, the RPA has the discretion, and in some cases, statutory obligations to consult SNCBs, in relation to those applications. For above reasons, the Applicant does not believe amendments are required to R17. It also follows the form of the same Requirement in other made DCOs (see for example The East Anglia THREE Offshore Wind Farm Order 2017, and the Swansea Bay Tidal Generating Station Order 2015). The SoS should have no concerns in this regard as appropriate controls are in place to ensure approved/certified documents can only be amended in appropriate circumstances and subject to appropriate scrutiny.
1.4.48	The Applicant	The Environmental Statement at table 5.8 (page 5-34) [APP-035] sets out an indicative candidate construction phasing timetable and draft Requirement 3 refers to a phasing scheme to be approved by the local planning authority before works commence. Does the Applicant believe that the EIA and RIAA adequately allow for the variation in timescale for construction that this represents?	Yes. The Applicant believes that the EIA and RIAA adequately allow for the variation in timescale for construction that the potential variation in construction phasing represents. The Applicant is intending to update the Outline SPA CNMP (Examination Library Reference APP-243) and submit to the Examination before Deadline 3 to ensure that it is clear where mitigation measures are required to ensure the conclusions of the EIA and RIAA remain the same regardless of variations to timescales in the phasing plan. There is an error in ES Chapter 9 – Ornithology at paragraphs 196, 257 and 274 and in RIAA paragraph 166 where it states: "If Phase 2 of the Development is completed separately from Phase 1, construction activities undertaken between 1st March and 31st August will be controlled using the methodology set out in the SPA CNMP to ensure there is no additional disturbance to wintering geese using the AR HMA." The underlined text above should read "between 1st September and 31st March…" i.e., the period during which over-wintering Brent geese, golden plover and lapwing might use the AR HMA.
1.4.49	The Applicant	Could the Applicant explain the financial arrangements that would be put in place to secure decommissioning of the Proposed Development at the end of its operational life?	Whilst the Applicant does not consider that it is necessary to provide financial security for future decommissioning costs, it is good commercial practice to set aside the necessary funds throughout the operational life of the Development and this is the Applicant's intended approach. dDCO Requirement 15 provides a clear and enforceable mechanism to secure the carrying out of the necessary decommissioning works within a fixed period from the Development ceasing to operate. The Applicant considers that the enforcement mechanisms in the Planning Act 2008 are stringent. Criminal liability is a possible consequence of a breach of Requirement 15. The Proceeds of Crime Act

Ref.	Question to:	Question	Applicant's Response
			2002 also allows local authorities to seek to recover the profits accruing to businesses and individuals who breach planning control, and part of the money recovered is retained by the relevant local planning authority. This has been used successfully by planning authorities recently to recover substantial sums via confiscation orders.
1.4.50	The Applicant	The application includes flexibility between a choice of a battery storage system, or the allocated area being used for additional solar modules. Could the Applicant clarify the implications of one versus the other in terms of useful electricity production. The Environmental Statement non-technical summary [APP-249] at paragraph 231 states '…the battery storage element of the Development will help to facilitate greater use of renewable electricity.' Could the Applicant provide further detail on what 'proportion' of production is likely to be stored? The batteries are also capable of storing electricity from the grid rather than that generated on site. Could the Applicant explain what proportion of use would be for each of these two purposes and if on-site generated electricity will take priority. If so, does the Applicant believe that this needs to be assured through the dDCO, and, if so, how?	The ratio of MWp generation to area across the developed fields within the site is approximately 1.5 MWp per hectare. The approximate area utilised for energy storage within the electrical compound is 5.23 ha, therefore, if that were utilised for solar generation, approximately 7.85 MWp of additional DC capacity could be added to the Development, corresponding with an increase in total generation of approximately 2.25%. The energy storage facility would not produce any electricity, but would enable the storage and delivery of electricity to deliver electricity network ancillary services, balancing services, and merchant trading, capturing market-driven price arbitrage opportunities. Table 5.2b of Chapter 5 - Development Description (APP-035) sets out that the energy storage facility could have a total storage capacity of approximately 630 to 700 MWh, as an example, this could equate to the delivery of 350 MW of electricity output for 2 hours. Therefore if the potential output of the energy storage facility at any given time were to be directly compared with the potential output of the solar PV, the instantaneous output capability of the energy storage facility is higher than that of the solar PV, subject to the energy having been stored in the energy storage facility and therefore being available. The comment '…the battery storage element of the Development will help to facilitate greater use of renewable electricity' is a holistic reference to the whole electricity network. As greater numbers of renewable generators come onto the network, storage and balancing services are inevitably required to allow excess energy generated at times of low demand to be stored and delivered at times of high demand. It is not possible to say with any certainty at this stage what proportion of the use of the batteries would be for storage of onsite generation versus that from the wider network. This is because the optimisation of power flows will depend on near-term market price signals and the current state of charge of the energy storage facility. An energy storage facility of greater than 50 MW has great potential to facilitate balancing and grid management on a transmission scale, both to complement onsite generation but also other generators on the network. The Applicant does not believe that it is necessary or appropriate to constrain the use of the energy storage facility by onsite or offsite sources of electricity to this level of detail through the dDCO.

Ref.	Question to:	Question	Applicant's Response
1.4.51	The Applicant	No material, finish or colour is specified in the Outline Design Principles for the mounting structures. Could the Applicant explain why this is not considered necessary?	The ES Development Description Chapter [APP-035] sets out that the mounting structures will be metal (likely galvanised steel). Galvanised steel is the most frequently used industry standard however there are instances of aluminium being used. The Development is seeking to produce low cost electricity and the mounting structure is an area of significant cost where an innovative solution could have a significant cost implication. The flexibility is therefore sought to allow a range of solutions to be considered and implemented. The Applicant would be happy to incorporate a design principle that the final materials will be provided in the Design Principles document to be agreed prior to installation. This will be included in an updated version of the document to be submitted ahead of Deadline 3.
1.4.52	The Applicant	Could the Applicant explain how the permissive path qualifies as 'development' and provide justification for the inclusion of the proposed permissive path as 'Associated Development' in the dDCO.	The provision of the permissive path could include earthworks (levelling of ground for safe access), improvement of culverts to ensure safe access, signage, gates to ensure safe access over the spine road, possible measures to ensure foot traffic only, linkage with the existing public right of way via upgraded footbridges. Therefore, the Applicant is satisfied that the permissive path is "development" as defined in the Planning Act 2008 and Town and Country Planning Act 1990. The permissive path has been included as "Associated Development" for the same reasons as set out in the Applicant's response to 1.2.5 above.

2.6 Environmental Statement, General

Table 2.6: Applicant's responses

Ref.	Question to:	Question	Applicant's Response
1.5.1	The Applicant	In the Environmental Statement, effects of minor significance and some effects of moderate significance are concluded to not be significant 'in terms of the EIA Regulations'. In the context of sustainable development and planning policy such as in NPS EN-1, could the Applicant explain how the proposed development provides proportionate and reasonable	There are very few significant effects assessed in the ES. The majority of potential significant effects have been eliminated or reduced to a non-significant level by changes to the design, including changing the layout of the solar PV modules, substation and battery compound, including in the landscape design areas of planting that will form visual screens, set-backs from sensitive habitats and the creation of substantial new areas of valued habitat, including a Habitat Management Area for geese and other birds associated with the SPA. The embedded mitigation includes the application of normal construction good practice measures, such as for surface water management and dust suppression. Mitigation, to be considered in answer to this question, therefore represents mostly embedded

Ref.	Question to:	Question	Applicant's Response
		mitigation to all identified significant adverse effects?	measures. Many of these measures (such as providing grassland and hedgerow planting) mitigate several potential effects (such as visual, hydrological and ecological), to differing extents, and thus the whole body of mitigation must be considered against the whole body of predicted significant effects, in order to understand whether the mitigation is proportionate. **Mitigation Summary** This section sets out the principal aspects of mitigation included in the Development proposal. The area of land technically developable for implementing solar PV modules within the Site Boundary, without any embedded mitigation, is 291 ha (the area shown in grey on Figure 4.1 of the Site Selection Figures appendix of the Environmental Statement [APP-052]). This was reduced to 232 ha for the Candidate Design Development Site Layout (the "Development Parcels" shown in Figure 5.2 of the Development Description figures [APP-053] and the areas set out in the Outline Design Principles [APP-251]). This represents a reduction of 59 ha, 20% of the original. The area was reduced in order to create space principally for: • Birds associated with the SPA; • Separation from, and vegetation screening of views from, residential properties at Nagden and Warm House; • Separation from drainage ditches, given their value for hydrology and ecology; • Avoidance of views of the solar PV modules on the sloping ground in fields Y and Z; and • Separation from public rights of way through the Site. The outline Landscape and Biodiversity Management Plan (APP-203) sets out measures to avoid adverse effects and enhance beneficial effects on views, the landscape, protected species, birds associated with protected areas, water quality, valued habitats and biodiversity generally. This is integral to the design of the Development and was developed alongside the spatial design of the solar PV modules. The Outline Construction Environmental Management Plan (CEMP) (APP-206) sets out measures that minimise water run-off and the risks of pollution, for the appropriate handling of waste and to avoid effects on breeding birds during construction. These include working hour limitations and the use of professional clerk of works roles to ensure management mitigation measures are implemented effectively. These are largely, typical good practice measures, applied to the Development site. The Mitigation Schedule (APP-252) sets out all non-embedded, specific mitigation proposed. This includes:

Ref.	Question to:	Question	Applicant's Response
			• Field management prescriptions to minimise effects on important ecological features; • The potential for known and unknown, buried archaeology is low across the Site generally, and archaeological effects are further minimised by the implementation of the Outline Written Scheme of Investigation; • The Outline SPA Construction Noise Management Plan (APP-243) sets out measures designed to avoid significant effects on the qualifying features of the Swale Estuary SPA; • The specification of required maximum noise levels during the operational phase of the Development (Chapter 12, Noise and Vibration (APP-016); • The Outline Construction Traffic Management Plan (APP-245) sets out measures to avoid significant effects and further reduce potential effects along routes to be used by construction traffic and public rights of way, during construction. These are largely, typical good practice measures, applied to the Development site. **Significant Effects Summary** Chapter 7 - Landscape and Visual Impact Assessment (APP-037) reports substantial mitigation for potential visual effects, all of which is embedded mitigation. Significant residual effects remain, for some landscape and visual receptors across a limited geographical area. These effects are on recreational users of PRoW which run through the Core Landscape Study (CLS) Area and to the southeast of the CLS Area, and on the landscape of the CLS Area itself. The properties at Warm House and Nagden will receive significant effects, though those at Warm House will be mitigated, and those at Nagden will be partly mitigated, once proposed planting matures. Chapter 11 - Cultural Heritage and Archaeology (APP-041) identifies a significant effect on the setting of the World War II Pillbox (an undesignated asset) during the operational phase, which will be reversible on decommissioning. Chapter 15 - Interrelationships (APP-048) sets out effects arising from the combined effect of multiple effects of a different nature when acting on a single receptor, are assessed as significant during the construction and future decommissioning phases for the properties at Nagden and Warm House. Following application of the proposed mitigation measures, no other adverse significant effects are predicted. **Mitigation to Eliminate Significant Effects** To reduce the landscape and visual effects to a "not significant" level would likely require removal of approximately 186 ha of land technically developable for implementing solar PV modules that is included in the proposed Development (on the basis of maintaining a separation of c. 300 m between

Ref.	Question to:	Question	Applicant's Response
			visual receptors and solar PV modules), equating to a reduction of over 80%. In considering the loss of potential environmental benefits associated with the Development, as set out in Chapter 15: Climate Change (APP-045), that this reduction would entail, and the limited geographical area and low population/receptor numbers affected by the significant effects, such a reduction is considered excessive and not proportionate. This change would also likely eliminate the significant interrelationship effects. The World War II Pillbox is located to the south of the Site, however, in the area where the solar PV modules would be retained in the above scenario. To reduce effects on this, also, to a not significant level would likely require removal of all solar PV modules proposed. **Conclusion** Substantial levels of mitigation have been proposed in order to avoid or reduce the large majority of significant effects. Many of those effects have not been assessed, because the mitigation was embedded in the design of the Development. Those significant effects that remain, following mitigation, affect a small number of receptors and would require a dramatic reduction in the scheme (of 80 to 100%) to avoid any significant effects. Addressing these residual significant effects would not be proportionate mitigation. The mitigation proposed is therefore proportionate, and an appropriate balance between maximising the beneficial effects and minimising the adverse effects of the Development. This conclusion was reached after taking into account consultation responses through the pre-application DCO process.
1.5.2	The Applicant	Could the Applicant provide a definition of the terms 'indirect' effects and 'embedded' mitigation as used in the Environmental Statement? Could the Applicant check and confirm that in all cases where mitigation is said to be embedded in the project (and therefore does not need to be secured through, for example, a Requirement) that this actually the case – e.g. the selection of 'quietest available' construction equipment.	Indirect effects on a receptor, as referred to in the ES, are generally those that are a result of an effect of the Development on a different receptor. For example, the significance of a heritage asset is contributed to by its setting – the area around the asset that helps define it. The asset is afforded some protection, but the setting is protected only insofar as it contributes to the significance of the asset. If the Development has a visual effect on some part of the setting, though not the on the asset itself, the effect on the asset would be indirect. As another example, the Development will contribute to the local economy by construction workers spending money there – this is a direct effect. When the recipients of that spent money (such as shops and accommodation providers) in turn spend that money, on employees or purchasing, this is an additional benefit to the economy, which is indirect. Embedded mitigation is mitigation that forms an integral part of the Development, without which the Development would not be the same. This includes: • Changes to the design that reduce environmental effects; and

Ref.	Question to:	Question	Applicant's Response
			• The application of normal construction/implementation good practice measures, such as for surface water management and dust suppression, that reduce environmental effects. To clarify, embedded mitigation does not exclude aspects that need to be secured through a Requirement. The second point of embedded mitigation, above, is not fully built into the design (i.e., it cannot be shown on plan or specified in parameters describing the Development), and should be secured through, for example, a Requirement. An example of this would be Requirement 10, as proposed in the dDCO (APP-016), relating to the Construction Environmental Management Plan. It is not reasonable to suggest that the Development would be constructed wholly outwith the requirements of relevant construction law and normal good practice, and assess effects initially on that basis, because such practice would not be tolerated by any party to the Development. Normal good construction practice is therefore assumed, considered as embedded mitigation and would be secured by Requirement. The landscape design proposals (on plan) are a firm, designed aspect of the Development that has evolved through the iterative consideration of the mitigation of potential effects and the enhancement of potential benefits, from the outset of the project until submission of the application. The measures set out on plan require implementing in order to be effective, however, and the implementation principally is set out in the Outline Landscape and Biodiversity Management Plan (LBMP), which is secured through Requirements 4 and 5 of the dDCO. The design proposals would not have been made in the absence of proposals for their effective implementation, because they are integral to each other. It would therefore not be meaningful to divorce the concepts of the designed (on plan) aspects of mitigation, and their implementation (through Requirement), and it would certainly not be practicable in the ES chapter to assess the effects of these measures without effective implementation and propose effective implementation as mitigation. The LBMP is therefore reasonably considered to be embedded into the Development. As the above examples show, there is the potential for subjectivity in deciding whether a specific measure is or is not embedded in the Development. For EIA, the likely significant effects of the Development are the residual effects, not the effects prior to mitigation. In order for decision makers to be able to rely on this, the mitigation must be secured in the consent, whether the mitigation is embedded or not. The Development proposal, together with all embedded mitigation and specific mitigation, comprises the "on plan" or "parameterised" design aspects, supplemented by documents setting out control or implementation measures and a small number of specific mitigation measures that are set out in the Mitigation Schedule, and updated version (Revision B) of which has been submitted at Deadline 2 as

Ref.	Question to:	Question	Applicant's Response
			document 7.2, Revision B. The embedded design mitigation and documents setting out control or implementation measures are all captured by the Development plans and Requirements as set out in the draft DCO. With respect to the example given, of selection of the quietest available equipment (referred to in section 12.4.2 of Chapter 12 of the ES (APP-016), we note the following: • Firstly, the commitment was made in relation to operational noise, so does not refer to construction equipment; and • Secondly, the mitigation was embedded in the sense that a prediction of noise levels was made based on certain equipment, which demonstrated that the specified noise levels could be met, and the noise levels could therefore be set as limits for the operational phase of the Development. The text was caveated with "where possible"; in practice, this is expected to mean that where two equivalent options are available, the quieter would be chosen, as long as these lead to compliance with the operational noise limits set out in that chapter. This would be secured by a Requirement such as Requirement 14 in the draft DCO.
1.5.3	The Applicant	Could the Applicant clarify what is meant by 'moderate' in table 8.6 of the Environmental Statement [APP-038]?	Moderate in Table 8.6 describes the ecological value of the Phase 1 Habitats identified present. This is based on the habitat type itself and the level of suitability/potential it provides for protected species (flora/fauna). The values used are negligible, low, moderate and high on a sliding scale with negligible providing no/incredibly low potential for protected/notable species through to high, which is habitat that is suitable for a range of protected/notable species. An assessment was also made of the habitat quality to inform the value in Table 8.6. The rationale column within Table 8.6 provides reasoning, with moderate typically determined for habitats important as part of the Kent Biodiversity Action Plan or for its suitability for supporting named protected or priority species e.g. habitat value for bats are described within the Bat Conservation Trust guidelines as being of negligible, low, moderate or high value to foraging bats.
1.5.4	The Applicant	Could the Applicant provide clarification on the significance of effects on footpaths in section 13.5.2.2 of chapter 13 of the Environmental Statement [APP-043].	Section 13.5.2.2 of ES Chapter 13 (APP-043) refers to operational phase effects on the recreational amenity of the following receptors: footpaths, the national cycle route 1 and bird and wildlife watchers. The assessment is of effects on recreational amenity, which includes, but is not limited to, visual effects. This distinction and the basis for assessment is set out in paragraph 163 of Chapter 13. Visual effects (ignoring any other aspect of amenity) are assessed in Chapter 7 of the ES (APP-037). The significance of effects is summarised at the end of the sub-section within Section 13.5.2.2 for each footpath. These are drawn together in the following table. All effects on all footpaths not assessed would be not significant.

<table>
<tr><th>Ref.</th><th>Question to:</th><th>Question</th><th>Applicant's Response</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><th>Path</th><th>Significance</th><th>Comment</th></tr>
<tr><td>ZR484, CW55, The Saxon Shore Way and the proposed England Coast Path</td><td>Minor, within 5 km of the Development, and not significant.
Beyond 5 km, effects would be negligible.</td><td>Whilst visual effects would be significant, from locations in proximity to the solar PV modules, overall recreational amenity effects are assessed as not significant.</td></tr>
<tr><td>ZR485</td><td>Moderate, and significant</td><td>Mitigation has sought to improve aspects of the experience of walking on this path, though the experience would remain materially different to the baseline.</td></tr>
<tr><td>ZR486</td><td>Negligible, and not significant.</td><td>Limited visual effects and no effect on other aspects of amenity.</td></tr>
<tr><td>ZR488, ZR692 and CW90</td><td>Minor in localised places, otherwise negligible, and in all cases not significant.</td><td></td></tr>
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</td></tr>
<tr><td>1.5.5</td><td>The Applicant</td><td>The Mitigation Schedule is said to exclude 'embedded mitigation' (see paragraph 5 of [APP-252]). As proposed, many of the measures that are excluded are reliant on the certification of 'outline' DCO application documents and their later, accurate translation into more detailed versions by the Applicant for approval by the relevant authority when discharging the related Requirements. As such, does the Applicant believe that these are 'certain' or 'inherent' in the proposals, or would they require further action in order that they could be secured?
The DCO Examination and subsequent stages rely on a clear mitigation route map to ensure that all mitigation measures used in the assessment are</td><td>Detailed, specific descriptions of construction and operational equipment, methods, controls and reporting requirements depend on the aspects of the Development that are within the Rochdale Envelope (i.e., where optionality remains in the design/delivery) and hence are not specifiable at this stage. This is normal in renewable energy developments, where detail depends on the specific technology model selected. The detailing and review of such information is typically carried out between consent and construction (of a particular phase, if phased), as the technologies are selected and procured, and construction contractors are engaged.

This process is effective, and mitigation is secured through the consent, as long as the outline DCO application documents include sufficient detail so as to ensure mitigation of the potential effects. The wording of the relevant Requirements in the dDCO require that the final, approved document is consistent with the outline, hence ensuring all such measures, or their equivalent, are included in the final document. By ensuring that relevant consultee bodies are consulted on the final document prior to its approval by the Local Authority, external expertise and review provides further reassurance that the outline measures are implemented, and that the detailed measures are appropriate to the technology then proposed.

In the experience of the Applicant, and specifically in the experience of the consultant drafting this response (Arcus Consultancy Services Ltd), this process works effectively. Arcus has acted as Ecological Clerk of Works (ECoWs), Hydrological Clerk of Works, Archaeological Clerk of Works and</td></tr>
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Ref.	Question to:	Question	Applicant's Response
		secured. In light of this, the Examining Authority requests the Applicant to update the Mitigation Strategy to: • include all mitigation measures (whether designed-in or added on) to ensure that a clear and comprehensive mitigation route map is established; and • in each case, add reference to specific dDCO Requirements (or other legal means) which could secure the proposed mitigation measures.	Planning Monitoring Officer, on numerous renewable energy schemes (including on- and off-shore wind farms, solar farms and anaerobic digestors), and has always found that, where a mitigation/control measure is specified in outline at application stage, the post-consent process is effective in delivering the required measures as per the intention of the ES. As additional reassurance, there will be 'safety net' in place, in the form of ECoWs, to ensure that good practice is followed. The dDCO (APP-016) includes suitably worded Requirements as to ensure the outline measures are transposed into detailed measures without loss of the mitigative effect. In particular: • Draft DCO Requirement 10 requires that the Outline Construction Environmental Management Plan (CEMP) is implemented; • The Outline CEMP (APP-205) includes for the provision of an Ecological Clerk of Works (ECoW); and • The ECoW's role, as set out in the Outline CEMP, includes "monitoring compliance with the ecological mitigation works contained in the ES … [and] … monitoring the compliance with environmental management measures contained in the ES". This provides security that all mitigation measures set out in the ES will be implemented, even if not explicitly written into a DCO Requirement. The Mitigation Schedule has been updated and submitted at Deadline 2 as document 7.2, Revision B.
1.5.6	The Applicant	Flexibility is sought in the proposed development, such that it could be built without the energy storage facility (or with a smaller energy storage facility) when the vacant area would be developed with additional solar panels. The Environmental Statement states 'For all technical assessments, the realistic worst case is that the electrical compound is developed to its maximum extents, as set out above therefore the extension to the solar park is not assessed separately in this ES' – see paragraph 94 of Chapter 5 of the ES [APP-035]. Could the Applicant provide further	The Development of the Energy Storage Facility within Works Area 2 and 3 shown on the Works Plan (APP-007) is considered to represent the worst case, as it requires more material to be delivered by road, is more intrusive in construction terms and results in greater noise emissions during operation. Potential areas where a solar array in this area could potentially present an alternative worst case are construction noise (noise emissions from piling), and glint/glare and visual effects during operation. In the case of construction noise, there are solar panels proposed at similar ranges or closer to the Swale SPA and Ramsar site and therefore the effects of developing solar panels in Works No. 2 and 3 would be the same as in other areas of the site, and have therefore been considered. For visual and glint/glare impacts, the substitution of part of the electrical compound for solar panels is not expected to have a substantive positive or adverse effect on any aspect of the assessment. The assessment can be updated to include this if required. In respect of the RIAA, the energy storage facility option is considered to represent the worst-case

Ref.	Question to:	Question	Applicant's Response
		justification that this would represent the worst case for all relevant aspects examined in the EIA, including, but not restricted to, glint and glare, noise (construction and operation) and traffic and transport (deliveries)? As the RIAA [APP-026] addresses only the battery storage option, could the Applicant provide justification, with reference to the qualifying features of the Swale SPA and Ramsar site, that the battery storage option represents the worst-case scenario?	and as it represents a different aspect of development from the solar arrays, it is important to consider the effects of the energy storage facility separately, as the wider solar park impacts are covered extensively in areas of similar character and proximity to the Swale designations. During construction the effects of developing solar panels in Work No. 2 and 3 of the Works Plan (APP-007) would be the same or of a lesser magnitude than those assessed elsewhere as part of the Development and therefore the worst-case scenario has been addressed.
1.5.7	The Applicant	Could the Applicant confirm that the EIA has fully assessed all effects where optionality remains in the project design? The EIA assesses the northern option for the access road as this is said to constitute 'a worst case scenario as this would create a greater length of new access road and would be potentially more visible': is this true for all LVIA receptors (including RVAA receptors)?	Yes, the EIA assessed the worst-case Development scenario for each effect. Where there is no optionality, the worst-case scenario is the only scenario. Where there is optionality, the worst-case is considered. The approach is set out in Section 5.3 of Chapter 5 (APP-035) of the ES. Each technical chapter of the ES (APP-037 and APP-038) includes an introductory section entitled "Development Parameters Assessed", which sets out the rationale for the inclusion of scenarios in the assessment in chapter. It is possible that certain aspects of optionality, such as the variation in appearance of the panels for a range of panel slope angles, may have an element of subjectivity. In these cases, the lead assessor of the given effect has applied professional judgement in deciding which scenario constitutes the worst-case, and that has been assessed. Where alternative scenarios affect the assessment outcomes, the specific option used in the assessment is stated in the text, notably in the Noise Chapter (APP-016). Where optionality exists in delivery of the Development (as opposed to design), such as in construction phasing, the worst-case is also assessed, notably in the Traffic Chapter (APP-044) and Air Quality Chapter (APP-046) of the ES. Where effects are beneficial, a conservative approach has been taken to optionality, using a scenario that is not the candidate design but may be a realistic scenario within the range of optionality, notably in the Climate Change Chapter (APP-045) of the ES. In response to the specific point made in the question (the optionality over the access road route, i.e., whether it goes to the north or to the south of the existing Cleve Hill Substation), the Applicant can confirm that the northern option is assessed as the worst case for all technical assessments. For

Ref.	Question to:	Question	Applicant's Response
			visual effects, the RVAA (APP-210) notes, in paragraph 43, that the northern option is assessed as a worst case, because "this would create a partial new access road and would be potentially more visible". It is noted that, from the closest properties (Crown Cottages) there is screening of views of the southern access road option by existing vegetation between the cottages and the site boundary. The northern access road option may be visible from within the curtilage of Graveney Hill Farm, however. Neither option is particularly visible from any visual receptor, however.
1.5.8	The Applicant	Does the Applicant believe that the approach to using the 'candidate design' for the EIA in a context of sometimes wider Rochdale envelope parameters in the Applicable Design Principles is robust? (By way of example, the LVIA was carried out on the candidate design - is the Applicant content that this is the 'worst case' assessment to the upper limits of the Rochdale envelope and that the EIA has properly considered the worst-case development once consented and built?)	Yes, the approach to using the candidate design in the ES is to assess the candidate design where it is worst-case, and to use other scenarios where the candidate design is not worst case, and it is this "used as appropriate" approach that makes it robust. Generally, for adverse effects, the maximum development quantum within the Rochdale Envelope gives rise to the worst-case effects, and this is what the candidate design provides. An example would be maximising the area within each field that could be covered by solar PV modules, or maximising the height above ground of the solar PV modules in any given field. The candidate design is very useful for providing a clear definition of what are typically the worst-case parameters. It does not always represent the worst-case scenario, however, and, where this is the case, the technical chapters of the ES (APP-037 and APP-038) identify the worst-case scenario and assess that; this is the exception rather than the rule, however, which is why the candidate design is used as one example design, rather than a ubiquitous worst case. Each technical chapter of the ES (APP-037 to APP-048) includes an introductory section entitled "Development Parameters Assessed", which sets out the rationale for the inclusion of scenarios in the assessment in the chapter. It is possible that certain aspects of optionality, such as the variation in appearance of the panels for a range of panel slope angles, may have an element of subjectivity. In these cases, the lead assessor of the given effect has applied professional judgement in deciding which scenario constitutes the worst-case, and that has been assessed. Where alternative scenarios affect the assessment outcomes, the specific option used in the assessment is stated in the text, notably in the Noise Chapter (APP-016). Where effects are beneficial, a conservative approach has been taken to optionality, using a scenario that is not the candidate design but may be a realistic scenario within the range of optionality, notably in the Climate Change Chapter (APP-045) of the ES. The Applicant is content that the LVIA correctly assesses the candidate design as the worst-case scenario within the range of optionality provided by the Design Principles. Most notably, for the candidate design, the panel heights and other component sizing are maximised and the coverage of land by panels is maximised, and these are all worst-case scenarios.

Ref.	Question to:	Question	Applicant's Response
1.5.9	The Applicant	Could the Applicant please expand on the cumulative and in-combination assessments in relation to the Kemsley Paper Mill (K4), (Environmental Statement Table 2.2 [APP-032]; RIAA Table 7 [APP-026]). Were other projects proposed at the same site included in the cumulative and in-combination assessments – for example, the Wheelabrator Kemsley Generating Station (K3) and the Wheelabrator Kemsley North Waste to Energy Facility? Could the Applicant confirm whether the conclusions presented in relation to cumulative and in-combination effects of the Proposed Development with Kemsley Paper Mill (K4) also apply when these other developments proposed on the Kemsley site are considered?	As set out in Chapter 2 - EIA (APP-032) of the ES, the Zone of Influence (ZOI) for cumulative developments in relation to the Development Site, for all potential cumulative effects except on the Swale SPA, "was established as being a maximum of 10 km, and substantially less than this for some technical assessments". As such, only developments within 10 km of the Development Site Boundary were included. Kemsley Paper Mill, which is marginally outside this 10 km study area, was also included, in response to a specific request from consultees at Scoping stage. Developments in the vicinity of Kemsley were included in the assessment of potential cumulative effects on ornithological interests associated with the Swale SPA. These included Kemsley Paper Mill (K4) CHP Plant, Kemsley IBA Recycling Facility, and Land off Barge Way, Kemsley Fields Business Park, Kemsley. These are all included in Table 2.2 in Chapter 2 of the ES. Developments beyond 10 km from the Development Site were not included if they did not affect habitat that could be suitable for birds associated with the SPA. This included the Wheelabrator Kemsley Generating Station and the Wheelabrator Kemsley North Waste to Energy Facility, which is an existing site (it was under construction in 2016), which has applied for consent for a change to upgrade power output. The application has not yet been lodged with the Secretary of State, though the PINS website includes a Scoping Report and Scoping Opinion. The land for the upgrade project is the same land that is currently already developed, and does not have value for birds associated with the SPA. Hence, there is no potential for cumulative effects on birds associated with the SPA together with the Development. The Wheelabrator Kemsley Generating Station and the Wheelabrator Kemsley North Waste to Energy Facility is partially within and partially outside the 10 km Study Area for cumulative developments for non-avian assessments, however was not included in the list. Given the distance from the site, combined with its site already having been developed, its inclusion would not affect the cumulative and in-combination effects of the Proposed Development as assessed in the ES.
1.5.10	The Applicant	The cumulative and in-combination assessments (in the Environmental Statement and RIAA respectively) focus on land-based developments. Could the Applicant explain, following consultation with the MMO, whether there are any other developments, plans or projects in the marine environment which could result in	The MMO has provided a list of other developments, plans or projects which is provided at Appendix 14. The MMO provided their view that, the marine-impacts arising from works are likely to be relatively minor based on the scale and nature of the project and that the area is relatively 'quiet' in terms of Marine Development. The Applicant's position is that as the activities to be undertaken in the marine environment form a continuation of the existing baseline activities, and as there are no new impacts predicted on the marine environment as a result of the Development, there is no potential for other developments, plans or projects in the marine environment, in addition to those considered, which could result in

Ref.	Question to:	Question	Applicant's Response
		cumulative or in-combination effects with the proposed development?	cumulative or in-combination effects with the Development.
1.5.11	MMO Natural England Swale Borough Council Kent County Council Canterbury City Council	Could the MMO, Natural England, Swale Borough Council, Kent County Council, Canterbury City Council and any other local authority please confirm whether they are content that all other developments, plans and projects that have potential to result in cumulative or in-combination effects together with the proposed development have been identified and appropriately assessed by the Applicant in the Environmental Statement (Table 2.2) [APP-032] and the RIAA [APP-026] (including any relevant marine licensed projects)?	Consultee response.
1.5.12	The Applicant	Could the Applicant provide an explanation of Environmental Statement Chapter 15 [APP-045] paragraph 44, which states that the 'Cloud cover will most likely decrease in a future climate change baseline relative to the current baseline. This would improve the performance of the solar farm, providing increased energy from solar irradiation. This constitutes a minor beneficial effect'? Is this a claim of beneficial effect from the proposed development?	No. Paragraph 44 is within section 15.4.1 of chapter 15 (APP-045) which assesses the 'Vulnerability of the Development to Climate Change' and therefore relates to the effect of climate change on the Development. The minor beneficial effect refers to increased electricity generation as a result of a projected future decrease in cloud cover. Section 15.4.2 assesses the 'Influences of the Development on Climate Change'.
1.5.13	The Applicant	In relation to the potential risk of fire from the proposed battery array, Environmental Statement Chapter 17 [APP-047] paragraph 168 states 'Fire detection and suppression features could be installed to detect… and suppress fire… to minimise the effect of any fire'. Is the Applicant able to commit to installing these features	Fire detection and suppression features will be installed as part of the Energy Storage facility. These fire suppressing design features will be secured through the Outline Design Principles as referenced in Requirement 2 of the dDCO. The Outline Design Principles will be updated to include this and submitted to the Examination by Deadline 3.

Ref.	Question to:	Question	Applicant's Response
		and, if so, explain how they could be secured in any DCO?	
1.5.14	The Applicant	In relation to the Sequential Test Report and analysis [APP-201], could the Applicant please provide clarification as to how the relative environmental effects of the alternative sites influenced the choice made?	The Sequential Test Report (APP-201), is focused principally on identifying whether there is a better alternative to the Development Site in terms of agricultural land classification, as required by the NPPF and PPG. Technical and environmental constraints are applied such that potentially developable areas are reduced. This accounts for the main potential environmental effects of each site (on designated areas and on land use), but does not assess factors such as visibility, residential amenity or effects on footpaths, which are beyond the scope of that report. Having identified potentially developable areas, these were compared in terms of NPPF and PPG as set out in the Sequential Test Report, and found to be equal, with the Development Site providing both the largest potential area and the area closest to the grid connection point. These two factors in favour of the Development Site provide increased beneficial effects in terms of low carbon electricity generation and reduced adverse effects in terms of a lesser effect from the grid connection.

2.7 Landscape and Visual Impact Assessment (LVIA), including RVAA and Glint and Glare

Table 2.7: Applicant's responses

Ref.	Question to:	Question	Applicant's Response
1.6.1	Natural England Swale Borough Council Kent County Council Canterbury City Council	Could Natural England, Swale Borough Council, Kent County Council and Canterbury City Council confirm that they are content with the locations of the viewpoints and photomontages presented in the LVIA?	Consultee response.
1.6.2	The Applicant	Could the Applicant confirm the correct viewing distances for the baseline photographs and the photomontages, given the different sizes of their reproduction? Could the Applicant check the baseline viewpoint photographs and visualisation montages for correct labelling, notably those for viewpoint 22, and submit	The correct viewing distance is stated in the bottom left corner of each figure and referenced as the 'Principal Distance' in line with current SNH standards as below: **Current SNH and Landscape Institute (LI) guidance relating to image viewing distances.** The LI guidance refers to 'SNH guidance 2006', but this is an outdated version of the guidance. We have therefore used the current SNH (2017 v2.2) guidance for all Cleve Hill figures as this represents the most up to date methodology available.

Ref.	Question to:	Question	Applicant's Response
		corrected documents where necessary?	In terms of how we have defined viewing distances (or principal distance this is set out as follows using an extract taken from "SNH Visual Representation of Windfarms Feb 2017 v2.2". **Viewing distance** '102 In the previous (2006) version of this guidance it was recommended that images should be viewed at a correct "viewing distance" to recreate the correct perspective geometry of the view. However, viewing printed images at a 'correct viewing distance' is not easy, especially when provided as a cylindrical projection (which should be viewed curved). More importantly, experience has shown that geometrically correct printed images, viewed at a theoretical viewing distance, do not necessarily portray the view as experienced by people in reality. 103 The method described below results in significantly larger images, for which an accurate viewing distance is less important. The images are enlarged and this provides a better representation of the real view, at a comfortable viewing distance. 104 As a result, it is recommended that photomontages are simply viewed at a comfortable arm's length. This will vary depending on the length of the viewer's arms and their eyesight. However, the difference in viewing distance which results will have little impact on the impression of scale / depth in the image due to the increased size of the images. An instruction to view images at a 'comfortable arm's length' should be included on all visualisations produced. They should also be viewed flat as they are in planar projection.' For reference to the LI guidance viewing distances as per the old 2006 SNH guidance would be as follows: • Viewpoint Figures Viewing Distance of 261mm • Photomontage Figures Viewing Distance of 522mm As well as the principal viewing distance the text: 'view at a comfortable arm's length', should also be displayed on photomontages. We acknowledge that labels to photomontages at viewpoint 22 at years 1, 5 and 10 (Examination Library references APP-171, APP-172, APP-183, APP-184, APP-195 and APP-196) are incorrectly reversed between north and south. New versions of these figures for reference are included as Appendix 15.

Ref.	Question to:	Question	Applicant's Response
			The Applicant has reviewed all of the viewpoint photographs and photomontages and has not identified any further labelling errors.
1.6.3	The Applicant	Could the Applicant please explain the apparently conflicting statements around the predicted visibility of the proposed development and study areas for the LVIA [APP-037]? It is unclear from these whether visibility is considered to be limited to 2km or 5km.	The 2 km study area represents the area in which the Development exerts most influence on landscape and visual receptors and where significant effects were considered most likely. Therefore visibility is considered limited to 5 km. The Development is theoretically visible up to 5 km from the Site. Beyond this distance, even with good visibility, the Development would be barely perceptible in the composite landscape due to the local landscape context and the nature of the Development. Therefore visibility is considered to be limited to 5 km as demonstrated in Figure 7.10 of the ES (Examination Library Reference APP-054) where views are available from viewpoints 9, 18 and 19 at the outer edge of the 5 km study area.
1.6.4	The Applicant	Could the Applicant clarify the approach to the assessment of landscape effects, which is based on a 2km rather than a 5km study area [APP-037]? Could the Applicant also provide justification for the exclusion of some landscape character areas that are within 2km of the core landscape study area?	During fieldwork it was assessed that there would be no likely significant effect upon landscape resources beyond a distance of 2 km from the Development. This is due to several factors such as the limited height of the Development, the enclosed nature of the sea wall and surrounding vegetation and landform and the decreasing effects of distance upon landscape resources. As such the effects upon landscape receptors assessed those likely effects within the 2 km study area. It was assessed following fieldwork that there were several LCA's within the 2km study area with either extremely limited or no effects and no visibility of the Development due to those aspects listed above and therefore no further assessment was made although all areas were visited during the assessment.
1.6.5	The Applicant	Could the Applicant provide justification as to why the assessment of visual effects at residential receptors has largely been limited to receptors within 1km of the core landscape study area, when the study area for other receptors, which may be considered less sensitive, extends up to 2km [APP-037]?	Beyond a distance of 1 km there are no residential receptors likely to be affected by the Development due to the location of residential receptors within the surrounding landscape, local landform and intervening vegetation. Views from residential receptors beyond 1 km have been represented in viewpoints 11,14,17,18 and 19. It was considered that the RVAA would provide a thorough assessment of the effects of the Development upon residential amenity for those residential receptors likely to be affected by the Development based on the draft guidance on RVAA produced by the Landscape Institute. The new guidance relating to RVAA issued by the Landscape Institute in March 2019 creates a clear separation between LVIA and RVAA and therefore the above approach is not fully compliant with the new LI guidance, however all work undertaken to date on the RVAA is over and above the requirements of the guidance and in the assessment of effects is in line with LVIA methodology.

Ref.	Question to:	Question	Applicant's Response
1.6.6	The Applicant	Could the Applicant clarify why residential receptors at Viewpoints 11 and 18 (Technical Appendix A7.3) [APP-209] have been defined as having low value and medium sensitivity rather than the high sensitivity ascribed to apparently similar receptors elsewhere in the assessment? Could the Applicant explain why users of public rights of way at Viewpoints 6, 8, 10, 17 and 22 are allocated medium susceptibility to change rather than high as stated in Table C1 (Technical Appendix A7.3)?	Views from viewpoints 11 and 18 are considered to be of low value as the viewpoints have no designations, not a particularly popular viewpoint, minimal or no cultural associations, and assessed by the assessors as being of a low value. Views from other residential receptors such as viewpoint 21 have been given an elevated assessment due to the views from within and across the AONB or based on professional judgement. Users of public rights of way at Viewpoints 6, 8, 10, 17 and 22 are allocated medium susceptibility to change rather than high as stated in Table C1 (Technical Appendix A7.3) due to a judgement by the assessor that the view is from a public right of way where the view is of moderate interest as per Table 7.11 in the LVIA (Examination Library reference APP-037). Other views have been assessed with a higher susceptibility to change where it is assessed that the views of the surroundings are an important contributor to the experience as set out in Table 7.11.
1.6.7	The Applicant	Could the Applicant clarify the apparent inconsistency around the significance of visual effects at Nagden and Warm House between Environmental Statement paragraph 323 and its summary at paragraph 479 [APP-037], and whether there would be significant visual effects following 10 years of operation to residents of these properties?	Paragraph 323 of the LVIA (Examination Library reference APP-037) confirms that after year 10 there will be significant effects upon both properties at Nagden and Warm House. Paragraph 479 also confirms this to be the case. In the summary at paragraph 323 and in particular with reference to Warm House it is confirmed that although the property can be mitigated from views of the development after year 5 and completely at year 10, the mitigation itself removes the existing long distance views and as such the effects remain significant. Such effects could be assessed as positive, neutral or negative based on a subjective assessment. Positive insofar as views of the existing power lines are removed and views are of woodland/shelterbelt similar in character to vegetation framing the existing view. Neutral insofar as the existing open view although lost would be replaced with a natural view, and negative as the open view is lost and subsequently views would be significantly foreshortened. It therefore remains that Major significant effects remain at Warm House at year 10 as per section 7, paragraph 51 on the RVAA. Paragraph 479 confirms that mitigation of views of the Proposed Development can be achieved in full. With respect to properties at Nagden where part mitigation of the majority of views of the Development can be achieved, Major/Moderate (significant) effects still remain due to the change in the composition of the view.
1.6.8	The Applicant	With reference to section 7.1.1 of Chapter 7 of the Environmental Statement [APP-037] and the Outline Design Principles [APP-251], could the Applicant confirm the assumption made as to the maximum height of transformers in the preparation of the ZTVs, the photomontages and the LVIA? If the transformers were higher than the solar PV modules, would the ZTVs, the photomontages and LVIA need to be	The transformers are 3 m in height as set out in Table 5.1 of ES Chapter 5 - Development Description (Examination Library reference APP-035). Figure 7.3 (ZTV Local Context) (Examination Library Reference APP-054) is based on a solar panel height ranging from 3.01 to 3.91m and therefore the ZTV represents a worst case scenario. The ZTV is also run with the substation area height of 11 m AGL and therefore even in the unlikely flood event scenario stated in above question (b) the presence of the substation in the ZTV would still illustrate a worst case scenario. The flood level which the site has been designed to are predicted to be up to 1.8 m (hence the

Ref.	Question to:	Question	Applicant's Response
		amended? At Table 5.1 and paragraph 57 of the Environmental Statement Chapter 5 [APP-035], mention is made of floating transformers, which may exceed the height AGL of the solar PV modules in a flood event. No mention is made of these in ES Chapter 7 [APP-037]. Could the Applicant confirm whether the floating transformers would be likely to result in any additional significant effects to landscape or visual receptors during a flood event?	2.1 m maximum of the bottom height of the solar panels including a 300 mm freeboard). In this scenario the maximum ascent of platform base in a flood scenario would be 1.8 m which when added to the transformer height would be approximately 4.8 m. Each transformer is approximately 8.2 m long, 2.3 m wide and 3 m high with approximately 80 units proposed within the CLS Area. In this situation the transformers would be of a similar height to the sea wall, and although there are a large number on site they are well dispersed amongst the panels and would be present in views for a short duration while flooding subsides. The visual context for the Development and surrounding area under these conditions would be hugely altered due to the wider impacts of a flood event of this magnitude and it is therefore unlikely that this would result in any additional significant effects.
1.6.9	The Applicant	Could the Applicant confirm the assumptions for the maximum heights of the new flood bunds and the maximum height of the substation components for the preparation of the ZTVs, the photomontages and the LVIA? If these are different to the assumptions stated on Figures 7.2 to 7.4 and at section 7.1.1 of Environmental Statement Chapter 7 [APP-037], or the definitions in the Outline Design Principles, then could the Applicant confirm whether the ZTVs, the photomontages, the LVIA and the RVAA need to be amended?	The flood protection bund height used to run the ZTV is based on Above Ground Level (AGL) data as ZTVs take into account the digital terrain model (DTM) surface AGL which means we subtracted the AGL value at the bund location (on average 1.9 m) to calculate the bund height AGL – which is 3.4 m. For reference the AGL and Above Ordnance Datum (AOD) comparison is below: • 3.4 m is the height of the bund AGL (based on an average ground level of 1.9m at the bund location); • 5.316 m is the height of the bund AOD (Sea Level) • 4.5 m is the height of the Bund within the substation compound based on the constructed substation base (proposed to be 0.8m AOD finished floor level (FFL)). The components within the compound are based on the heights of the components described within section 7.1.1 of ES Chapter 7 - LVIA (Examination Library reference APP-037). In terms of the ZTV calculation the height of the largest features within the compound being 12.8 m in height are represented within the ZTV as being 13.6 m AOD given the FFL is 0.8m AOD. Therefore the tallest components within the compound calculated for the ZTV are based on a height of 11.7 m AGL (based on 13.6 m less 1.9 m AGL). No amendments to the ZTVs, the photomontages, the LVIA and the RVAA are required. There is a typographical error on the LVIA Figures 7.2 and 7.3 (Examination Library Reference APP-054) which states that the substation area is based on 11 m AGL, this should read 11.7 m AGL.
1.6.10	The Applicant	Could the Applicant clarify the assumptions made as to the heights that will be achieved by the planting described in the	The table included as Appendix 16 was used to guide the height of planting for the production of photomontages. All photomontages produced are based on the height ranges listed in the table with species set out in 3D Studio Max to ensure heights proposed were verifiable in the photomontages.

Ref.	Question to:	Question	Applicant's Response
		Outline Landscape and Biodiversity Management Plan [APP-203] at years 5 and 10 in the preparation of the photomontages and assessment of landscape and visual impacts? Did such assumptions make allowances for the growing conditions at an exposed coastal location?	Heights are based on a mixture of guidance contained within the Hillier Designers Guide and professional judgement of plants growing in coastal and marshland conditions. Growth rates for plants growing on the flood protection bund around the Electrical Compound are considered based on both coastal conditions and planting on an engineered slope in exposed conditions and scrub planting has been adjusted to reflect the proximity to the coast. In all cases the growth rates are considered conservative to represent a worst-case scenario. We have also considered the rates and establishment opportunities from field work observations of similar treatments in and adjacent to the Development site. Growth rates to the south of the Development site adjacent to the fruit belt have also been considered where it observed that planting establishes well due to a reasonable soil quality and a sheltered location.
1.6.11	The Applicant	Could the Applicant confirm the management provisions for all tree and shrub planting types from year 5 onwards, and the proposed end date for management activities?	The objectives of the management plan for new trees is to ensure good establishment of tree species within hedgerows, shelter belts and woodlands up to year 5 post construction. At year 5 following the Landscape Architects site visit the trees within each group would be assessed for success and adherence to the objectives of each landscape feature prescribed within the Outline Landscape and Biodiversity Management Plan (LBMP) (Examination Library reference APP-203). Any works or issues required to be addressed beyond year 5 would be resolved as part of a revision to the LBMP as recommended at the end of each chapter (monitoring). Such revisions are likely to address issues such as dead, dying or diseased species which would likely result in a repeat of years 1-5 to plant new specimens and re-establish the trees. Other anticipated issues are likely to be the presence of deadwood or poor shape and form. This would more likely be resolved through remedial works to trees in line with BS3998:2010. Other elements may be management prescriptions particularly in the context of trees within hedgerows to ensure no damage is being done to existing trees within hedgerows through poor management practices by mechanical maintenance for instance, and such issues will be resolved in the revised LBMP at time of revision. Beyond this period it is proposed that the maintenance will be limited and the shape and form of trees will be encouraged to naturalise to reflect the local climatic conditions and prevailing winds for instance to ensure natural landscape features are developed. In management prescriptions for Shelterbelts additional management is proposed to align with management of surrounding shelterbelts and includes works to trees beyond year 6. This would be assessed as part of the site visit at year 5 to assess the wider landscape management of adjoining shelterbelts. Depending on the quality or character of such offsite management the LBMP will be amended to suit the most appropriate management. The above process will also take into account any regional or national issues at this time such as disease.
1.6.12	The Applicant	Could the Applicant explain the source and rationale for determining a threshold	There is no official guidance for determining the effects of glint and glare and therefore Pager Power produced its own guidance based on assessment experience (over 350 assessments), technical

Ref.	Question to:	Question	Applicant's Response
		requiring mitigation against glint and glare of at least 60 minutes per day for 3 months of the year [APP-246]?	expertise and stakeholder consultation. The full guidance document, now in its second edition, can be found in Appendix 17. The rationale for determining the significance of glint and glare from solar panels was completed by reviewing guidance for similar light-based effects (shadow flicker for wind turbines). The effects of glint and glare differ to shadow flicker for a number of reasons, and can be considered less significant because: • A solar panel produces a solar reflection and therefore the light reflected is less intense than direct sunlight because a percentage of the light is absorbed by the solar panel. Shadow flicker is the effect of the varying light levels directly from the Sun; • Shadow flicker produces significant variations to light levels within a room. An observer does not have to be looking at the wind turbine directly to observe the effect. For glint and glare effects to be experienced, an observer has to view the solar panels directly; • A solar reflection from a solar panel will appear static, whereas the effect of shadow flicker will inherently flicker in time with 1/3 the frequency of the rotating blades (assuming three blades); • The presence of shadow flicker would be a new effect experienced at a dwelling. Solar panels produce solar reflections of similar intensity to those from still water or glass for example, both common reflective sources next to dwellings. Shadow flicker guidance states that effects for more than 30 minutes per day over 30 hours is significant and requires mitigation. Considering the information presented above (and within Section 6.5 of the guidance), it is deemed appropriate to consider the effects of glint and glare less significant than shadow flicker. Therefore, the duration beyond which mitigation should be required for glint and glare is longer than for shadow flicker. Therefore, the recommendation within the guidance is if visible glint and glare is predicted for a surrounding dwelling for longer than 60 minutes per day, for three or more months of the year, then the impact should be considered significant with respect to residential amenity. In this scenario, mitigation should be implemented.
1.6.13	The Applicant	In the Glint and Glare report [APP-246], could the Applicant clarify the moderator of significance used in the assessment of effects at dwellings that 'Reflections would generally coincide with direct sunlight, such that an observer looking towards a reflecting panel would also be looking	Due to the scenario in which a solar reflection is possible, the Sun would be low in the sky and located in an area in the sky above the panels such that the solar reflection and the Sun would be viewed simultaneously. This is the case even for those dwellings just south of the solar panel area and where a view of the reflecting solar panels is possible. This is because of the angle of the solar panels and the elevation and azimuth angle of the Sun in the sky. The Sun, in all circumstances, would be a significantly brighter source of light compared to the reflection from the solar panels.

Ref.	Question to:	Question	Applicant's Response
		towards the Sun'? Does the Applicant believe that the use of this moderator is justified in the case of receptors that lie to the south of the solar arrays?	
1.6.14	The Applicant	Could the Applicant advise if the output from the Glint and Glare study has been integrated with the ZTV for the visual assessment as suggested in the Scoping Opinion?	The inter-relationship between visual effects and glint and glare effects on the same receptors is addressed in Chapter 18 - Interaction and Accumulation of Effects of the ES (APP-048).
1.6.15	The Applicant	Could the Applicant please clarify the apparent inconsistency between Environmental Statement Chapter 17 [APP-047] and the supporting Glint and Glare report [APP-246] in relation to a recommendation in the latter that some (unidentified) residential receptors are considered for further survey and mitigation?	Based on the impact significance assessment process, presented in Appendix D of the Glint and Glare Report (Examination Library reference APP-246), the potential impact is moderate. This classification does not definitely require mitigation, however options should be considered to reduce potential effects further. The glint and glare report was carried out without including the landscaping screening set out in the Outline LBMP (Examination Library reference APP-203). The findings of the report therefore represent an unmitigated worst case. Whilst the planting in the Outline LBMP is embedded mitigation and has not been specifically proposed to reduce glint/glare effects, it has been developed to reduce visibility of the solar panels which will also serve to reduce the effects of glint and glare. No mitigation requirement beyond that embedded in the Development design was therefore considered to be required.
1.6.16	The Applicant	Technical Appendix A7.4 (the RVAA report [APP-210]) refers to the Consultation Draft of the Technical Guidance Note on Residential Visual Amenity Assessment (RVAA) published by the Landscape Institute in February 2018. This guidance was updated by the Landscape Institute on 15th March 2019, with the publication of Technical Guidance Note 2/19 on Residential Visual Amenity Assessment (RVAA). Could the Applicant confirm whether the update would (if followed) result in any differences to the conclusions reached in Technical Appendix A7.4 or Chapter 7 of the Environmental Statement	The publication of the Technical Guidance Note 2/19 on Residential Visual Amenity Assessment (RVAA) provides clarification on a wide number of areas relating to the RVAA process. It highlights areas within the RVAA methodology for Cleve Hill which differ from the updated guidance however the conclusions of the assessment would remain the same insofar as the properties recommended for further assessment as having the greatest magnitude of change such that the Residential Visual Amenity Threshold may be engaged (step 4) would include those properties we assessed in our detailed assessments. It also confirms that the conclusions reached would remain the same and 'in all cases, it is assessed that such effects do not present a "visual intrusion of such magnitude as to render either properties as unattractive places in which to live".' And on this basis and in line with the current guidance the effects of the Development would not be sufficient to exceed the Residential Visual Amenity Threshold. The RVAA sought to supersede the requirement for residential assessment as part of the LVIA as the methodology for the initial RVAA assessment was based on LVIA methodology. Based on the new (current) guidance there are irregularities between the methodologies in the LVIA and RVAA

Ref.	Question to:	Question	Applicant's Response
		[APP-037]? Could the Applicant clarify how the RVAA and the LVIA have been integrated and explain the apparent inconsistency in the interpretation of the significance of effects in the Environmental Statement and the RVAA report? In doing so could the Applicant justify the approach to the RVAA in which only those properties that would experience major adverse impacts at Year 10 following completion of construction are taken forward to the second stage of assessment?	interpreted from the previous guidance. Even so the assessment of the RVAA remains that only those properties that were identified in the RVAA should have been taken forward to the fourth stage of assessment. This is also based on professional judgement as to whether the Residential Visual Amenity Threshold would be exceeded, or as per the previous guidance whether the visual intrusion of such magnitude as to render properties as unattractive places in which to live. Differences in the conclusion would be to provide a more concise and clear presentation of the reasons why the RVAA Threshold has not been exceeded and to remove reference to the LVIA process in the final stage of assessment.
1.6.17	Swale Borough Council Kent County Council Canterbury City Council	Do Swale Borough Council, Kent County Council or Canterbury City Council have any observations on the approach, scope and findings of the LVIA and RVAA, including the scope of proposed mitigation and monitoring?	Consultee response.

2.8 Noise

Table 2.8: Applicant's responses

Ref.	Question to:	Question	Applicant's Response
1.7.1	The Applicant	Could the Applicant clarify the basis on which inverters and transformers have been incorporated into the noise assessment [APP-016], including numbers, location and optionality between battery storage and an extended array.	Section 12.5.4.1 of the ES details how the inverters have been incorporated into the noise model. As set out in Table 5.1 of Chapter 5 - Development Description (APP-035) there will be 3071 inverters distributed across the site. Given the large number of inverters, it is not practical to include each as a separate point source in the noise model. As such, an 'area source' equalling the total sound power level of all the inverters combined was inputted into the model over the area covered by the inverter modules. This approach provides the same result as 3071 individual inverters distributed evenly across the area in question. As discussed in Section 12.5.4.2 of the ES, 80 transformers were included as separate point sources in the model at the locations specified in Figures 5.2a to d of the ES (APP-053).

Ref.	Question to:	Question	Applicant's Response
			Regarding the optionality between the energy storage facility and an extended array, noise sources associated with the energy storage emit higher levels of noise than the inverters and transformers associated with the solar array. The noise assessment therefore assessed the energy storage as a worst case. Should an extended array be installed rather than the energy storage, noise impacts will be the same or lower than those presented in the ES.
1.7.2	The Applicant	Could the Applicant please explain how the 'representative' noise levels set out in table 12.7 of the Environmental Statement [APP-016] are derived from the mode, median and mean values quoted?	When determining representative daytime and night-time levels, BS 4142 advises against assuming that the prevailing background sound can be determined using any single approach. Accordingly, and as recommended in BS 4142, a series of histograms were prepared to show the spread of data within each dataset (see Charts 12.1 to 12.9 of the ES Chapter 12 (APP-016)). Professional judgement is used to determine the representative noise level in each case, considering the spread of data shown in the histograms along with the respective mean, median and modal values.
1.7.2	Swale Borough Council	Is Swale Borough Council happy with this approach?	The Applicant contacted Swale Borough Council prior to undertaking the assessment and agreed that the assessment would follow methodology set out in BS 4142. Following submission of the PIER, Swale Borough Council confirmed that they were satisfied with the survey and representative levels.
1.7.3	The Applicant	Could the Applicant please explain why the noise assessment [APP-016] is apparently limited to residential receptors and birds. Were any users of rural paths, other amenity and recreational features, or community facilities not considered to be sensitive receptors?	Whilst rural paths, other amenity spaces and other recreational features may be considered to have a noise-sensitive element, residential dwellings are generally accepted as the most noise-sensitive of all potential receptors. The assessment has been undertaken at the residential dwellings in closest proximity to the Development. Given that the assessment predicts no significant effects at these receptors, if follows that there will not be a significant effect at recreational features or community facilities located further from the Development. Noise effects on footpaths are assessed as an indirect effect within Chapter 13 (APP-043) as described in paragraph 41, and interrelationship effects including noise effects and effects on footpaths are assessed in Chapter 18 (APP-048) as described in paragraph 4.
1.7.3	Swale Borough Council Canterbury City Council	Do Swale Borough Council and Canterbury City Council agree with the scope of receptors selected for assessment?	The scope of the assessment was agreed during consultation. The noise-sensitive receptors selected for assessment were specified within scoping report, and during further consultation with the Environmental Health Officer at Swale Borough Council to agree noise monitoring locations.
1.7.4	Swale Borough Council	Is Swale Borough Council content with the methodology used to assess the magnitude and significance of noise effects, including the use of a threshold value that ignores	The methodology used to assess construction and operational noise effects was provided in the Scoping Report and agreed with Swale Borough Council.

Ref.	Question to:	Question	Applicant's Response
		the baseline noise condition (except where the increase in noise levels over background lasts for a month or more), and restricting the use of LAmax for impulsive noise effects to bird receptors?	
1.7.5	The Applicant	In relation to ornithological receptors of high sensitivity, the assessment of noise effects from piling, manoeuvring piling plant and the installation of panels finds a change of medium/ large magnitude. Could the Applicant explain why this is not judged to be of moderate/ major significance, as would be suggested by the assessment methodology set out in Tables 12.18 and 12.19 [APP-016]?	This is a typographical error, and should have been stated as a moderate / major significance. However, the mitigation was developed assuming a significant impact in terms of the EIA Regulations, and as such it does not affect the outcome of the assessment.
1.7.6	Swale Borough Council Natural England RSPB Kent Wildlife Trust	Are Swale Borough Council, Natural England, RSPB and Kent Wildlife Trust content with the Applicant's proposal to specify construction plant, equipment and mitigation measures to ensure compliance with the various commitments to reduce noise at a later stage through the development of management plans and the imposition of Requirements?	At this stage, specific plant details, including the type, model and noise emission data is not available. BS 5228 provides typical noise levels for various construction activities, which have been used as the basis for this assessment. This is a standard and widely-adopted approach to construction noise assessments given the inherent uncertainties in construction details at the planning stage of a development. There is a commitment to ensure that the identified noise thresholds will not be exceeded during construction, including by potentially limiting certain activities in areas closest to the Swale SPA.
1.7.6	The Applicant	What reassurance could the Applicant give that sufficient measures will be available to achieve predicted and acceptable construction noise levels?	Based upon the author's professional experience (10+ years' experience in acoustics industry including several years working as a noise control engineer designing noise mitigation products) as well as substantial project experience in the assessment of noise from solar developments and construction sites, it is considered that the level of mitigation is readily achievable through the selection of quieter equipment, use of noise mitigation measures or application of appropriate setback distances during sensitive times of year (i.e. breeding season). Equipment manufacturers are constantly refining products, and advances in technology has resulted in a reduction of noise emissions from construction plant and equipment. Predictions used in the ES

Ref.	Question to:	Question	Applicant's Response
			use typical source levels for construction activities from BS 5228, some of which are 15 – 20 years old. Quieter plant and equipment than that modelled in the ES will be available, and will be investigated and recommended as part of the Construction Environmental Management Plan (CEMP). Many construction equipment manufacturers offer proprietary acoustic enclosures or attenuators to ensure noise impacts are minimised. Where required, such mitigation measures will be investigated and recommended in the CEMP. Further to the above, additional mitigation measures are available to reduce noise from construction plant, including acoustic jackets, screens and quilts. Online test data shows that reductions in the region of 10 – 20 dB can be readily achieved. Where required, appropriate products will be investigated and recommended in the CEMP.
1.7.7	The Applicant	Could the Applicant explain how the operational noise mitigation commitments are secured in the dDCO?	Requirement 14 of the dDCO commits the Developer to undertake an operational noise assessment prior to construction. This operational noise assessment will contain specific information regarding the location and noise emission data for all operational plant, along with all necessary mitigation measures Where mitigation is required, details of specific noise control products (including acoustic enclosures, attenuators or screens) will be provided in the report for approval by the Local Authority. These mitigation measures will be included in the noise model to demonstrate that the final design, incorporating appropriate mitigation, will ensure rating noise levels at the nearest noise sensitive receptors are not exceeded.
1.7.8	The Applicant	Could the Applicant explain the confidence that can be placed in the delivery of the proposed noise mitigation measures listed at paragraphs 114 (construction) and 116 (operation) of the Environmental Statement [APP-016] where there appears to be uncertainty around their deliverability, especially where the qualifiers 'where practicable' and 'where possible' are used. Could the Applicant explain how these measures are secured in the dDCO?	Qualifiers are used in the ES where the mitigation is considered a good practice measure, these are not relied upon in order to achieve the required noise levels. They are in addition to the 'hard' mitigation measures and will be adopted during all works, irrespective of the noise level, in the interest of good site management. The embedded construction measures set out at paragraphs 114 will be secured as part of the Construction Environmental Management Plan (CEMP). This document will provide details of the core working hours and construction programme. The CEMP will be implemented as approved. The embedded operational mitigation measures set out at paragraph 116 will be included within the operational noise assessment required by the dDCO. This operational noise assessment will be agreed with the Local Authority, and will be implemented as approved.

2.9 Socio-economics

Table 2.9: Applicant's responses

Ref.	Question to:	Question	Applicant's Response
1.8.1	The Applicant	Could the Applicant clarify if the effects set out at Environmental Statement non-technical summary 13.3 (189 to 195) [APP-249] in relation to recreation are duplicates of those set out in the visual effects section of the Environmental Statement or are they additional?	The effects summarised in the Environmental Statement Non-Technical Summary (APP-249) section 13.3 are effects on recreational amenity, which includes, but is not limited to, visual effects. This distinction and the basis for assessment is set out in paragraph 163 of Chapter 13 (APP-043) of the ES, as: "Recreational amenity encompasses a range of experiential factors, including visual pleasure, a sense of space, exercise, fresh air, light, company or solitude, tranquillity, appreciating wildlife and other factors, which may include subjective factors. It is not necessarily the case that a significant visual effect (or other type of effect) leads to a significant recreational amenity effect, although it may, and this is considered in the assessments." Visual effects (ignoring any other aspect of amenity) are assessed in Chapter 7 of the ES (APP-037). It is generally the case, though not a rule, that where the visual change is so dramatic as to materially change the experience of using a footpath, then the effect on recreational amenity would be assessed as significant. This is the case for footpath ZR485, which goes through the middle of the Development Site, and would change from having long range, open views of arable fields, to having relatively short range (c. 25 m) views of solar PV modules and their mounting structures, albeit in a corridor of improved path surface and habitat quality. This is not the case, however, for the Saxon Shore Way as it passes around the periphery of the solar PV modules. This path is elevated above the top of the solar PV modules, and the open views, to the Swale Channel to the north, and across low-lying flat lands to low hills to the south, would remain. All other aspects of the experience of using the path would remain as in the baseline. Thus, whilst the visual effects at locations along this path would be significant because the solar PV modules would be clearly visible and a new element in the view, the recreational amenity for users of the path would not materially change. The visual effects and effects on recreational amenity are related, and are not separable, therefore, but they are also not the same thing. If there were no visual effects, then there would be almost no effect on recreational amenity, in these cases. Similarly, if there were no footpaths, then there would be no people to receive significant visual effects. The holistic effect on walkers is described by the assessment of effects on recreational amenity. The assessment of visual effects remains useful, however, in explaining the visual aspect of the recreational amenity effect.

Ref.	Question to:	Question	Applicant's Response
1.8.2	Kent County Council Swale Borough Council Canterbury City Council	Do Kent County Council and Swale Borough Council believe that there are any additional mitigation measures that could reduce the significance of effect to the amenity of users of the public rights of way across and adjacent to the site during construction?	Consultee response.

2.10 Traffic and Transport

Table 2.10: Applicant's responses

Ref.	Question to:	Question	Applicant's Response
1.9.1	The Applicant	Can the Applicant expand on the response to Kent County Council's Relevant Representation [AS-009]: 'The spread of vehicles arriving at the site will be influenced by the nature of the material being delivered. Many of the deliveries made by sea will be held at the port of entry before onward transport to the site. It is expected that these deliveries can therefore be released from the port in a controlled manner'? How does the Applicant believe that this measure can be controlled through any DCO?	A large proportion of equipment and associated components required to construct the solar park will be imported to the UK by sea (e.g. solar panels and ancillary components). The equipment will be off-loaded from the cargo vessel(s) either into a holding area at the port or directly onto vehicles for onward transport to the site. It is envisaged that multiple vehicles can be loaded simultaneously and released from the port in a controlled manner. The remaining goods/equipment will be held at the port until collected and transported to the site in a similar manor at a later stage. It is expected that the routing, timing and management of vehicles to/from the site will be controlled via the Construction Traffic Management Plan which is required by Requirement 11 of the draft DCO.
1.9.2	The Applicant	Can the Applicant explain the assumptions made in the construction traffic assessment [APP-044] relating to visitors and workers cars? How would 'fly parking' be prevented during construction?	Visitor and staff parking will be strictly prohibited on the public highway during construction and operation of the solar park. This restriction will form part of the contractual obligations for all contractors working at the site. The provision of staff travel in the form of welfare vans is expected to limit the number of vehicles expected at the site. For those arriving by vehicle, a parking area will be designated within the site. The parking strategy will be communicated through the contractor's information packs and will be monitored and enforced by the Traffic Co-ordination Officer.

Ref.	Question to:	Question	Applicant's Response
			These measures will be incorporated into the Construction Traffic Management Plan which is required by Requirement 11 of the dDCO.

2.11 Water, Flooding and Coastal Defence

Table 2.11: Applicant's responses

Ref.	Question to:	Question	Applicant's Response
1.10.1	The Applicant	Could the Applicant provide a figure prepared to an appropriate scale depicting the location of the drains within the Proposed Development site and other surface water management features such as culverts and sluices? This should clearly identify the Internal Drainage Board managed watercourse.	A figure appended to the SoCG with the Lower Medway IDB identifies IDB maintained assets (watercourses / ditches) and flow control structures within the Core Study Area (identified in Chapter 10 of the ES [APP-040]).
1.10.2	The Applicant	Could the Applicant submit an amended version of Appendix C of the Outline CEMP [APP-205] to provide clarity with regard to the location of the proposed new and upgraded surface water crossings?	The figure appended to the SoCG with the Lower Medway IDB identifies the location of proposed new and upgraded surface water crossings. As such, it is not envisaged that the CEMP requires updating.
1.10.3	The Applicant	The RIAA [APP-026] explains that the CEMP will include a 'Pollution Prevention Plan'. Whilst there is reference to measures to avoid pollutants entering the local environment in the Outline CEMP, there is no specific reference to a Pollution Prevention Plan. Could the Applicant update the Outline CEMP [APP-205] to reflect the commitment to produce and secure a Pollution Prevention Plan?	Section 10.2.7.1 Good Practice of the ES (APP-040) states that "Good practice will be followed in all aspects of construction, operation and decommissioning, specifically through a Pollution Prevention Plan (PPP), which will be incorporated into a final CEMP (based on the Outline CEMP presented in Technical Appendix A5.4), which under the draft DCO would have to be approved by the local planning authority in consultation with the EA prior to commencement of the construction phase.". The Pollution Prevention Plan will set out measures to be employed to avoid or mitigate potential pollution for all phases of the Development, and will also include an Incident Plan to be followed should a pollution event occur. This plan will be produced following consultation and agreement with EA and all appropriate personnel working on the construction site will be trained in its use. As such, this will be secured through the Requirements 2(1)(h), 8 and 10 of the dDCO.

Ref.	Question to:	Question	Applicant's Response
1.10.4	The Applicant	Could the Applicant confirm that the development will not affect existing abstractions in the vicinity of the Proposed Development? Could the Applicant explain if the Proposed Development could impact the reservoir located to the south of the Proposed Development and - if impact pathways exist - the extent to which significant effects are likely to occur?	Sections 10.3.12 Public Water Supplies, 10.3.13 Private Water Supplies and 10.3.14 Abstractions and Discharge Consents of Chapter 10 of the ES (APP-040) detail water abstractions within 1 km of the Hydrology Core Study Area. The Development is hydrologically severed by the presence of surface water ditches which would prevent surface water from the Development draining onto the reservoir. Additionally, development is proposed in areas that are hydrologically down-gradient of the reservoir and as such surface water is likely to flow to the north, away from the reservoir. Subsurface flows are unlikely to be disrupted due to the thin nature of the PV racking systems and minimal depth that they are driven into the ground.
1.10.5	The Applicant	Could the Applicant explain further how access to the substation will be designed through or over the proposed bund to ensure that the substation is safe from flooding for the lifetime of the Proposed Development?	The access road will cross over the top flood protection bund, ensuring a continuous crest height of 5.316 m to protect against a flood defence breach flooding event for the lifetime of the Development. ES Figures 5.2b and 5.10 (APP-053) show the route of the access road over the flood protection bund. Figure 5.8 shows a cross section of the flood protection bund including the access track as it rises diagonally across the bund.
1.10.6	The Applicant	Could the Applicant confirm how adherence with the minimum distances between the Proposed Development construction works and the existing ditches (as referenced in paragraph 123 of the Environmental Statement [APP-040]) is secured by the dDCO?	Paragraph 123 of ES Chapter 10 - Hydrology, Hydrogeology, Flood Risk and Ground Conditions (Examination Library reference APP-040) outlines buffer distances from watercourses that are embedded into the development design. The 8 m buffer of IDB maintained assets is a Byelaw and therefore this will be secured through Requirements 2(1)(h), 8 and 10 of the dDCO. The 5 m buffer of non-IDB maintained watercourses (Ordinary Watercourses) will form part of the PPP in the Outline Construction and Environmental Management Plan and will be secured through Requirement 10 of the dDCO.
1.10.7	The Applicant	Could the Applicant explain whether the conclusions of the submitted Microclimate and Vegetation Desk Based Study [APP-204] were taken into consideration in the preparation of the Outline LBMP [APP-203]	There is no intention to undertake further case studies to inform the wildflower seed mix however, further inspections will be undertaken by ecologist/landscape architect in Years 1, 2, 3 and 5 to ensure the necessary habitats are establishing as required and if not, that immediate action is taken to address. This will ensure that the desired habitat is established across the site.

Ref.	Question to:	Question	Applicant's Response
		and whether a contingency plan exists should the proposed seeding fail? The Microclimate and Vegetation Desk Based Study acknowledges a lack of existing data in relation to east-west orientated arrays and states that the findings of the study should be 'considered with caution'. Is it the intention of the Applicant to conduct any additional studies (as suggested in Section 6 of the report) to ensure that a higher degree of certainty is provided that the proposed wildflower mix seeding will establish successfully underneath the east-west oriented PV arrays?	The submitted Microclimate and Vegetation Desk Based Study (Examination Library reference APP-204) was taken into consideration in the preparation of the Outline LBMP (Examination Library reference APP-203). Should the chosen seed mixture be appearing to fail then this would be addressed through the selection and reseeding of a more shade tolerant mixture. In doing so, the planting success will be monitored and addressed if necessary.
1.10.8	Environment Agency	Is the Environment Agency content that the climate change predictions used in the assessment have not been updated to take account of UKCP18? To what extent does the Environment Agency consider that the application of the most recent climate projections (UKCP18) would result in findings different to those identified in the Environmental Statement and Flood Risk Assessment [APP-227], particularly with regards to sea levels and tidal flooding events?	The Applicant's consultants, Arcus, consulted Ben Meredith (EA Advisor, Modelling & Forecasting) on 09/01/2019 and 11/06/2019 regarding the use of UKCP18 projections. The advice from the EA is to continue to use the current guidance within 'Adapting to climate change: Advice for Flood and Coastal Risk Management Authorities (April 2016)' and 'Flood risk assessments: climate change allowances (2016)' until the UKCP18 projections have been adopted by the EA. A Clarification Note has been produced to update ES Chapter 15 - Climate Change (Examination Library reference APP-045) in light of the publication of UKCP18. This has been submitted at Deadline 2 as document 10.6.3.
1.10.9	The Applicant	Has the Applicant considered the possibility of failure of batteries and containment, the consequent leakage of chemicals from the Proposed Development and whether any likely significant effects could occur as a result of this? What measures would be in place to address such risks and how are these secured in the dDCO?	In the unlikely event of both a battery and container failure resulting in release of chemical fluids, any release would be contained within the electrical compound by bunding meaning the only pathway to hydrological resources would be via the drainage network installed to drain the compound. An isolation / cut-off valve will be included in the detailed design of the drainage system to ensure any potentially polluting chemicals / materials can be prevented from dispersing into the wider hydrological network in the unlikely event that this occurred. Due to the presence of Diesel Gensets, and oils within components of the Development Substation, oil interceptors should also be incorporated into the detailed drainage design for the same reasons. The detailed design of the drainage network would be secured through Requirements 2(1)(h), 8 and 10 of the dDCO.

Ref.	Question to:	Question	Applicant's Response
1.10.10	Environment Agency	Can the Environment Agency confirm whether or not it agrees that the Water Framework Directive information provided in the application appropriately demonstrates the Proposed Development's compliance with the requirements of the Water Framework Directive? Do any other matters relevant to Water Framework Directive need to be taken into account?	ES Chapter 10 - Hydrology, Hydrogeology, Flood Risk and Ground Conditions (Examination Library reference APP-040) assesses the potential for the Development to impact upon the coastal (estuarine) environment, for example, references to coastal waters within section 10.5.1. A shift in WFD classification was used as a criteria for the assessment of magnitude of effects within the assessment, as outlined in Table 10.3 *Criteria for Determining Magnitude*. All effects on the water environment, including coastal waters were assessed as Negligible, demonstrating that there would be no change in WFD status. As such, it is considered that the application appropriately demonstrates the Development's compliance with the requirements of the WFD.