



Cleve Hill Solar Park

DCO Application Reference EN010085

Written Representation from
Kent Wildlife Trust

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1. Kent Wildlife Trust objects to the Cleve Hill Solar Park application. Below we detail the issues we have identified that have led to this position.

Consideration of Alternatives

2. The avoid–mitigate–compensate hierarchy is a core tenet of sustainable development, including UK planning policy and legislation. More specifically, Regulation 18(3)(d) of the EIA Regulations requires a description of the ‘reasonable alternatives’ considered, and the first test of Article 6(4) of the Habitat Regulations is that there not be any ‘alternative solutions’ (to the overall objective of the plan or project). In this context the accuracy of the information provided should be considered, including whether or not the alternatives considered have been unduly limited by the details of the proposed scheme (rather than the overall objective).
3. The Statement of Need “...concludes that circa 300 - 400 MW of unsubsidised low-carbon solar generation is needed in the UK, and that the Cleve Hill location is uniquely suited to the co-location of 300 - 400 MW of electricity storage alongside the solar generation asset.” (APP-253, Summary). We note that proposals for a solar park for the generation, storage, and export of up to 500 megawatts have recently entered the pre-application stage of the NSIP process (‘Sunnica Energy Farm’, case ref EN010106), so it would appear that the Cleve Hill location is not as unique as the Applicant believes.
4. The Applicant has defined ‘reasonable alternatives’ as those within 5km of the Cleve Hill substation as this distance is considered to be “*at, or beyond, the limit of viability for a transmission connection*” (APP-034, Paragraph 23). The Scoping report for the Sunnica Energy Farm¹ states that “*The total length of the cable run for Grid Connection Route A would be approximately 6km, and 10km for Grid Connection Route B.*” While there are differences between the two schemes, this does raise the question as to what degree alternatives, as defined by the applicant, have been constrained by their design and engineering choices. While the EIA Regulations limit consideration of alternatives to those that are “...*relevant to the proposed development and its specific characteristics...*”, we do not take this to refer to specific design and engineering choices.
5. London Array Wind Farm did not use their remaining capacity at the Cleve Hill Substation due to uncertainties about the environmental impacts, particularly impacts on the population of an SPA species. <https://www.londonarray.com/the-project-3/phase-2/> (accessed 18/6/19). We do not believe that the consideration of alternatives should be limited because of the unintended opportunities provided by the spare capacity at the Cleve Hill Substation. To do so could set a dangerous precedent, compromising the UK’s ability to plan strategically for its energy needs, and potentially causing an offence under the Habitats Regulations.
6. Kent Wildlife Trust is not an expert in the legislation and policies that have a bearing on the consideration of alternatives, and is therefore unfortunately not in a position to further develop the points above. We only ask that the Inspector considers them in making his recommendation if he considers them relevant and valid.

¹ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-000015-EN010106%20-%20Scoping%20Report.pdf>

Mitigation for Brent geese

7. The Ornithology Technical Appendix (APP-223) sets out the case for achieving the required capacity for Brent geese in the mitigation area through a combination of cutting/grazing and fertilising (paragraphs 115-127). It is established that areas cut and not fertilised do not achieve as a high a capacity as those that are.
8. In response to concerns regarding the impact of fertiliser use on water quality, the Applicant has stated that fertiliser will be “...*restricted in spatial application in fields to avoid spreading near the field boundaries.*” (APP-039, p9-50). Current rules on spreading manure prevent doing so within 10 m of the ditches². This has not been taken into account in the calculation of the Brent geese bird-days/ha that the site, on paper, may support. As the length of ditches within the mitigation area is significant, and for the avoidance of doubt, the Applicant should revise the calculations to take the differing management of the ditch buffers within the mitigation area into account.

Lapwing and golden plover

9. The Ornithology Technical Appendix (APP-223) sets out the case for using 1,560 and 1000 bird-days/ha as a measure of the capacity of the Brent goose mitigation area for golden plover and lapwing respectively (paragraphs 129-131). These figures come from a study of a 2,063 ha mixed arable area, and arise from a ‘*sum of the field areas weighted by their frequency of occupancy.*’³ As such they are a measure of the preferential use of certain fields within a wider arable landscape, and should be used with caution. A number of studies have suggested that these species feed opportunistically on a range of open habitats (arable and grassland types) within a landscape, probably determined by prey availability and field size (E.G. Mason & Macdonald (1999)⁴).
10. Paragraph 133 of the Ornithology Technical Appendix (APP-223) concludes that there is a shortfall in provision for lapwing, but states “*Lapwing and golden plover overlap to a large extent in their foraging requirements, feeding on similar invertebrate prey, and therefore assuming they are interchangeable, the AR HMA would support more lapwing-days if there are fewer golden plover-days to support.*” This assumes that there is competition between the two species, and the bird-day figures used as a starting point were limited by this competition. This does not appear to be supported by the literature.
11. Fuller & Youngman (1979)⁵ state that “*Both species frequently occurred in the same field when feeding and roosting, but the fact that general field preferences were the same does not rule out the possibility of a more subtle habitat segregation, such as preference for different soil conditions. On occasions we observed that Golden Plovers tended to feed on the higher parts of*

² <https://www.gov.uk/guidance/rules-for-farmers-and-land-managers-to-prevent-water-pollution#using-manure> Accessed 19/6/19

³ Gillings, S., Fuller, R.J. and Sutherland, W. (2007). Winter field use and habitat selection by Eurasian Golden Plovers *Pluvialis apricaria* and Northern Lapwings *Vanellus vanellus* on arable farmland. *Ibis* 149: 509-520

⁴ C.F. Mason & S.M. Macdonald (1999) Habitat use by Lapwings and Golden Plovers in a largely arable landscape, *Bird Study*, 46:1, 89-99, DOI: 10.1080/00063659909461118

⁵ R. J. Fuller & R. E. Youngman (1979) The utilisation of farmland by Golden Plovers wintering in southern England, *Bird Study*, 26:1, 37-46, DOI: 10.1080/00063657909476615

fields occupied by the two species. Such differences may be linked to varying diet, which is perhaps the most probable means of ecological separation in winter.”

12. Gregory (1987)⁶ states that “...Thompson (1983) speculated from his results that Golden Plovers may peck for prey at shallower soil depths than Lapwings, so reducing inter-specific competition.” In Barnard & Thompson (1985)⁷, it is stated that “*In the absence of gulls, golden plovers have no significant effect on lapwing time budgeting and feeding efficiency.*” The above papers suggest that golden plover avoid direct competition with Lapwing, and therefore their presence makes little difference to the availability of food for lapwings. The exception to this is when lapwings are under pressure from black-headed gulls, who steal their food. While black-headed gulls were recorded during the Cleve Hill bird surveys, it is not stated if they were acting in such a way.
13. More evidence is needed to back up the assumption made in paragraph 133 of the Ornithology Technical Appendix, or additional mitigation for lapwing needs to be identified.

Outline Landscape and Biodiversity Management Plan (APP-203)

14. The Landscape and Biodiversity Management Plan (LBMP) sets out how the mitigation and enhancements for species and habitats will be achieved, and is therefore a key document. It needs to give confidence that the desired outcomes can be achieved, while giving enough flexibility to tweak the management in response to monitoring if necessary, and also provide enough certainty for the purposes of the Habitats Regulations. As the document currently stands, it lacks sufficient detail to give confidence that it can meet these aims.
15. In particular, we would like to know how the Applicant proposes to control grazing densities within the perimeter fencing. At present, the LBMP treats the area within the perimeter fences as single compartments, but as can be seen from Habitat Management Areas figure (Figure 9.3 within APP-056) these areas can be divided into the ditches and buffers that are proposed to mitigate impacts on marsh harriers, and grassland under solar panels. It can be expected that outcomes between these two areas for any given grazing density (for the combined area) will be different, owing to the different growing conditions between them and behaviour of grazing stock. Another consideration is the prevention of poaching of ditch banks. We therefore consider it necessary to be able to control the grazing density between these areas separately. The provisions for grazing within the LBMP also need to be robust enough to avoid being compromised by commercial grazing interests.
16. We would also like to see more information regarding control of water levels within the LBMP. To achieve some of the aims of the document with regard to ditches and associated habitats, water levels will need to be raised. It may also be necessary to differentially control water levels in different areas of the site. We have started to progress this issue with the Applicant via the Habitat Management Steering Group, and will be providing more specific recommendations to them, particularly where it has a direct influence on water levels within the Special Protection Area.

⁶ Richard D. Gregory (1987) Comparative winter feeding ecology of Lapwings *Vanellus vanellus* and Golden Plovers *Pluvialis apricaria* on cereals and grasslands in the Lower Derwent Valley, North Yorkshire, *Bird Study*, 34:3, 244-250, DOI: 10.1080/00063658709476968

⁷ Barnard, C.J. & Thompson, D.B.A. (1985) *Gulls and Plovers: The Ecology and Behaviour of Mixed-Species Feeding Groups*. Publ. Croom Helm, London

17. We also have to consider how deliverable the LBMP is. Specifically, we would like reassurance that the manure required for the plan is likely to be available. As it is claimed that this ‘dunging’ will also benefit invertebrates (on which lapwing and golden plover feed), we assume the Applicant will be sourcing it from ivermectin-free cattle, owing to the negative effects of this on invertebrates⁸.

Marsh harrier

18. If successfully delivered by the LBMP, we do not dispute that the habitats created along the ditches will be of a type used by marsh harrier. What we are concerned about is the solar panels (plus fences in some places) creating a development ‘corridor’ that the marsh harriers do not use. We recognise that the corridor width varies across the site. We note that this issue has been picked up in ExQ1.1.11.

Managed Realignment

19. We note that, in Annex B of the Rule 6 letter (PD-003), the Inspectorate states “...*whilst the effects of the proposal on the achievement of sustainable development including the mitigation of, and adaption to, climate change are not listed as specific Principal Issues...the ExA will conduct all aspects of the Examination with these objectives in mind.*” Though we recognise that solar generated energy is renewable and can contribute to the mitigation of climate change (while also recognising that renewable and sustainable are not interchangeable terms), this should be balanced out with the Environment Agency(EA)’s plans for the area, which would also provide a positive contribution to the mitigation and adaptation to climate change. While the primary purpose of the EA’s plan is to meet the Country’s obligations under the Habitats Regulations (AS-017), salt marsh, a significant area of which can be expected to be created as a result of Managed Realignment at Cleve Hill, is known to ‘lock-up’ large amounts of carbon in comparison to other habitats (E.G. Barbier et al. 2011⁹).
20. We note in the Statement of Common Ground between the Applicant and the Environment Agency that “...*the Applicant would accept a suitably worded DCO requirement which would result in the end of the operational phase of the Development after 40 years of operation subject to the EA (or equivalent body at the time) demonstrating that the MR proposals remain capable of implementation on the Cleve Hill site at that time*” (AS-017). In order to be meaningful, it is important that it is worded such that the solar park itself does not compromise the EA’s (or equivalent’s) ability to demonstrate Managed Realignment is capable of being implemented. It is also important that the EA (or equivalent) are not prevented from gathering the necessary information to do so.

⁸ For example, Foster, G, Bennett, J & Bateman, M. (2014). Effects of ivermectin residues on dung invertebrate communities in a UK farmland habitat. *Insect Conservation and Diversity*. 7. 10.1111/icad.12030.

⁹ Barbier EB, Hacker SD, Kennedy C, Koch EW, Stier AC, Silliman BR. 2011 The value of estuarine and coastal ecosystem services. *Ecol. Monogr.* 81, 169-193. doi:10.1890/10-1510.1

Acquisition of Rights

21. We have a number of concerns regarding the potential conflict between the potential exercise of the rights the Applicant is seeking over the Special Protection Area (our Nature Reserve) and our management of it. We also have a current right of access through the application site to our Nature Reserve. At the time of writing we are still in discussion with the Applicant with a view to addressing these concerns through Heads of Terms and Deeds of Easement. These discussions are still at an early stage and at present this issue does not form part of our objection.