THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

East Anglia TWO Offshore Wind Farm

Planning Inspectorate Reference: EN010078

Secretary of State 2nd Additional Information Request

(30 December 2021)

Appendix 4: Natural England's Comments on the Applicant's Response to the Outer Thames Estuary SPA in Relation to Red-Throated Diver Displacement from Vessel Movements

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31st January 2022

Appendix 4 Natural England's Comments to the Applicant's Response to the Outer Thames Estuary SPA in Relation to Red-Throated Diver Displacement from Vessel Movements, submitted 30 November 2021

Overview

Natural England has reviewed the Applicant's response in relation to red-throated diver in Section 7 of the Applicants' Responses to the Secretary of State's Questions of 2nd November 2021 (Items 4-7).pdf (Royal Haskoning DHV *et al*. 2021).

We note that the Applicant was requested by the Secretary of State to provide information on specific areas of the Outer Thames Estuary (OTE) SPA where red-throated divers are known to be displaced by vessel movements; evidence that the Applicant could secure a reduction in vessel movements to reduce the displacement of red-throated divers in these areas; and provide evidence that this would be sufficient to compensate for red-throated divers displaced by the turbines.

Detailed Comments

1) Information on Specific Areas of the Outer Thames Estuary (OTE) SPA where red-throated divers are known to be displaced by vessel movements

1. Natural England agrees that red-throated divers (RTD) are among the most sensitive of birds to anthropogenic disturbance, including shipping. We note that the Applicant states that no dedicated work on vessel responses has been undertaken in OTE SPA. However, using a Generalised Additive Model (GAM) approach, APEM (2016)[1] indicated a significant influence of distance from shipping lanes and from sites of windfarm construction or operation on the distribution of RTD. APEM found that the activity of shipping vessels on the days the survey was carried out contributed to explaining the diver distribution.

2. We accept that there is no historical baseline which is unimpacted by shipping, however the lack of an unimpacted baseline does not mean that the impacts cannot be used to assess the level of displacement from shipping in a robust way. It would be possible to model the change in red-throated diver distribution if one can simulate

[1] APEM (2016). Assessment of Displacement Impacts of Offshore Windfarms and Other Human Activities on Red-throated Divers and Alcids. Natural England Commissioned Reports, Number 227

the removal of shipping pressures. Natural England acknowledges that the modelling is likely to be complex and require the mapping of vessel traffic derived from data collected by the automatic identification system of shipping (AIS). This type of modelling approach has been employed to investigate the impacts of shipping on Liverpool Bay SPA as carried out by CREEM (Burt *et al*, 2017)[2]. A similar modelling approach could theoretically be used in the OTE SPA to determine what the impacts from shipping would be, and this may indicate the change in diver distribution that would occur by simulating the removing of shipping. However, this does not change our views on the need to reduce the impact from EA1N and EA2 and as stated previously, to avoid any displacement the arrays should be moved 10km away from the boundary of the Outer Thames Estuary SPA.

3. Whilst the information used to designate the SPA does not provide any explanation of distribution patterns at the time of designation, there may be alternative approaches to investigate what factors determine distribution. One approach would be to use habitat modelling that identifies the influence of multiple environmental characteristics, also controlling for the influence of vessel activity, on diver distribution. That could then be used to identify places with all the right characteristics, but too few divers - and so indicate the displacement effect and potentially allow an "undisturbed" distribution to be generated.

4. However, we agree that nonetheless the evidence shows that as a highly sensitive species, red-throated diver are disturbed by vessel traffic within and around the SPA. It is therefore critical that that Applicants focus on what can be done to reduce impacts from EA1N and EA2 in respect of vessel movements. This impact reduction would need to align with the proposals set out for EA3. Therefore, Natural England advises that EA1N and EA2 should as a minimum be avoiding and minimising vessel movements within the OTE SPA in the period from 1st November to 31st March inclusive, as these are the key months when divers are present in the greatest numbers. Rather than referring to *'between November and March 1st inclusive'*, the proposed Best Practice Protocol for Minimising Disturbance for RTD **[REP8-036]** should instead refer to 1st November to 31st March inclusive. Please see our

[2] M.L. Burt, Mackenzie, M.L., Bradbury G. and Darke J. (2017) Investigating effects of shipping on common scoter and red-throated diver distributions in Liverpool Bay SPA. Report number: CREEM-15198-2017-2. Provided to Natural England (Project ref. 23732) August 2017.

comments on 9a below for the ecological rationale for this extension.

2) Evidence that the Applicants could secure a reduction in vessel movements to reduce the displacement of red-throated divers in these areas

5. Again, we disagree with the Applicant's assertion that there is no robust means of understanding the extent and distribution of shipping related displacement effects in the OTE SPA. Please see our advice in 4.1 above.

6. Natural England question whether the restriction of vessel movements by third parties is beyond the means of the Applicants. Whilst we recognise that restricting vessel movements by third parties may be challenging, Natural England notes that it has been possible for offshore windfarm developers to make arrangements with fishers not to fish inside windfarm arrays, so it would seem at least possible to secure an agreement and pay other sea users to avoid certain areas, should other approaches not be productive.

7. Natural England notes that the only proposal put forward for compensation for displacement of Red throated diver at the OTE SPA by the Applicant up to the Secretary of State's Second consultation (20 December 2021) is reducing vessel movements at East Anglia THREE (EA3). As stated in our comments on ornithology compensation measures [REP9-065] Natural England's advice is that the proposed measure of vessel navigation management will not provide compensation that addresses the AEOI on the OTE SPA as a result of effective loss of habitat. This is chiefly because periodic disturbance from transiting vessels does not equate to the persistent displacement effect exerted by an windfarm array. We highlight that the impacts of the EA3 development including vessel movements were not considered to represent an AEOI either alone or in-combination on the OTE SPA during the determination of that project, so it is hard to see how amending that project would provide equivalent benefits to the impacts arising from East Anglia ONE North (EA1N) and East Anglia TWO (EA2).

8. Also, Natural England does not consider restricting movements of EA3 vessels to provide any substantial additional benefits as compensation, because the EA3 Development Consent Order (DCO) already commits that project to minimise disturbance to red throated divers. EA3 are already obliged to minimise the impacts of vessel movements within transit corridors. There is a commitment in their DCO to

produce a Project Environmental Management Plan ('PEMP') that includes *"procedures to be adopted within vessels transit corridors to minimise disturbance to red throated diver"*. Therefore, even if reducing the disturbance EA3 vessel movements could be considered as compensation for the displacement effects of a turbine array, any benefits would have to be additional to measures that are already planned. Natural England have not yet had sight of EA3's PEMP, so we are not in a position to assess whether the measures brought forward provide significant additional benefits.

9. Notwithstanding the fundamental issue that minimising disturbance from EA3 vessels is an existing commitment in EA3's DCO, we advise the following in relation to paragraph 71, points a. to e.:

> a. *all vessel traffic engaged in the construction, operation, maintenance and decommissioning of the East Anglia THREE offshore works (excluding works within the Outer Thames Estuary SPA) will avoid the northern component of the Outer Thames Estuary SPA from 1 November to 1 March inclusive (this is the area of the SPA that is outlined and hatched in blue and shaded green on the figure appended to the agreement);*

- Vessels should avoid the whole of the Outer Thames Estuary SPA, not just the northern component as stated. If that is not possible due to the operational port chosen, this further limits the effectiveness of the measures Para 72b.
- Natural England advises that the restriction period for 'non-essential works' (the meaning of which is yet to be agreed) should be from 1st November to 31st March inclusive. Natural England had previously agreed 1st November to 1st March would be appropriate, but given the predicted levels of vessels transiting within the OTE SPA from this project and others we have had cause to revisit the available data regarding monthly abundance of RTD. It has been found that the current proposal to end the restriction on 1st March will not cover one of the months where significant numbers of red throated divers will be present i.e. March. It has been observed that divers may be present in significant numbers during the period between October and May. Whilst numbers may vary at the beginning and end of that period i.e. October and April/May, the core months are

November through to the end of March. Webb et al (2009)[3] found that although many peak counts were in January or February, in 2006 and 2007 the peak counts were in March.

b. *all vessel traffic engaged in the construction, operation, maintenance and decommissioning of the East Anglia THREE offshore works will avoid the Outer Thames Estuary SPA and the area of sea within 2km of the boundary of the Outer Thames Estuary SPA (the "SPA Buffer") from 1 November to 1 March inclusive. Again, this excludes vessels engaged in works within the Outer Thames Estuary SPA or the SPA Buffer*

- As noted above, the temporal restriction of 1st November to 1st March should be 1st November to 31st March inclusive.

c. *East Anglia THREE will participate in the red-throated diver compensation steering group referred to in Part 6 of Schedule 18 to the draft DCO if invited to attend*

- As stated, EA3 are already committed to minimise disturbance to red throated divers within their own finalised DCO. Having not seen the final compensation package for EA1N and EA2, it is unclear to Natural England what additionality to those measures this proposal will bring.

d. *East Anglia THREE will comply with the measures set out in the red-throated diver implementation and monitoring plan referred to in Part 6 of Schedule 18 to the draft DCO to the extent that the measures relate to the relevant East Anglia THREE offshore works*

- Whilst this is welcomed it is not clear to Natural England what additionality this will bring in relation to reducing the disturbance to Red Throated Divers, especially with EA3 already to committed to measures to minimise disturbance in their own DCO.

[3] Webb, A., Dean, B.J., O'Brien, S.H., Söhle, I., McSorley, C., Reid, J.B., Cranswick, P.A., Smith, L.E. & Hall, C. (2009). The numbers of inshore waterbirds using the Greater Thames during the non-breeding season; an assessment of the area's potential for qualification as a marine SPA. JNCC Report, No. 374.

e. *East Anglia THREE will provide monthly reports to the Applicant(s) to demonstrate compliance with the obligations referred to in paragraphs a and b above*

- Natural England notes that this is an internal process within SPR and therefore it is not clear what additionality this will bring in relation to reducing the disturbance to Red Throated Divers.

3) Provide evidence that this would be sufficient to compensate for red-throated divers displaced by the turbines

10. The reasons provided by the Applicant why they consider the proposed measures of restricting vessel movements from EA3 are inadequate. As stated in Natural England's advice [REP9-065] the reduction in the temporary disturbance from vessels will not compensate for the long displacement from the presence of turbines. Furthermore, there is already a commitment in EA3's DCO[4] to minimise disturbance to red throated divers as set out below:

    Under paragraph 13:
    (d) A project environmental management plan covering the period of construction and operation to include details of—
    (vi) procedures to be adopted within vessels transit corridors to minimise disturbance to red throated diver.

    Therefore, any reduction will be, at best, minor in nature.

11. Natural England re-iterate that our advice is that due to displacement effects on red throated diver in the Outer Thames Estuary SPA, an adverse effect on integrity cannot be ruled out either alone or in-combination in respect of EA1N, and in-combination in respect of EA2. Natural England's position is set out in **REP9-067** and in our covering letter to this response.

12. Finally, we note that in Paragraph 83 the Applicant repeats the inaccurate assertion that divers already avoided London Array prior to its construction. We will not repeat why the Applicant's assertion is false here but refer to our comments in **REP13-04 paragraphs 29 to 37.**

[4] The East Anglia THREE Offshore Wind Farm Order 2017 (planninginspectorate.gov.uk)