

The Planning Inspectorate
Temple Quay House
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25 Mawrth / March 2019

Dear Sir/Madam,

DEADLINE 8 SUBMISSION

GORSAF BŴER NIWCLEAR ARFAETHEDIG WYLFA NEWYDD / PROPOSED WYLFA NEWYDD NUCLEAR POWER STATION

RE: NATURAL RESOURCES WALES' DEADLINE 8 SUBMISSION

Further to NRW's Deadline 7 submission [REP7-011] which provided responses to a number of Hearing Action Points arising from the March Issue Specific Hearings, this Deadline 8 submission provides NRW's comments on the following reports (as NRW committed to in its Deadline 7 submission):

- i. NRW's comments on the *Position Paper on Compensation Measures* [REP5-046] and *HRA Stage 3 Assessment of Alternative Solutions* [REP5-044] reports in relation to the Anglesey Terns Special Protection Area (SPA) – see [section 1](#);
- ii. NRW's comments on the updated *Water Framework Directive Information to Support Article 4(7) Derogation* report [REP6-025] – see [section 2](#);
- iii. NRW's comments in relation to the Ecological Compensation Site on the additional information submitted at Deadline 6 (within the ES Addendum Appendices [REP6-016]), including hydrology and soils data collected to date at Cors Gwawr and Cae Canol-dydd – see [section 3](#).

The comments provided in this submission comprise NRW's response as a Statutory Party under the Planning Act 2008 and Infrastructure Planning (Interested Parties) Regulations 2015 and as an 'interested party' under s102(1) of the Planning Act 2008.

In addition to being an interested party under the Planning Act 2008, NRW exercises functions under legislation as detailed in the cover letter of NRW's Deadline 2 Written Representations [REP2-325]. For the purpose of clarity, all comments in this letter pertain to NRW's advisory role.

NRW's comments are as follows:

1. Anglesey Terns SPA

1.1. Position Paper on Compensation Measures

- 1.1.1. The Position Paper on Compensation Measures was submitted by the Applicant at Deadline 5 [REP5-046].
- 1.1.2. As outlined in paragraph 2.1.2 of the report, NRW has advised the Applicant in the development of its compensation proposals, including on Stages 1, 2 and 3.
- 1.1.3. Paragraph 2.1.1 sets out the 4 short-listed sites. As detailed in paragraph 2.1.2 of the report, NRW agree that these sites are, in principle, suitable for the provision of compensatory habitat. NRW understands that the Applicant will submit further information at Deadline 9 setting out more detailed proposals for the provision and management of the compensation sites. NRW will provide further advice on the adequacy of the Applicant's compensation measures at Deadline 10.
- 1.1.4. Paragraph 3.1.3 of the Position Paper provides the Applicant's understanding of the need to progress more than 2 sites as being to "*minimise the risk of inter-species or intra-species competition*". NRW has previously advised the Applicant that the four sites should be progressed, not only because of the potential inter-species competition (it being rare that Arctic and Common tern breed with Sandwich terns), but also because of the uncertainty of success at a given site and the recognised challenges of delivering compensatory proposals for three species of breeding terns. It is not guaranteed that the terns will translocate to a new site and therefore by having an appropriate number of sites, there is a reasonable chance of success for the compensation proposals. The translocation to different sites will be an iterative process, trying different methods to see which works at the different sites, thus an appropriate number of sites allows different techniques to be tried out. NRW advises that 4 sites is an appropriate number of sites to provide a reasonable likelihood of success for the compensation proposals.
- 1.1.5. In paragraph 3.1.4 the Applicant states that "*NRW is not advocating that four sites are a requirement of an effective compensation package*". NRW advises that the applicant should progress with the 4 proposed sites in order to provide a reasonable likelihood of success relative to the conservation objectives of the Anglesey Terns SPA.
- 1.1.6. Paragraph 3.2.1 states that "*tern decoys and tape lures (playback of recordings of terns, where possible using a recording of the Cemlyn colony for 'local dialect') would be used to encourage tern nesting*". We recommend that the calls of black-headed gulls are played as well as the other tern species, rather than just Sandwich terns, as the black-headed gulls arrive first and the Sandwich tern usually exist sympatrically with these species. Different methods could be tried on different sites in an adaptive management regime. Further to that suggested in paragraph 3.2.1 of the report, calls recorded from the local colony at Cemlyn for both Sandwich terns and black-headed gulls could be used to give it the local dialect.

- 1.1.7. With regard to paragraph 3.2.3, NRW advise that the sites should be prepared in late winter / early spring so that they are ready for the terns/black-headed gulls returning in mid-March. NRW agree that the equipment at the sites should be removed at the end of the breeding season for safe storage, however it would need to be returned for the following season. The vegetation and substrate material need to be maintained at the site ahead of each breeding season. NRW can provide further advice to the Applicant on these detailed measures.
- 1.1.8. We note the indicative simulations of habitat compensation works provided in Figures 3-2 to 3-9. The area of habitat/substrate provision appears to be relatively small in some of the visualisations while the number of breeding boxes appear low (e.g. Dulas Bay and Glan y Môr Elias). However, we note that these simulations are indicative only. NRW can provide further advice to the Applicant on the appropriate area of habitat provision.
- 1.1.9. In paragraph 3.3.5 the Applicant states that “*should the area favoured by terns lie within the vicinity of, but out with, the operational land identified, Horizon would not be required to acquire/have control over this land but would continue to maintain the habitat compensation site.*” We advise that the operational land at each site must be of an adequate size to provide appropriate compensatory habitat for breeding terns. NRW can provide further advice to the Applicant on the appropriate area of habitat provision.
- 1.1.10. Paragraph 3.4.1 states that sites would be established ahead of the earliest breeding season that an adverse effect could (potentially) occur i.e. before main construction started or, potentially, before particular works within main construction started – depending on the location and programming of works. NRW advise that the compensation sites should be provided to allow one full breeding season ahead of an adverse effect potentially occurring. This will provide the opportunity for black headed gulls and terns to prospect and colonise the sites ahead of the potentially disturbing construction works and, increase the likelihood of the sites being successfully utilised.
- 1.1.11. Paragraph 3.4.2 states that “*on completion of construction of the Project (assuming that terns are still breeding at the Cemlyn lagoon colony and the SPA’s conservation objectives are being met), any fencing, tern rafts and welfare facilities would be removed in an off-season, with only shingle and cockle shell deposits remaining*”. In this situation, if one or more of the sites is used by breeding terns, we advise that the Applicant engages with NRW regarding the transition of management of the site(s).
- 1.1.12. As part of the compensation proposals, NRW considers that appropriate monitoring throughout the construction phase will be required.
- 1.1.13. The management of the proposed compensation sites will be an iterative process and may need to be adapted for each site (i.e. what works on which site) over the implementation phase of the compensation. NRW can provide further advice to the

Applicant with respect to the development of detailed monitoring, reporting and adaptive management strategies for the compensation sites. We also advise that the Applicant ensures that appropriate monitoring of the Cemlyn Bay colony is undertaken throughout the construction phase. Monitoring of the Cemlyn colony will be required to understand tern behaviour at the Cemlyn colony relative to the management compensation sites (for example, if the compensation sites are not being utilised by terns, it will be necessary to understand whether they are continuing to successfully nest and breed at Cemlyn). In addition, monitoring of the Cemlyn colony is required to determine whether, following the construction phase, the terns are present at Cemlyn in sufficient numbers to meet the conservation objectives of the SPA. This would then determine the need for continued management of the compensation sites.

- 1.1.14. NRW advise that a securing mechanism for the compensation proposals will be required in the event that the Secretary of State concludes an adverse effect on site integrity when undertaking an Appropriate Assessment. The applicant has proposed that this should be done by way of a DCO Requirement and on 13/3/2019 provided NRW with a draft of the Requirement and a 'Tern Compensation Strategy' for inclusion within the Main Site Sub-CoCP. NRW understands that the Applicant intends to submit this information into the examination at Deadline 9, after which point NRW will formally will provide its advice to the Examining Authority. In the meantime, NRW will advise the applicant in respect of the adequacy of the compensatory measures proposed, and in connection with the development of the DCO Requirement and Tern Compensation Strategy.

1.2. HRA Stage 3 Assessment of Alternative Solutions:

- 1.2.1. The *HRA Stage 3 Assessment of Alternative Solutions* report was submitted by the Applicant at Deadline 5 [REP5-044].
- 1.2.2. NRW, as the Appropriate Nature Conservation Body (ANCB), only considered this report in the context of whether the alternative solutions considered would avoid, or reduce, adverse effects on the integrity of Anglesey Terns SPA.
- 1.2.3. We note that the Applicant has prepared a 'long-list' (Table 5-2) of potential alternative solutions, many of which are ruled out as the options would not "*meet/deliver the Project need*" or would not "*meet/deliver the Project objectives*". Please note that NRW in its ANCB role is not in a position to advise on this issue and it is a matter for the competent authority to consider.
- 1.2.4. We also note that in Steps 3 and 4 (consideration of feasible alternative solutions), that the three short-listed alternative solutions are ruled out as they would not be technically (solution no. 13) or financially (solution no. 22 and 22) feasible. Please note, NRW in its ANCB role is not in a position to advise on these issues and it is a matter for the competent authority to consider.

- 1.2.5. Notwithstanding our comments above, we would however make clear that, the only alternative solution that NRW as the ANCB considers would potentially not have an adverse effect on the integrity of Anglesey terns SPA would be solution no 19 (*Avoid blasting and construction during the tern breeding seasons*). We note in Table 5-2 that this solution is ruled out as it would not meet/deliver the Project need or objectives.

2. Water Framework Directive Information to Support Article 4(7) Derogation

- 2.1.1. The Applicant's updated *Water Framework Directive Information to Support Article 4(7) Derogation* report [REP6-025] was submitted at Deadline 6.
- 2.1.2. In NRW's Deadline 7 submission [REP7-011], NRW agreed (paragraph 5.4.9 in Annex B) to provide its comments on the Applicant's Article 4(7) information. NRW has provided the key points below (paragraph 2.1.4) to the Applicant by email on 15/3/2019 to assist the Applicant in addressing any outstanding gaps in information. A telecon was also held with the Applicant on 27/2/2019 to address many of the points also highlighted in 2.1.4 below.
- 2.1.3. The Applicant, in its Deadline 6 response [REP6-027] to NRW's Deadline 5 submission, states in paragraph 1.3.25 that it intends to provide materials to be considered under Article 4(7) in respect of benthic invertebrates. We note that this information will be provided by the Applicant at Deadline 8.
- 2.1.4. NRW's comments on the Applicant's updated Article 4(7) information [REP6-025] are as follows. We advise that the Applicant addresses these urgently:
- The Article 4(7) refers to NRW's out of date Operational Guidance Note 77 (OGN 77): *Derogation Determination for Water Framework Directive Article 4(7)*. We advise that the Applicant applies the 2018 version of the OGN77, which was provided to the Applicant on 27/2/2019;
 - Please note there is new interim TraC classification¹ (though we don't consider this makes a material difference to the conclusions in the Article 4(7) report);
 - Paragraph 4.2.5 states "*The Common Implementation Strategy guidance is a working draft and has not been formally adopted*". Please note that it has now been adopted;
 - Section 5.4 (Test (c)) presents the Applicant's case in terms of Overriding Public Interest. In terms of the policies referred to, we advise more emphasis is provided on Welsh policies over UK policies. For example, we note that paragraph 4.2.28 states that "*Welsh legislation and policy are also considered in test c1, including the Well-being of Future Generations (Wales) Act 2015 [RD8]*". However, we don't consider this legislation has been considered in test c1 (there may also be an error with the reference RD8).

¹ This is available to download at Water Watch Wales: <https://waterwatchwales.naturalresourceswales.gov.uk>

- e) Clarification is required as to how the Applicant has identified the potential mitigation measures to provide reassurance that all practicable mitigation has been considered;
- f) Also in relation to mitigation, the securing mechanism included in the “*Mitigation measure included?*” column is not specific in many examples. For example, there are a number of references to the Landscape and Habitat Management Strategy however, for clarity, it would be useful to clarify which chapters of the Strategy will secure the mitigation.
- g) Paragraph 5.5.32 of the report states that “*the presence of mounds A and B are therefore considered to drive non-compliance of the GWDTE and as such specific design alternatives to Site Campus are not considered further*”. It appears to NRW that the contribution (of the Site Campus construction/operation) to change in groundwater level is likely to be minor compared with other effects, including the presence of mounds A and B, however we consider this could be more clearly explained in the report. The additional proposed DCO Requirement for Hydrogeological Monitoring and Mitigation at Tre'r Gôf, which the Applicant intends to include in its Deadline 8 submission, could mitigate any effects associated with changes in groundwater level caused by the Site Campus.
- h) Mitigation measure *YM2.8 Drainage* is considered in Table 5-1. NRW do not consider that the indicative drainage information proposed in the DCO application will be fully protective of Tre'r Gôf. We note that YM2.8 refers to the Design and Access Statement as the securing mechanism, however we consider DCO Requirements WN1 and WN9 (the latter Requirement also securing the principles in Chapter 4 of the LHMS) which require submission of detailed drainage designs are the most appropriate securing mechanisms to include in the Article 4(7) report. Submission of detailed drainage designs (to be approved by the discharging authority in consultation with NRW) will be required to demonstrate that the Site Campus proposals do not significantly contribute to the non-compliance of the GWDTE.
- i) We advise clarity is provided on strategic and project level considerations;
- j) A number of the alternative design options are not referenced (although there are some additional report references collated at 5.5.26). We consider that each alternative option should be evidenced by reference to a report;
- k) Section 7.1 considers the requirements of Article 4(8). Section 7.1 deals with the first part of Article 4(8) (i.e. “*that the application does not permanently exclude or compromise the achievement of the objectives of this Directive in other bodies of water within the same river basin district*”), however we advise that it should also consider the second half of Article 4(8) i.e. that the application “*is consistent with the implementation of other Community environmental legislation*”. The Secretary of State may require this information to be included;
- l) Section 7.2 considers the requirements of Article 4(9). Article 4(9) requires that the application is consistent with the implementation of other Community legislation. However, section 7.2 has only considered other environmental Community legislation in considering the requirements of Article 4(9). We consider that there may be non-environmental European Community legislation that may be relevant.

- 2.1.5. We also wish to highlight (and as emailed to the Planning Inspectorate on 23/1/2019) that, as the Appropriate Agency for the purposes of the Water Framework Directive, NRW will advise the Examining Authority on matters relating to Article 4(7) of the Directive. In addition to providing comments on the information submitted by the Applicant (see 2.1.4 above), NRW will advise the Examining Authority as to whether the requirements of Article 4(7) have been met. This advice will be in the form of a brief report which we intend to submit at Deadline 10.
- 2.1.6. As advised in its Deadline 7 submission, NRW considers that the benthic invertebrates element in the Skerries Coastal water body should also be considered for derogation under Article 4(7). We note that the Applicant intends to provide materials with respect to benthic invertebrates at Deadline 8. NRW will consider this information in the scope of its advice on the requirements of Article 4(7).
- 2.1.7. For information, and as emailed to the Planning Inspectorate on 23/1/2019, NRW in its advisory role intends to advise (in its Deadline 10 submission) on application of Article 4(7), 4(8) and 4(9) of the Water Framework Directive. NRW's advice will be limited to the following extent:
- Article 4(7)(c): NRW will only provide advice on the first limb, namely the 'overriding public interest'.
 - Article 4(7)(d): When assessing whether there is a "*significantly better environmental option*", NRW will restrict its assessment to other options within Wales' territorial limits.
 - Article 4(8): NRW will not provide advice on the second limb of article 4(8) namely consistency *with the implementation of other Community environmental legislation*".
 - NRW will not provide advice on Article 4(9).

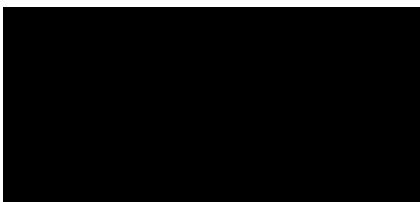
3. Ecological Compensation Sites

- 3.1.1. The Applicant submitted additional information (within the ES Addendum Appendices [REP6-016]) at Deadline 6, including hydrology and soils data collected to date at Cors Gwawr and Cae Canol-dydd.
- 3.1.2. NRW welcomes the information provided to date, but notes significant uncertainties, which are detailed further below in paragraph 3.1.5. Given these uncertainties, NRW cannot conclude with confidence that the proposed compensation will achieve its objectives.
- 3.1.3. As detailed in NRW's Deadline 7 submission [REP7-011], we recommend an adaptive management approach, predicated on the delivery of the required quantity and quality of compensation. This should include trialling of various techniques, including turf / topsoil stripping, cropping to remove nutrients, ground re-profiling, drain and land-drain removal (rather than taking a minimal approach).

- 3.1.4. In order to enable a robust adaptive management approach, NRW provided proposed amendments to Chapter 4 of the Landscape and Habitat Management Strategy [REP5-036] at Deadline 7. NRW also proposed amendments to Requirements ECS2 and ECS4 in its Deadline 7 submission.
- 3.1.5. NRW has provided the advice above for the Applicant to address during the DCO Examination. However, we note that the Applicant will need to continue hydrological and soil monitoring proposals to obtain a robust baseline prior to discharge of any related Requirements (ECS2, ECS3 and ECS4). We provide the comments below to explain the concerns that were raised at Deadline 7:
- a) The hydrological record covered in the ES Addendum Appendices [REP6-016] is very short. We view the report as interim and incomplete, with no conclusion as to the likely feasibility of fen creation. The record of groundwater geology is from September to January (approximately 4 months), however, in order to provide a robust baseline then a minimum of 12 months of data would be expected, and ideally 2-3 years in order to account for seasonal variation.
 - b) There is evidence of land drains which are likely to mask the natural groundwater condition. The report assumes this data to show the behaviour of natural groundwater without consideration of the possible impact of land drains. We note that several of the excavations have shown clay pipes, and observations on the ground suggest extensive under-drainage of these fields. We recommend that the report provides historical context on past land uses and modifications wherever possible including through aerial photo interpretation and ground penetrating radar to elicit the pattern of land drains. The report also requires incorporation of groundwater contours and cross sections.
 - c) There is use of differing soil nutrient extraction techniques (compared with some established literature) which make comparison with established literature difficult.
- 3.1.6. Please note, the comments provided in 3.1.5 above are not exhaustive. As detailed in 3.1.5 a), we consider the report to be an interim report. NRW can provide further advice direct to the Applicant (following the DCO Examination) on any updated and further iterations of the hydrological and soil baseline report.

Please do not hesitate to contact Bryn Griffiths should you require further advice or information regarding these representations.

Yours sincerely



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