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To: [Wylfa Newydd](#)
Cc: [Wylfa Newydd DCO](#); [Energy Island](#); [Aron, Henry](#)
Subject: Natural Resources Wales: Deadline 4 submission - Wylfa Newydd Nuclear Power Station (Our ref: 20011606)
Date: 17 January 2019 15:36:27
Attachments: [2019 01 17 Deadline 4 submission - NRW.PDF](#)

Deadline 4 submission, including NRW's case put orally at the January ISHs – Our ref: 20011606

Dear Kay Sully,

Thank you for sending the Rule 8(3) letter (dated 18/12/2018) for NRW's attention.

Please see attached NRW's deadline 4 submission which includes the following information:

- NRW's case put orally at the Issue Specific Hearings in January 2019,
- NRW's comments on the non-material change requests (no. 3, 4 and 5).

If you need any further information then please get in touch.

Many thanks

Bryn

Bryn Griffiths

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17 Ionawr / January 2019

Dear Sir/Madam,

DEADLINE 4 SUBMISSION

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

RE: NATURAL RESOURCES WALES' CASE PUT ORALLY AT THE ISSUE SPECIFIC HEARINGS HELD IN JANUARY 2019

1. Introduction

- 1.1. This document summarises the case put by Natural Resources Wales (NRW) at the following Issue Specific Hearings (ISH) held in January 2019 in which NRW was in attendance:
 - 9 January 2019: 2nd ISH on the draft Development Consent Order (DCO);
 - 10 January 2019: 1st ISH on Biodiversity (Terrestrial Ecology; Birds; Marine Works and environmental impacts; HRA);
 - 11 January 2019: 2nd ISH on Biodiversity (including Coastal Change, Climate Change and Transboundary Impacts).
- 1.2. In Annex A below we also provide a copy, as requested in the Planning Inspectorate's Rule 8(3) letter dated 18/12/2018, of NRW's comments on the non-material change requests (no. 3, 4 and 5) on which the Applicant consulted between 5th November – 6th December, and which was submitted to the Examining Authority at deadline 1 (REP1-014, REP1-016 and REP1-017).

2. 2nd ISH on the draft DCO (9 January 2019)

2.1. Articles and Schedules of the draft DCO – Marine jurisdiction

- 2.1.1. NRW has no objection to NRW Permitting Service being identified as discharging authority for DCO requirements associated with the marine works, subject to the inclusion of cost recovery requirements within the DCO.

- 2.1.2. We will continue to work with the Applicant, Welsh Government and Isle of Anglesey County Council (IACC) to consider the proposed approach further. We reserve the right to amend this position pending further detailed discussions with the Applicant and IACC, and the Welsh Government over the detailed drafting of the order and any necessary agreement over ways of working. Accepting responsibility for the discharging authority role for the marine works should not be seen to provide any view on the determination decision for the Marine Licence. We are undertaking a further detailed review of the DCO Requirements to ensure that we are able to undertake the role of discharging authority without compromising the Marine Licence. We will provide detailed comments to the Examining Authority by deadline 5.
- 2.1.3. As advised in NRW's Written Representation (REP2-325), we seek fees that mirror The Marine Licensing (Fees) (Wales) Regulations 2017, (£120 per hour for discharge of License conditions for a band 3). The analysis undertaken to support the 'fees review' demonstrated that this would be the required fee to support cost recovery for discharging conditions. With respect to the fees described by the Applicant, the cost recovering for a marine licensing authority to undertake this work would not have been considered. For comparable approaches, projects in England that contain a Deemed Marine Licence, the English fees for post consent would apply 'The Public Bodies (Marine Management Organisation) (Fees) Order 2014'. The Marine Management Organisation, as the discharging authority, is able to charge fees for that work by law under that Order. NRW requires that it is also able to be recompensed for its work, if it is to be a discharging authority.
- 2.1.4. With regard to use of section 106 funding for discharging DCO requirements, the Applicant states in its response to NRW's Written Representations (REP3-035) (paragraph 2.1.3) that "*Horizon has committed to providing a significant amount of funding under the draft DCO s.106 agreement for the processing of any discharge approvals and associated monitoring under the DCO. While this currently would apply to IACC, in the event that NRW is to be the discharging authority for the Marine Requirements it would also have the benefit of this additional funding*". The relevant section (Schedule 15) of the Draft 106 agreement as submitted at Deadline 3, makes no reference to NRW or any provisions for developer contributions to NRW for monitoring and implementation during construction and operation (associated with its proposed role as discharging authority below Mean High Water Springs). We have not been consulted on this matter by the Applicant and welcome further engagement.

2.2. **Schedule 3 Requirements**

- *NRW consultee role*

- 2.2.1. Within the Applicant's response to NRW's Written Representations (REP3-035) (paragraph 2.1.10), the Applicant states that it is content to amend a number of requirements (as listed in 2.7 of our representations) to provide that IACC, in determining whether or not to provide its approval, may consult NRW. These

amendments will be reflected in the updated draft DCO submitted at Deadline 4 (17 January 2019). NRW is content with this.

- Sub-CoCPs and CoOP

- 2.2.2. Within NRW's Written Representations (paragraphs 4.1 and 5.1), NRW advised that there's insufficient detail in the submitted Sub-Codes of Construction Practices and Code of Operation Practice to demonstrate that the activities will be managed appropriately. NRW has significant concerns with the level of detail currently included. NRW advise that if the DCO is made, that detailed Sub-CoCPs will need to be approved by the discharging authority, in consultation with NRW, ahead of the relevant activities taking place.
- 2.2.3. Within the Applicant's response (4.1.4 & 5.1.3) to NRW's Written Representations, it is stated: *"Horizon considers that the detail of the CoCPs / CoOP will be sufficient by the end of Examination for them to be approved as part of the DCO and not subject to any future approval process (unless a change is proposed via the tailpiece provisions)."* NRW have significant concerns with the approach taken and the level of detail available. Some examples of our concerns are as follows:
- In relation to Cae Gwyn SSSI, there is commitment in the Sub-CoCP to undertake monitoring but limited detail regarding the scope of monitoring, location of hydrological investigations, methodology, duration, frequency etc. With the current draft of the Sub-CoCPs, the monitoring proposals would be prepared post-consent, with no mechanism for proper scrutiny or approval. NRW notes that it is difficult to provide the required information prior to the end of the Examination. NRW therefore advise that the required information should be set out in a detailed Sub-CoCP and approved by the discharging authority, in consultation with NRW, ahead of the relevant activity taking place.
 - NRW notes that only high-level mitigation measures have been specified in the Marine Works Sub-CoCP to mitigate impacts on marine mammals (as features of Special Areas of Conservation). Detailed mitigation measures will need to be secured to demonstrate no adverse effect on marine mammals as a result of marine construction works. NRW notes that it is difficult to provide the required information prior to the end of the Examination. NRW therefore advise that the required information should be set out in a detailed Sub-CoCP and approved by the discharging authority, in consultation with NRW, ahead of the relevant activity taking place.

3. 1st ISH on Biodiversity (10 January 2019)

3.1. Habitats Regulations Assessment (HRA) – Seabird survey data

- 3.1.1. NRW has reviewed the seabird survey data, including the 'Addendum to Seabird Baseline Report' submitted for Deadline 3 (REP3-045). As stated in our response to the first written questions (Q 5.0.11), we consider that the baseline seabird information collected through boat-based transect and tracking surveys is

adequate to inform the assessment. Our concern is not with the adequacy of the baseline work undertaken; what concerns NRW is how the Applicant is using the data collected to inform the impact assessments. NRW strongly disagrees that the evidence (including literature information available or information collected at the Wylfa Newydd site) is sufficiently robust to demonstrate, beyond reasonable scientific doubt, that there would not be adverse effects on site integrity of the Anglesey Terns Special Protection Area (SPA).

- 3.1.2. NRW is not aware of any additional surveys, or changes to survey methodology, that could be done which would inform the Shadow HRA in a way that would demonstrate, beyond reasonable scientific doubt, that the works would not have adverse effects on site integrity.

3.2. HRA – Impacts on the Anglesey Terns SPA

- 3.2.1. NRW advised in its Written Representations that there is significant scientific doubt regarding whether there will be adverse effects on the Sandwich, Common and Arctic terns of the Anglesey Terns SPA. This is as a result of the whole construction works, including the activity on land and within the marine environment in addition to blasting works on site
- 3.2.2. NRW has explained its reasoning in detail in section 7.8 of its Written Representations. In summary, the Sandwich tern is a very sensitive species and readily deserts breeding sites. In addition, and of particular importance in view of the conservation objectives for Sandwich tern, is that the colony at Cemlyn is already showing signs of considerable stress, including:
- Significantly fewer terns returned to the colony in 2017.
 - Decrease in their productivity since 2007.
- 3.2.3. To inform its own impact assessment, the Applicant has drawn on academic literature, but the articles cited deal with other tern species, or wintering waders or wildfowl, or it refers to disturbance by people or watercraft. The literature is not directly comparable with the situation at this SPA and does not deal with disturbance caused by major construction projects on Sandwich tern colonies. We acknowledge that the academic literature available does not include directly comparable information that deals with this specific topic.
- 3.2.4. The evidence collected from the site indicates how terns behave in response to regular events such as presence of people, dogs, planes, bin lorries etc. However, the colony will be used to these events taking place every breeding season. What the terns will not be used to is the novel (including impulsive) and potentially louder noise, which may act cumulatively with the visual effects of a large-scale construction project, to cause significant disturbance.
- 3.2.5. The works pose significant risk to the conservation objectives of the SPA, as follows:

- Number of breeding pairs: The conservation objective for this is a five year mean of 460 pairs of Sandwich terns. At the moment the five-year mean is 2,062. Given the very high sensitivity of Sandwich terns to disturbance, there is a clear risk of the terns abandoning the colony as a result of disturbance. That would be catastrophic for meeting the conservation objective for number of breeding pairs.
- Range: If the colony abandons the site, this will have a significant effect on the “range” conservation objective for the Sandwich tern, Common and Arctic tern features of the SPA. At the moment, there are 3 sites with Common and Arctic terns nesting. If the colony at Cemlyn was abandoned, this would be reduced down to 2.
- Productivity: The conservation objective for the productivity of the Sandwich tern feature for the site is 0.85 chick per pair, mean average, over five years. At the moment the five-year mean is below this at 0.452. An increase in disturbance from the works could lead to an increase in what are known as “fly-ups” (birds flying up impulsively when disturbed). This would be of concern because when the birds are airborne, there is a greater risk that the eggs and chicks left behind will be vulnerable to predators, reducing productivity again (when the productivity is already below the conservation objective). NRW has additional concerns about the impact on productivity now that the Applicant is proposing a 24-hour working period for significant areas of works. Furthermore, disturbance could also result in stress, manifested as changes in hormone levels and not necessarily in a visual response, particularly if that visual response (such as taking flight) is unlikely to be appropriate for the type of disturbance. For example, taking flight might be appropriate to avoid a predator, but is of little adaptive value as a response to noise especially if this exposes eggs or chicks to predators. In such circumstances, birds may appear to tolerate noise or disturbance. However, it should not be assumed that there is no ultimate effect on body condition or breeding performance. In addition to increased construction noise stimuli at the colony, terns flying in and out of the colony during the course of their foraging trips will also be subject to a significant change to their visual environment due to the scale of construction works and associated machinery. The stress caused by these visual stimuli has the potential to act cumulatively with the effects of noise stimuli.
- NRW also consider that all three of these conservation objectives would be affected further if the shingle ridge of the colony is eroded away due to a change in coastal processes from the western breakwater. NRW will provide advice on mitigating coastal processes impacts on the relevant agenda item.

- *Mitigation*

- 3.2.6. As a result of the potential disturbance to terns, the Applicant has proposed mitigation in Table 11-1 of the Shadow HRA. However, as outlined in our Written Representations, NRW has significant concerns regarding the effectiveness and deliverability of the mitigation proposed. Following review of the report titled ‘Technical Note indicating how Horizon would meet committed noise levels’ (REP3-048), NRW’s position in its Written Representations remains unchanged. As detailed in paragraph 7.8.31 of its Written Representations, NRW has

significant concerns about the effectiveness and deliverability of the mitigation proposed. We also have the following additional comments following review of REP 3-048:

- NRW is unclear as to the basis for the Applicant's proposed Red / Amber thresholds or indeed, how those thresholds would be developed. It is also unclear as to why the Applicant considers it appropriate to use hourly averages to determine whether thresholds have been exceeded. The approach of considering hourly averages does not take into account the unique, impulsive noises which could lead to abandonment and increased fly ups.
- In addition, once thresholds have been exceeded, there are a number of criteria that must be met before mitigation will be applied (for instance, safety considerations, the availability of equipment and potential impacts and the overall construction programme – none of which are defined). As a result, the mitigation cannot be relied upon to reduce the possible impact of noise disturbance.
- NRW has similar concerns with respect to the Applicant's proposed 'reactive monitoring' (11.4.6 of the Technical Note). For instance, the Applicant does not explain how observed 'fly-ups' will be attributed to construction activities by 'matching acoustic signatures to site activities'. We consider that this will be particularly challenging given the scale of the construction site and the range of construction activities likely to be occurring simultaneously. Even if Horizon can identify the activity responsible for disturbance, alternatives will only be adopted if 'safe and practicable' – no definitions of safe or practicable are provided. As a result, NRW advise that this mitigation will not sufficiently address the risks of disturbance at the colony.
- The Applicant has proposed additional noise controls during the 'establishment period' and during the first two years of construction. The controls propose a limit of 55dB, at the colony, on the noise caused by blasting and day-time construction works. The Applicant states that in order to achieve 55db, "*works would avoid the most adverse (light downwind) wind conditions for noise transfer to the colony*". NRW require further detail on how noise-generating construction activity will be managed in accordance with the highly variable wind and weather conditions at Wylfa Newydd.

3.2.7. In view of the concerns raised, NRW's clear advice is that there is significant scientific doubt regarding whether there will be adverse effects on the Sandwich, Common and Arctic terns of the Anglesey Terns SPA. Stage 3 and 4 of the HRA process would therefore be required and compensation measures be secured.

3.2.8. NRW has been advising the applicant with regard to possible compensation measures elsewhere on Anglesey and in north Wales to attract in and provide breeding sites for the three terns species in appropriate locations away from potential disturbance.

3.3. HRA – Cemlyn Bay SAC (including from Mound E drainage)

- 3.3.1. NRW notes the bulky earthworks and landscape mounding proposed within the Cemlyn area at Mound E. Drainage from Mound E will flow into Nant Cemlyn, which then flows into the Cemlyn lagoon, one of the special features of the Cemlyn Bay Special Area of Conservation (SAC). Cemlyn lagoon is particularly sensitive to water quality impacts, and NRW has concerns that drainage from Mound E during the construction period, before Mound E is fully re-vegetated, could contain a greater concentration of suspended sentiments and impact on water quality in the lagoon.
- 3.3.2. NRW has now reviewed the latest Main Power Station Site Sub-CoCP (REP2-032) that was submitted for Deadline 2 which details (section 10.2.10) mitigation measures to avoid adverse effects on lagoon.
- 3.3.3. We note the mitigation arrangements proposed for surface water runoff from Mound E into Nant Cemlyn and the lagoon. In particular, we welcome the proposal to pump the run-off to Afon Cafnan, until the risk of pollution has been reduced, and we also welcome the design of the swales and siltation lagoon across Mound E.
- 3.3.4. We also accept the proposal to combine an assessment of the state of the vegetation covering Mound E, with an assessment of the sediment load arising from the mound over a period of time, and then the proposal to compare that with the sediment load arising from the wider catchment. NRW is satisfied that this provides a robust basis for restoring a state of natural drainage from Mound E to the lagoon (which is a feature of Cemlyn Bay Site of Special Scientific Interest (SSSI) / SAC).
- 3.3.5. There is also additional mitigation detail provided in section 7.39.10 of the Applicant's response to NRW's Written Representations, which we advise is included in the Sub-CoCP.
- 3.3.6. In summary, NRW is satisfied that, with detailed mitigation measures, impacts on the Cemlyn Bay SSSI/SAC as a result of Mound E can be appropriately mitigated. Section 10.2.10 of the Applicant's response to NRW states that baseline monitoring, and trigger thresholds, will be agreed with NRW. NRW advise that the detailed mitigation (including monitoring proposals) are set out in the detailed Sub-CoCP, to be approved by the discharging authority (in consultation with NRW).
- 3.3.7. NRW will confirm its advice in writing at the next opportunity.

3.4. **HRA – coastal processes**

- 3.4.1. Cemlyn Bay SAC consists of two features: the coastal lagoon and the perennial vegetation on the shingle ridge known as Esgair Gemlyn. The lagoon and shingle ridge vegetation could both be affected by the proposed marine works as a result of changes to coastal processes in the area.

- 3.4.2. The marine structures, including the breakwater and marine off-loading facility, are permanent structures and may cause changes in coastal processes in the vicinity of the shingle ridge.
- 3.4.3. In our Written Representations, we advised that additional information was required. The Applicant has since submitted the document titled 'Supplementary Information on Coastal Processes to Support Wylfa Newydd EIA and Shadow HRA' (REP2-007) for Deadline 2. NRW has reviewed the document and can now update its advice.
- 3.4.4. In summary, NRW advise that there is still an unacceptable degree of uncertainty regarding the ongoing impact of the breakwater on the integrity of shingle ridge during storm events from the north-west. We welcome the additional modelling undertaken, however that work has shown material effects, including an increase in wave height over a particular area of the ridge due to a reflected wave. These material effects result in there being significant uncertainty about how the ridge, and the lagoon, will be affected over the long term by these changes in the hydrodynamic conditions.
- 3.4.5. As a result of this significant uncertainty, and the fact that a model can only aid our understanding of such a complex natural process to a certain extent, our clear advice is that it cannot be concluded, beyond reasonable scientific doubt, that the proposals would not have adverse effects on those SAC features.
- 3.4.6. We advise that the applicant should consider monitoring the ridge to test the prediction in the ES that the breakwater would not cause material effects to the ridge. If effects on the ridge are detected through monitoring, there should be provision for adaptive management to help maintain the integrity of the ridge. We would welcome continued discussion with the Applicant to advise on an adequate monitoring and mitigation package.
- 3.4.7. NRW will expand on this advice in our next written submissions.

3.5. **HRA – In-combination effects of air quality**

- 3.5.1. As we stated in our response to the first set of written questions (Q 5.0.15), in light of the Wealden judgement, we consider that even when the Process Contribution is less than 1%, other relevant projects should be considered to ascertain whether there are possible in-combination effects. Depending on the source of the impact, different projects will have different screening radii so far as it relates to air quality. If these radii overlap with the source being assessed and the pollutants emitted can interact (e.g. NO_x, SO₂, NH₃), then there is a likelihood that an in-combination effect could occur and therefore an assessment is required.
- 3.5.2. In relation to the construction phase, NRW is not aware of other relevant projects which may act in-combination to cause an adverse effect on integrity of Cemlyn Bay SAC in terms of air quality (based on 200m screening distance for construction plant and machinery).

3.5.3. In relation to the operational phase, NRW is reviewing additional information from the Applicant, as part of the Operational Combustion Permit, to understand whether the modelled outputs are reliable. We can provide further advice once robust modelled outputs are confirmed.

3.6. Marine Works – Noise Modelling & Mitigation – Marine Mammals

3.6.1. We stated in our Written Representations that we agreed with the conclusions of the Shadow HRA that construction works associated with the project (including collision with marine vessels) are not likely to result in adverse effects on the site integrity of marine mammal SACs/Sites of Community Importance in Wales. This is on the basis of detailed mitigation being approved by the discharging authority, in consultation with NRW.

3.6.2. Marine construction works, including dredging, rock breaking, rock cutting and drilling, have the potential to generate significant underwater noise. The Shadow HRA includes outline mitigation measures in Table 11-1, also reflected in the Mitigation Route Map (APP-422), which will need to be implemented. We advise that detailed mitigation measures will need to be set out in the Marine Works Sub-CoCP and approved by the discharging authority, in consultation with NRW, as a DCO Requirement.

3.6.3. Vessel management (e.g. keeping travel speed low; staying on course; following codes of conduct for reducing wildlife disturbance) will be important in mitigating possible risk of collision. We advise that a Vessel Management Plan be set out in the Marine Works Sub-CoCP to be approved by the discharging authority, in consultation with NRW, as a DCO Requirement. The Applicant in its response to our Written Reps states that the Marine Works Sub-CoCP will be updated with the principles of the Vessel Management Plan at deadline 4 (and that “*the full VMP will be subject to consultation with NRW and become a condition of the Marine Licence*”). Please note, NRW consider that the full VMP should also be set out in the Sub-CoCP.

3.6.4. In section 7.11.11 of our Written Reps, we highlighted that since the Habitats Regulations Assessment and ES were written, the accepted underwater noise criteria for marine mammal injury and disturbance have changed. New criteria developed by the National Marine Fisheries Service in the US (NMFS 2018) are now the best available science and have been adopted by the Statutory Nature Conservation Bodies in the UK. The criteria give new sound levels at which hearing injury can occur. The Applicant has considered these new criteria in their response to NRW’s Written Reps and provide a note in Appendix D of that response which describes the implications for the Shadow HRA of using the NMFS (2018) criteria. The Applicant states that the conclusions of the Shadow HRA do not change when the new criteria are used. However, there is no assessment using the new criteria for rock breaking and percussive drilling which are likely to be the noisiest activities (i.e. worst case). We note that the Applicant’s response to NRW’s Written Representations suggests the use of the NMFS criteria has been

based on data currently available “*while the underwater noise modelling is updated using the NMSF (2018) criteria*”. It appears that the intention is to provide updated modelling to the Examination in due course – NRW request confirmation that that is case.

3.7. Marine Works – Water Framework Directive

3.7.1. The Water Framework Directive sets out requirements to protect and improve the water environment and defines environmental objectives that must be met for all water bodies.

3.7.2. NRW has the following advice:

- *The Skerries coastal water body*

3.7.3. Physical footprint of the marine structures and the excavation and dredging works, as well as certain secondary effects (e.g. changes in hydrodynamics; sediment deposition) will affect the coastal bed and intertidal zone in the Skerries. We agree with the WFD Compliance Assessment that the hydromorphological quality element of this water body may deteriorate from high to good status, such that a derogation under Article 4(7) of the WFD will be required.

3.7.4. We advised in our Written Reps that further information was required to show that benthic invertebrates would not deteriorate as a result of the project. We received further information from the Applicant at Deadline 3 (18th Dec). We will respond in writing at deadline 5.

- *Anglesey North coastal water body*

3.7.5. In relation to the Anglesey North coastal water body, as stated in paragraph 7.4.14 of NRW's Written Representations, the application does not include an assessment of the impact of the cooling water discharge upon coastal processes. It is unclear whether the volume of water discharged, and the speed at which it is discharged, could impact on hydrodynamic processes in that water body (e.g. layering of rocks, sediment movement).

3.7.6. The Applicant submitted supplementary information (REP2-007) on coastal processes for deadline 2 regarding the effects of the cooling water discharge on coastal processes. However, that information only dealt with impacts to the bed shear stresses caused by the increased flow discharge. There was no modelling provided to show the impacts of the discharge on hydrodynamics. This information is required for NRW to complete its advice.

- *Cemlyn Lagoon coastal water body*

3.7.7. NRW advised in its Written Representation that it is not possible to rule out adverse effects on the integrity of Cemlyn Bay SAC due to the effects of marine structures on coastal processes, which could impact on Esgair Cemlyn. The technical

assessment of these issues is through the HRA, including identifying appropriate mitigation. As Cemlyn lagoon is also a WFD coastal water body, it will need to be considered if there is risk of deterioration.

- *Ynys Mon Secondary groundwater body*

- 3.7.8. We agree with the Applicant that saline intrusion and damage to the Tre'r Gôf Groundwater Dependent Terrestrial Ecosystem (GWDTE) would constitute deterioration of the Ynys Mon Secondary groundwater body.
- 3.7.9. Not all pathways have been identified, in particular where relating to the effects of dewatering on the Terrestrial Ecosystem at the main site. No monitoring or mitigation for these effects has therefore been provided. The Applicant states in its response to NRW's Written Representations (at paragraphs 7.15.2/7.15.3) that additional information will be provided on this by Deadline 6.
- 3.7.10. Given the remaining uncertainty about the risks to Tre'r Gôf GWDTE if the groundwater level is altered, we advise that provision for monitoring and mitigation of groundwater around Tre'r Gof should be in the Main Site Sub-CoCP. There's no such provision currently in that document.

- *Article 4(7)*

- 3.7.11. NRW provided a number of comments to the Applicant on the draft Article 4(7) information in March 2018, and we restated our position in our latest Written Representations. In its response to our Written Representations, the Applicant states that it is considering our advice and undertaking further work which will be provided by Deadline 6. NRW will respond to that additional information once it has been submitted.

3.8. Marine Works – Benthic Habitat

- 3.8.1. The ES did not include a cumulative impact assessment of the effects of the marine works, the changes in coastal processes, and the water-borne discharges (including the cooling water discharge), on benthic habitats of conservation importance.
- 3.8.2. The Applicant acknowledged this in its response to our Written Representations (7.73.3), and an additional 5.6ha of cumulative habitat loss and / or degradation has now been identified around the cooling water discharge, in addition to that identified under the footprint of marine works (revised total of 36.1ha).
- 3.8.3. We welcome the additional information and updated impact assessment. However, we disagree with the conclusion that no additional mitigation needs to be provided, including to offset this larger extent of habitat loss or degradation. The additional area of impact identified during the cumulative assessment process is partially composed of Annex 1 rocky reef. This has been categorised as a habitat of conservation importance (with a medium receptor value) in the EIA process, and

mitigation has been proposed to offset losses of this habitat in Porth y Pistyll. NRW would expect Horizon to acknowledge the additional reef areas identified in the revised assessment within the combined total for areas requiring mitigation.

3.8.4. We note from the Applicant's response to our Written Representations (paragraph 7.73.8) that the Applicant has recently compiled a report that expands on the engineering options appraisal that has been undertaken to determine the ecological enhancement measures that are viable. We understand that this report is going to be formally submitted at deadline 4 and that it will include a commitment for additional mitigation. We will review this additional information and respond in writing in due course.

3.9. **Marine Works – Invasive Non-Native Species (INNS)**

3.9.1. Given the scale of the construction works in the marine environment, and the likelihood that marine vessels from across the world will be used as part of the project, there is considerable risk from marine INNS.

3.9.2. The Shadow HRA Addendum (AS-010) submitted by the Applicant in response to the Section 51 advice includes a draft Biosecurity Risk Assessment.

3.9.3. We consider the report provides a number of appropriate measures to minimise the introduction and/or spread of marine invasive non-native species. However, there are still some gaps that need to be addressed in the final Biosecurity Risk Assessment which should be set out in the detailed Marine Works Sub-CoCP and approved by the discharging authority (in consultation with NRW) as a DCO Requirement.

3.9.4. The role of the Ecological Clerk of Works was discussed at the hearing. NRW requested clarification on this role with respect to the marine environment and whether the role would be responsible for i) securing adequate environmental controls in the marine environment, and ii) ensuring compliance with risk assessments management plans and actions required to reduce risks around marine INNS.

3.10. **Marine Works – Monitoring Impingement**

3.10.1. With regards to Section 7 fish (i.e. fish for which there is a duty to maintain and enhance under the Environment (Wales) Act 2016), we consider that there may be potential effects on lesser sandeel, whiting and herring.

3.10.2. We note that the Code of Operational Practice proposes to monitor the entrapment of fish. We advise that detailed monitoring proposals, which will be used to optimise the mitigation, should be set out in a detailed Code of Operational Practice and approved by the discharging authority, in consultation with NRW, as a DCO Requirement.

3.11. Terrestrial Ecology – Tre'r Gôf SSSI

- 3.11.1. Tre'r Gof is an alkaline fen (wetland) which has developed over 10,000 years. It is sensitive to damage from changes in water quantity or water quality.
- 3.11.2. We have consistently advised the Applicant that all reasonable alternatives and mitigation should be considered (before compensation) to reduce and avoid negative effects on the SSSI.
- 3.11.3. However, we do not consider that the hydrogeological conceptual model is fit for purpose. We have made several detailed comments in our Written Representations, including highlighting the flawed understanding of the geology and hydrogeology.
- 3.11.4. In addition, the effects of dewatering to build the cooling water tunnels, both short and long term, are not included in the model. Given that the tunnel outfall is near to Tre'r Gôf SSSI, there is a significant risk, in combination with other dewatering activities on the main site, that the water levels of the supply mechanism into Tre'r Gôf could be reduced further, including the potential to cut off the springs feeding into Tre'r Gôf.
- 3.11.5. We do not agree with the Applicant that its model is conservative. No estimate of the time taken to reach steady state is provided and no evidence is given as to the efficacy or sustainability of shotcreting (i.e. the spraying of concrete) as a way of reducing groundwater inflow to an excavation in the long term, given the passive drainage which will then operate.
- 3.11.6. NRW advise that appropriate monitoring and mitigation, informed by a revised conceptual model and linked to dewatering, should be included in the sub-CoCP. No such provision is made currently. The detailed monitoring and mitigation should be set out in a detailed Sub-CoCP to be approved by the discharging authority (in consultation with NRW).
- 3.11.7. NRW also advise that it is unclear how drainage under and around Mound A will operate. There is concern that the proposed "drainage blanket" could actually decrease groundwater recharge and contact time with the substrate (essential to achieve the required chemical status) by capturing springs and seepage too early. Based on the information provided, we advise that it is unlikely that the "drainage blanket" will reduce the impact of changes to the quality and quantity of groundwater to the site.
- 3.11.8. In relation to air quality, NRW is content that the proposed mitigation at Tre'r Gôf, including the cutting and removal of excess biomass, is a reasonable response to the risk of damage from elevated NOx levels.

3.12. Terrestrial Ecology – Cors Gwawr & Cae Canol-dydd Compensation Sites

- 3.12.1. NRW consider that there is insufficient information on the pre-emptive compensation sites (Cors Gwawr and Cae Canol Dydd) to have confidence in the proposals. In particular, hydrological data supplied for these sites is inadequate, which means that their hydrology currently is not adequately understood.
- 3.12.2. In both cases, there are existing areas of fen which can be enhanced by managing apparent water sources (e.g. springs and streams) so that they are extended to irrigate a larger area. However, there is no adequate data on groundwater regime or streamflow on which to base any projection of the quantity or quality of wetland that could be created.
- 3.12.3. Preliminary hydrological survey suggests that there are probably groundwater and surface water resources that could provide *some* appropriate conditions to create fen wetland, but this has not been quantified. It is therefore not possible at this time to conclude with confidence that enough water of adequate quality is available to create the proposed fen habitat.
- 3.12.4. Characterisation of groundwater would normally be based on several hydrological years data, to account for seasonal high and low points and to counter the effect of yearly weather variation.
- 3.12.5. The Applicant has suggested that recent soil investigations indicate little need for surface stripping of topsoil (to remove over-fertile layers) but this again is predicated on there being enough water of adequate quality for irrigation and groundwater. It therefore cannot be concluded at this stage that soil stripping will be unnecessary.
- 3.12.6. While we consider that the desired habitat may be capable of being created, the work done so far does not provide the assurances needed. We consider an adaptive management approach will be required, which could mean creating wetland at other sites if the fen creation at the proposed sites cannot be delivered. We hope that this will not be necessary, however this should not be ruled out at this stage.

3.13. Terrestrial Ecology – Cae Gwyn SSSI

- 3.13.1. NRW advise that there is inadequate baseline hydrological investigation. Whilst we understand the difficulty due to poor access to the site, it results in a weak understanding of the underlying hydrological processes affecting the site and a reliance on extrapolation and best guesses. We consider that the dewatering will probably not impact the SSSI, but we have only low confidence in this prediction due to the paucity of substantive evidence. As a result, we recommend a programme of additional boreholes and monitoring (with agreed trigger levels) along with a contingency plan for mitigation, such as groundwater recharge in the event of evident impact. The detailed monitoring and mitigation proposals should

be set out in a detailed Sub-CoCP and approved by the discharging authority (in consultation with NRW).

- 3.13.2. In relation to air quality, NRW has considered the Air Quality Quantification report (REP3-052) submitted by the Applicant for Deadline 3. This states that, based on the mitigation committed to in the Main Site Sub-CoCP (commitment to use newer non-road mobile machinery), that there are only exceedances of the relevant air quality thresholds at Cae Gwyn SSSI for nitrogen deposition during the Year 2 scenario.
- 3.13.3. The baseline nitrogen deposition is already high in the area, so the project would add additional loading to the SSSI which is beyond the critical load at which a significant effect may be occur.
- 3.13.4. The Air Quality Quantification report states that the modelled increase in nitrogen deposition at Cae Gwyn may cause a <1% decline in species richness. However, this conclusion does not fully consider the impacts of nitrogen deposition on the bog habitats. Species richness does not equate to species value. It does not consider that the species lost may be particularly sensitive to that pollutant and also critical to the ecology of the site.
- 3.13.5. Species respond variously to nitrogen loads. Mosses are particularly sensitive. The southern basin of the SSSI is probably the most sensitive part of the site; its structure is a lawn of *Sphagnum* mosses which are largely dependent on rainwater for their mineral supply. Thus, changes in rainwater composition (and aerosol deposition) are particularly relevant to this group of lower plants, which form the functional structure of the bog. Also, with changes in nitrogen composition, there is a likelihood of changes in the particular species of *Sphagnum*, from the large, bog-building species to thinner species. Thus, the southern basin is particularly likely to be impacted by adverse changes in air quality.
- 3.13.6. Unlike the fen habitats of Tre'r Gôf, a *Sphagnum* lawn cannot be mown to remove biomass and excess nutrients without destroying the very feature itself. It is difficult to envisage any on-site mitigation which would address this problem and one must therefore rely on mitigation to reduce the problem at source, whether from the development itself or other background sources of nitrogen pollution.
- 3.13.7. The Secretary of State will need to recognise and weigh the possible damage to the SSSI in its determination of the project.

3.14. Update on consents, licences and other agreements

3.14.1. NRW is currently in the process of determining 5 applications:

- Radioactive Substances Environmental Permit (EP) - Regulates radioactive emissions to the environment. Application received in October 2017.

- Marine Licence - application for all the construction and construction-related activities (e.g. blasting, tunnelling, dredging and disposal of marine sediment) below Mean High Water Springs. Application received in June 2018.
- Combustion EP - Regulates emissions to the environment from back-up generators and boilers. Application received in June 2018.
- Operational Water Discharges EP - Regulates water discharges associated with the operation of the power station's cooling water system. Application received in June 2018.
- Construction Water Discharges EP - Regulates water discharges associated with site drainage and contaminated water during the main construction period (for example, includes discharges of rainfall runoff and discharges from a sewerage system). Application received in June 2018.

3.14.2. A further 6th application is also expected: Abstraction Licence application – Regulates dewatering activities associated with construction (e.g. dewatering of deep excavations). We are expecting this application to be submitted in early 2019.

3.14.3. NRW carried out extensive consultations on all applications received to date, both within NRW and externally. Those consultations led us to make many detailed requests for further information from the Applicant so that our decisions on those applications are adequately informed. That need to obtain further information lengthened timescales for decision-making and impacted our ability to reach the stage of having draft decisions during the examination of this DCO. If we are able to arrive at a draft decision, we will initiate a further round of consultation on such a decision. We are not expecting to be in a position to make any final decisions before March 2020.

4. 2ND ISH ON BIODIVERSITY (11 JANUARY 2019)

4.1. Terrestrial Ecology – Protected Species

4.1.1. In relation to post-construction monitoring, we have reviewed the updated Sub-CoCPs submitted for deadline 2 and confirm that the duration of the post-construction monitoring proposals for those species for which draft mitigation licences have been submitted is now satisfactory.

4.1.2. In relation to water voles, NRW is satisfied with the mitigation measures set out in the draft conservation licence for the Main Site. However, the draft licences are not control documents. We note that the Sub-CoCP has been updated to include a commitment to pre-construction surveys. However, detailed mitigation measures are not specified in the Main Power Station Site Sub-CoCP. There may also be impacts at the Associated Developments for which detailed mitigation measures will need to be set out. NRW advise that the detailed Sub-CoCPs should be approved by the discharging authority, in consultation with NRW.

- 4.1.3. In relation to bats, NRW is satisfied with the mitigation measures set out in the draft mitigation licences in respect of bat breeding site and resting places. However, the draft licences are not control documents. The detailed mitigation measures are not specified in the Main Power Station Site Sub-CoCP. NRW therefore advise that the detailed Sub-CoCPs should be approved by the discharging authority, in consultation with NRW.
- 4.1.4. In relation to great crested newts, both in terms of the main site and the A5025 improvements, NRW is satisfied with the mitigation measures set out in the draft mitigation licences with the exception of the information provided about newt fencing proposed. However, the draft licences are not control documents. The detailed mitigation measures are not specified in the relevant Sub-CoCPs. NRW therefore advise that the detailed Sub-CoCPs should be approved by the discharging authority, in consultation with NRW.
- 4.1.5. In terms of the Dalar Hir Park & Ride, there are records of great crested newts in the vicinity of the site and may be present on site (particularly when the wall, which acts as a barrier, is removed during construction). NRW advise that detailed Reasonable Avoidance Measures should be set out in the Sub-CoCP to demonstrate that the works will not impact on great crested newts.
- 4.1.6. In relation to long-term management, management schemes will need to ensure appropriate management of habitats for protected species on the main site and off-site in the long-term. As discussed at the 2nd ISH for the draft DCO, for the off-site habitats, we advise that management schemes are secured via an overarching section 106 obligation.
- 4.1.7. In relation to chough and barn owl, as Schedule 1 species under the Wildlife and Countryside Act 1981, we advise that detailed mitigation measures should be set out in the Sub-CoCP and approved by the discharging authority (in consultation with NRW), to demonstrate that the birds will not be disturbed while nesting. There is insufficient detail on this in the current Main Power Station Site Sub-CoCP.

4.2. Coastal processes – sediment regime

- 4.2.1. Ideally, NRW would have liked to have seen more data relating to sediment within Cemlyn Bay to help to understand what sediment is available to be mobilised under certain bed shear stress conditions. However, we have considered the supplementary information (REP2-007) on coastal processes provided to support the EIA and the Shadow HRA and we are satisfied that more data would not materially change the results of the impact assessment on smothering of the ridge. Please note, there are still uncertainties about the reflected wave conditions and changes to hydromorphology that were explained in the first ISH on biodiversity (10th January 2018) and which need to be considered further.

4.3. Coastal processes – wave modelling

- 4.3.1. In the time available, we do not consider that further modelling, or gathering further data, would help to address the uncertainty that has been identified. Amending the design of the breakwater, and re-modelling that new design, would also be unlikely to address our concerns as the new design would probably result in an impact on the shingle ridge, and the further modelling work would be unlikely to resolve the uncertainty.

4.4. Marine modelling of the construction discharge

- 4.4.1. Sewage discharges both from the construction sewage package plant, and from Dŵr Cymru Welsh Water's sewage treatment works linked to the site campus, could have an impact on Cemaes Bathing Water. The Applicant is currently carrying out additional work including modelling. The Applicant states in its response to our Written Representations that this will be submitted to NRW's Permitting Service as part of the application for a Construction Water Discharge Permit. We understand that this additional information is also to be submitted in to the DCO Examination.

4.5. Flood risk – climate change

- 4.5.1. For the modifications of landform/mounds which will increase flood risk, and for the associated developments, we consider that the appropriate climate change allowances have been used. With regard to Dalar Hir Park and Ride which has used 10 years climate change allowance, that period of 10 years relates to the lifetime of that temporary development; we accept that as a reasonable approach.
- 4.5.2. The Office for Nuclear Regulation is responsible for advising on flood risk as it bears on the safety of the nuclear reactors and associated buildings (within the fence line).

4.6. Flood risk – Dalar Hir Park and Ride

- 4.6.1. The additional modelling in the Flood Consequence Assessment (FCA) Addendum (REP2-371) has identified a reduction in flood risk as compared to the previous FCA.
- 4.6.2. The FCA Addendum was submitted on 18 Dec 2018 (deadline 3), and therefore NRW has not yet been able to carry out a full technical review. NRW's preliminary view, based on the limited review that has been undertaken, is that subject to mitigation, the risks and consequences would seem to be acceptable. However, there are matters that need to be addressed.
- 4.6.3. The Applicant, in its recent response to our Written Representations refers to a parking space remaining at flood risk (i.e. not "dry") during the design flood event which is contrary to TAN15. Our advice is that no part of the development should flood on events more frequent than the 1% Annual Exceedance event. It is unclear

what area this is (and if it is an area of parking or a single parking space). Site plans are required showing the areas affected.

- 4.6.4. In the FCA Addendum, the modelled inflows (i.e. the volumes of water modelled in the watercourse) have been reduced thus making the flood risk smaller, but flood mitigation measures are still required to manage the risk. We note that the Applicant intends to lower field levels to 15.03m AOD, however there is no information presented on what the existing field levels are (the difference will need to be known).
- 4.6.5. Also, we note that no blockages of culverts have been included. The risk of blockage relates more to debris entering the watercourse as a result of the people using the park and ride facility (i.e. rubbish), rather than from woody debris upstream of the site. It is clear in our published guidance (Operational Guidance Note 100. Flood Risk Management: Modelling blockage and breach scenarios: Feb 2015) that where culverts have been identified as being sensitive to blockages, a blockage scenario will need to be modelled. This information will be required.
- 4.6.6. NRW will confirm its advice in writing after the hearing, by deadline 6 (19 Feb).

4.7. **Flood risk – Offline highway improvements**

- *Valley (Section 1)*

- 4.7.1. Our previous concern relating to Section 1 (Valley roundabout) was due to the FCA not assessing a breach of the tidal embankment which gives protection from tidal flooding to the proposed area of highway improvement.
- 4.7.2. We were expecting an Addendum to the FCA which would have assessed a breach in the hydraulic modelling. To date, that has not been provided, although a Technical Note: 207672-0013-AA40-TLN-0001 (Hydraulic modelling of tidal defence breach at Valley) was submitted to NRW informally on 20/12/2018 (after Deadline 3).
- 4.7.3. Our preliminary view, in the time available for review since receipt of the information, is that the compensation previously proposed in this location should also be effective as mitigation should a breach (of up to 50m) occur in the tidal embankment. NRW will confirm its advice in writing after the hearing (deadline 6). We advise that the information in the Technical Note also needs to be formally submitted into the Examination).

- *Llanfachraeth (Section 3)*

- 4.7.4. The proposal is contrary to TAN15 in that the development will lead to an increase in flood risk elsewhere (increase in flood levels by 0.09m to agricultural land).

4.7.5. The Applicant has acknowledged that compliance with TAN15 will be difficult at Llanfachraeth and has dismissed compensatory flood storage as a means of effectively offsetting the observed impacts. We understand the Applicant is exploring a legal agreement with the relevant land owner to “allow” additional flooding on their land, and we will reserve our position on that pending further information from the Applicant.

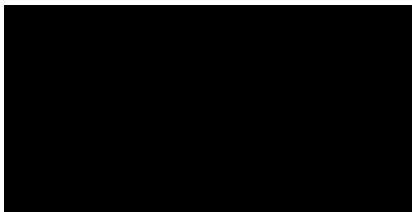
4.8. **Flood risk – Main site**

4.8.1. There are increased flood risks due to changes in catchments. The actual design for flood risk mitigation required to offset the increases in flood risk to Nant Cemaes, Afon Cafnan and Nant Cemlyn has not been presented, and is not proposed for submission into the Examination.

4.8.2. Instead, the Applicant is proposing an additional DCO requirement to submit the mitigation details post-consent (as stated in the Applicant’s response to NRW’s Written Representations). NRW would expect a developer to provide details of flood mitigation measures during the DCO Examination process, or at least sufficient details to demonstrate that the mitigation required is realistically achievable, and can be delivered within the order limits. Sufficient information is not currently available.

Please do not hesitate to contact us should you require further advice.

Yours sincerely



Rhian Jardine
Head of Development Planning and Marine Services
Natural Resources Wales

[CONTINUED]

ANNEX A – NRW RESPONSE TO THE ‘NON-MATERIAL CHANGE’ CONSULTATION (CHANGES No. 3, 4 & 5)



Ein cyf/Our ref: CAS-73225-B4P2
Eich cyf/Your ref: HNP-HZDCO-PAC-LET-00008

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6 December 2018

Dear Sir/Madam,

PLANNING INSPECTORATE REFERENCE: EN10007

**RE: WYLFA NEWYDD PROJECT – REQUEST FOR NON-MATERIAL CHANGES NO. 3,
4 & 5**

1. INTRODUCTION

- 1.1. Thank you for your letter dated 5 November 2018 inviting Natural Resources Wales (NRW) to provide representations on Horizon Nuclear Power's request for non-material change to the Development Consent Order (DCO) application.
- 1.2. We note that the consultation comprises the following documents:
 - Info Sheet: *Proposed changes to worker shift patterns* (November 2018)
 - Technical Note: *Request for Non-Material Change no.3 – Worker Shift Patterns* (November 2018)
 - Info Sheet: *Proposed changes to main site construction working hours* (November 2018)
 - Technical Note: *Request for Non-Material Change no.4 – Working Hours* (November 2018)
 - Info Sheet: *Proposed changes to HGV delivery times* (November 2018)
 - Technical Note: *Request for Non-Material Change no.5 – HGV Movements* (November 2018)
- 1.3. NRW provide the representations below with respect to the proposed request for non-material change in relation change no.3 (worker shift patterns), no. 4 (working hours) and no. 5 (HGV movements). Planning Inspectorate's Advice Note 16 (*Advice Note Sixteen: How to request a change which may be material*, March 2018) states in paragraph 2.1 that whether a proposed change would be considered to be a material change "is a question of planning judgment which may be based on criteria including, for example, whether the change would generate a new or different likely significant environmental effect(s)". This is ultimately a judgment for

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Correspondence welcomed in Welsh and English

the Examining Authority however NRW provides the advice below in respect of the proposed amendments.

2. WORKER SHIFT PATTERNS (CHANGE NO. 3)

- 2.1. Table 2-2 presents the primary shift patterns as submitted in the DCO application and the proposed changes to these shift patterns.
- 2.2. NRW advises that the proposed changes are not likely to result in new or different likely significant environmental effects.

3. WORKING HOURS (CHANGE NO. 4)

- 3.1. Paragraph 2.2.1 of the technical report states that Horizon propose to extend the working hours for specified activities of main construction up to 23:00 hours and, for some activities to 24 hours. The changes to each activity is shown in Table 2-2.
- 3.2. Paragraph 2.2.3 states that *“as a consequence of the proposed change and to reduce the potential environmental effects, additional haul routes within the Order Limits are proposed, which form the basis of the further modelling and assessment of the proposed change”*. It is also stated in paragraph 2.2.4 that *“to reduce the potential environmental effects associated with the proposed change to working hours, a small number of amendments have also been made to the indicative plant list/schedule which formed the basis of the modelling and assessments reported in the DCO application”*.
- 3.3. NRW provide advice as to whether there are likely to be new or different environmental effects on environmental receptors below.

- Air Quality

- 3.4. The technical report considers the effects of the changes on Cae Gwyn Site of Special Scientific Interest (SSSI) and Tre'r Gôf SSSI, and states in paragraph 2.5.21 that *“there were no new receptors which are above the criteria for requiring further consideration for a particular pollutant due to the proposed change”*. For clarity, it would be useful to demonstrate the likely changes on Bae Cemlyn / Cemlyn Bay Special Area of Conservation even if Horizon consider the process contribution to be below the relevant thresholds.
- 3.5. Tables 2-4 to 2-7 show the changes in process contributions for nitrogen and acid deposition as a result of the proposed changes (during year 2 and year 5 of construction). There are predicted to be slight increases in nitrogen and acid deposition as a result of the proposed changes in comparison with that assessed in the DCO application.
- 3.6. In relation to Tre'r Gôf SSSI, NRW consider that the mitigation proposed in the DCO (vegetation cutting to offset nitrogen inputs) remains appropriate to mitigate the

effects as a result of the proposed changes. We refer you to paragraph 7.16.5 of NRW's Written Representations where NRW advise detailed mitigation measures should be set out in a detailed Main Power Station Site Sub-Code of Construction Practice which should be approved by the discharging authority, in consultation with NRW.

- 3.7. In relation to Cae Gwyn SSSI, NRW advises in paragraph 7.16.6 of its Written Representations that additional information is required to demonstrate that the predicted emissions (assessed in the DCO application) will not damage the SSSI. In view of the changes in process contribution assessed in Tables 2-4 to 2-7, we advise the additional information to be submitted assesses the up to date predicted process contributions.
- 3.8. To conclude, NRW agrees that the proposed changes are not likely to result in new or different likely significant environmental effects on air quality receptors, however we advise that the above comments are addressed.

- *Terrestrial and Freshwater Ecology*

- 3.9. NRW note that European and nationally protected species (as listed in paragraph 2.5.55) are present within the Wylfa Newydd Development Area and could potentially be affected by the proposed changes. NRW advises in its Written Representations (section 7.17) that detailed mitigation measures will need to be set out in a detailed Sub-CoCP and approved by the discharging authority, in consultation with NRW. NRW considers that the proposed changes are not likely to result in new or different likely significant environmental effects on European and/or Nationally Protected Species and that the advice provided in its Written Representations remains unchanged.

- *Morwenoliaid Ynys Môn / Anglesey Terns Special Protection Area (SPA)*

- 3.10. The extension in working hours for some activities, and the associated lighting requirements for those activities, as well as the proposed additional haul roads, has the potential to result in additional effects on the tern colony at Cemlyn and the Anglesey Terns SPA. Although NRW consider that no new or different likely significant environmental effects are likely to be generated by the proposed changes, NRW does not agree with the conclusions of the assessments in D13 and the Shadow HRA (as part of the DCO application) with respect to the Anglesey Terns SPA.
- 3.11. As detailed in section 7.8 of NRW's Written Representations, NRW advises that there is significant scientific doubt regarding whether there will be adverse effects on the Sandwich, Common and Arctic terns of the Anglesey Terns SPA. In line with the precautionary principle, we consider that a conclusion of no adverse effects on site integrity of the Anglesey Terns SPA cannot be reached. The proposed changes have the potential to increase the risk of disturbance to the tern colony. As detailed above, and for the purpose of this consultation specifically, NRW considers that no new or different likely significant environmental effects are generated by the

proposed changes, however NRW does not agree with the conclusions of the assessment with respect to the impacts on the Anglesey Terns SPA and this should be addressed.

- *Marine Environment*

- 3.12. NRW advises in its Written Representations that detailed mitigation measures will need to be set out in a detailed Marine Works Sub-CoCP and approved by the discharging authority, in consultation with NRW. NRW considers that the proposed changes are not likely to result in new or different likely significant environmental effects on marine receptors and that the advice provided in its Written Representations remains unchanged.

- *Ynys Môn / Anglesey Area of Outstanding Natural Beauty*

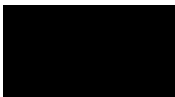
- 3.13. Paragraph 2.5.73 of the technical report explains that the proposed extension to the working hours of some activities to 23:00, and for some to 24 hours, brings the requirement for additional lighting.
- 3.14. The Wylfa Newydd Project is located partly within the Ynys Môn / Anglesey Area of Outstanding Natural Beauty (AONB). It is unclear why the AONB is not considered as a receptor in the technical report. NRW advises in paragraph 7.19.3 of its Written Representations that lighting may affect the AONB. However, for the purposes of this consultation, NRW advises that the proposed change is not likely to result in new or different likely significant environmental effects on the Ynys Môn / Anglesey Area of Outstanding Natural Beauty and that NRW's advice as provided in its Written Representation remains unchanged.

4. HGV MOVEMENTS (CHANGE NO. 5)

- 4.1. Paragraph 2.2.1 explains that the proposed change is *"to extend the weekday (Monday to Friday inclusive) delivery window into the evening, to include deliveries between the hours of 19:00 and 23:00. Furthermore, an additional delivery window is proposed on Saturday mornings, between 08:00 and 13:00"*.
- 4.2. NRW advises that the proposed change is unlikely to result in new or different significant environmental effects.

Please do not hesitate to contact us should you require further advice.

Yours sincerely



Bryn Griffiths
Senior Development Planning Adviser