

Wylfa Newydd Project Site Preparation and Clearance

Report to Inform Habitats Regulations Assessment Screening (Stage 1 Report) Addendum



ADDITIONAL INFORMATION May 2018

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1 Introduction

1.1 Purpose

- 1.1.6 This document ('the RIHRA Addendum') is an Addendum to the Report to Inform Habitats Regulations Assessment submitted in support of the Wylfa Newydd Site Preparation and Clearance Proposals.
- 1.1.1 In November 2017, Horizon Nuclear Power Wylfa Limited (Horizon) made an application to the Isle of Anglesey County Council (IACC) for Site Preparation and Clearance activities ('the SPC Proposals') on the Wylfa Newydd site (Planning Ref: 38C310F/EIA/ECON). In the context of this planning application, IACC are the Competent Authority as defined by the *Conservation of Habitats and Species Regulations 2017*, and Natural Resources Wales (NRW) is its statutory advisor.
- 1.1.2 The planning application for the SPC Proposals (Application) was submitted with a supporting Report to Inform Habitats Regulations Assessment (the RIHRA [RD1]).
- 1.1.3 The RIHRA Addendum has been produced in order to present all additional information and changes relevant to Habitats Regulations Assessment submitted subsequent to the application for planning permission. The need for this additional information has come about as a result of the following reasons:
- A formal 'Regulation 22' letter from the IACC requesting more information from Horizon, which includes items relevant to HRA;
 - consultation responses from NRW relating to HRA and subsequent discussions; and
 - a recent judgment from the Court of Justice of the European Union (*People Over Wind and Sweetman v Coillte Teoranta (C-323/17)* ('the CJEU judgment').
- 1.1.4 An EIA Addendum document and also Horizon's formal response to the IACC's Regulation 22 letter (the Regulation 22 Response) are provided separately.

1.2 Background

Consultation

- 1.2.5 Following submission of the Application NRW provided formal consultation responses on the SPC Proposals planning application to IACC on 22nd December 2017. This response was copied to Horizon and there were subsequent discussions between NRW and the IACC, to clarify and agree the nature of any formal Horizon response.

- 1.2.6 IACC made a formal request for further environmental information to Horizon¹ (IACC Ref: 38C310F/EIA/ECON, dated 9th February 2018) (the Regulation 22 Letter).

Direct and indirect reference to information provided with regard to HRA is detailed in section 6. This request for additional information and the subsequent discussions with the IACC and other parties, has informed the production of additional information and related changes to the project proposals.

- 1.2.7 Note, the section of the Regulation 22 Letter Annex schedule headed ECOLOGICAL AND ENVIRONMENTAL does not make reference to European Designated Sites or HRA so is not considered relevant to this RIHRA Addendum. (That section is responded to in the ES Addendum.)

- 1.2.8 A summary of responses to these requests relevant to HRA is given in the section 6 of this RIHRA Addendum. A full response is given in Horizon's Regulation 22 Letter response.

- 1.2.9 The IACC also received responses potentially relevant to HRA from other consultees, this RIHRA Addendum assumes that any outstanding questions raised by these consultation responses would have been communicated to by IACC through the Regulation 22 Letter.

Legal and policy update

- 1.2.10 A review of all legislation, policy and guidance referenced within the SPC Application has been undertaken and concluded that there has been no material change to the circumstances within which the RIHRA should be considered. As indicated in the introduction, the CJEU judgment has relevance to HRA. This is considered in further detail in section 5 of this RIHRA Addendum.

1.3 Structure

- 1.3.11 Structure of this report is as follows:

- Section 1: Introduction
- Section 2: Proposed amendments to the application
- Section 3: Consideration of amendments
- Section 4: Additional consideration of air quality effects
- Section 5: Consideration of CJEU Judgment C-323/17

¹Under Regulation 22 of the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2016

- Section 6: Summary and Conclusion

2 Proposed amendments to the application

- 2.1.12 A full description of the proposed amendments to the SPC Proposals is set out in the ES Addendum.
- 2.1.13 This section summarises the amendments which are relevant to the HRA.

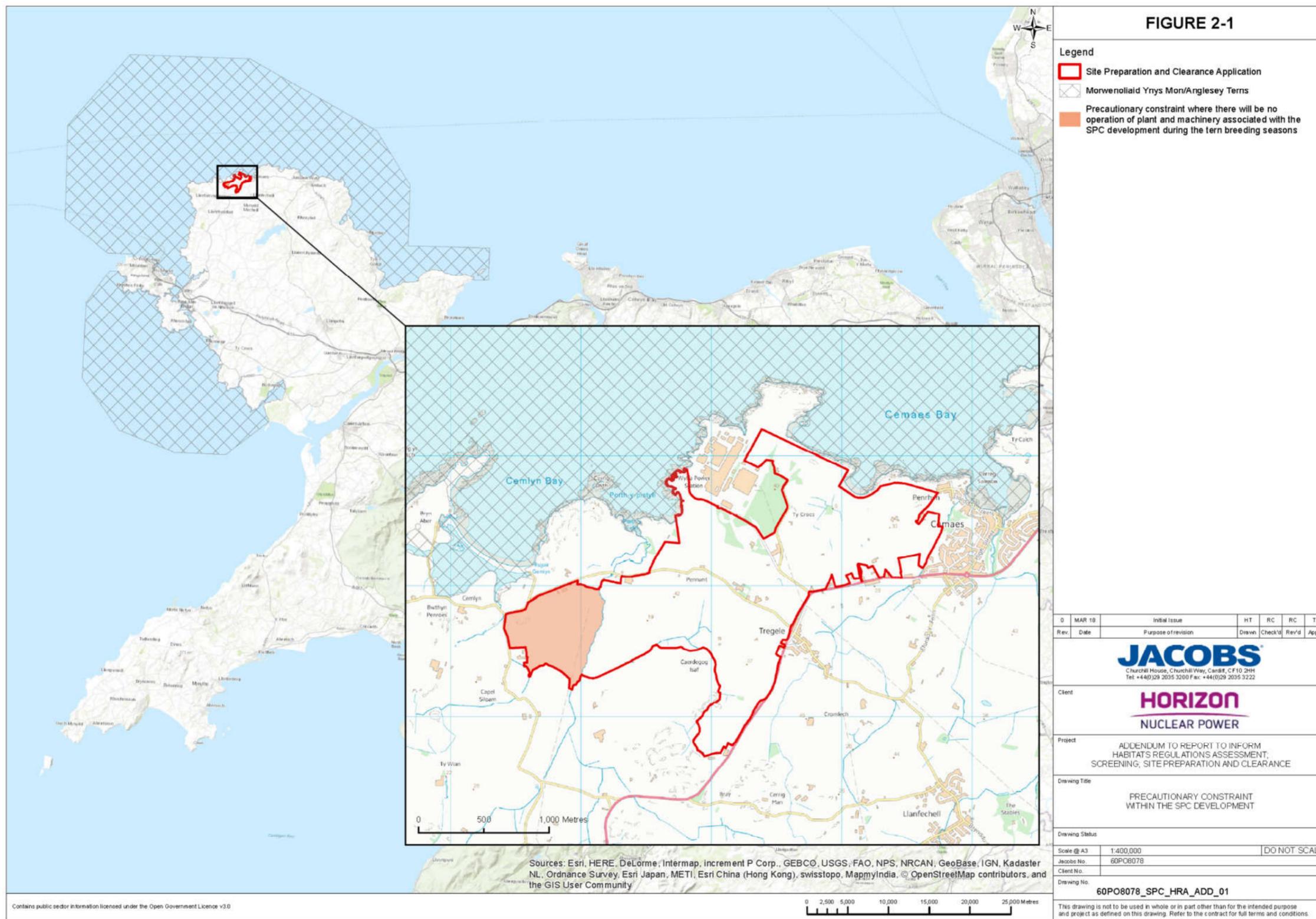
Additional seasonal constraint

- 2.1.14 Taking a precautionary approach, Horizon has amended the SPC Proposals to include an additional condition which provides that between 7th March and 15th August (when terns and/or black-headed gulls may be nesting within the Cemlyn Bay lagoon), there will be no operation of plant and machinery associated with the SPC Proposals on all land to the west of Afon Cafnan.
- 2.1.15 The area in question is shown in Figure 2-1 (below).

Watercourse realignment

The proposal to re-align part of the Nant Caerdegog Isaf watercourse (*'Watercourse realignment and associated landscaping'* in the bulleted list of ss 2.2.1 of the RIHRA), will be removed from the Application.

Figure 2-1 Precautionary seasonal constraint within the SPC Proposals



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3 Consideration of amendments

3.1 Additional seasonal constraint

Noise effects

- 3.1.16 NRW's consultation response includes the following advice within para 6.10, regarding the SPC Proposals:

*'Requirement 4: Additional mitigation measures to be specified to demonstrate no or imperceptible effects due to disturbance on the tern species of the SPA.'*²

- 3.1.17 Horizon understands that this suggested requirement is principally related to demonstrating that the SPC Proposals will not act in-combination with future developments at the development site, so as to avoid need for 'in-combination' consideration with future development on the site (or elsewhere). This is outlined in paragraph 6.5 of the same letter:

'If IACC intend to proceed with an approach that considers the SPC works as a project in its own right, then a HRA needs to be completed which can robustly demonstrate that through avoidance and mitigation measures and regulatory controls that the SPC project when considered "alone" would result in no or imperceptible effects on any European Protected Site. This is to demonstrate that proceeding with SPC activities would not act in-combination with future developments at the development site, or other relevant plans or projects. NRW advises that, based on the information provided as part of the planning submission, that it has not been demonstrated that there will be no or imperceptible effects on the tern colony through disturbance. NRW therefore advise that additional mitigation should be provided, including undertaking aspects of the work outside the tern breeding period.'

- 3.1.18 Horizon does not understand the NRW response as a challenge questioning the 'No Likely Significant Effect' conclusion of the RIHRA, rather the conclusion of 'no or imperceptible effects' that would allow the need for in-combination assessment to be discounted. However, as detailed below, in the formal request for further environmental information, IACC suggest a potential need to undertake an appropriate assessment based on the information provided.

- 3.1.19 IACC have also asked for:

- 3.1.20 *'Additional information/assessment of the impact on terns including proposed mitigation measures to demonstrate no or imperceptible effects due to disturbance on the tern species of the SPA'.*

² A slightly shorter version of this appears in the Summary of Requirements on page 1 of the NRW letter.

- 3.1.21 Horizon maintains that the evidence provided with the submission demonstrates that there would be imperceptible effects on the tern colony and that there is no need for further mitigation measures. However, Horizon has offered additional precautionary mitigation that would exclude the operation of plant and machinery associated with the SPC Proposals on all land to the west of Afon Cafnan during the tern breeding season. Additional information relating to noise is also provided [RD2].
- 3.1.1 Notwithstanding Horizon's position that the SPC Proposals would have either a no or an imperceptible effect on the *Morwenoliaid Ynys Môn/Anglesey Terns SPA*, taking a precautionary approach, the proposed additional seasonal constraint mitigation represents a further reduction in the likelihood of significant effects on terns, therefore the conclusion of no Likely Significant Effects (LSE) in the RIHRA stands. A summary of the assessment and explanation of changes is provided below.
- 3.1.2 Section 5 of the RIHRA sets out the results of the study of the potential source-receptor pathways for the SPC Proposals and identifies those European Designated Sites which require an assessment of LSEs. Table 5-1 identifies that there is potential for an effect pathway for '*SPA and Ramsar bird qualifying interest features*' in relation to '*Changes in visual and acoustic stimuli*'. Table 5-3 identifies SPA qualifying features (species) for consideration at the screening stage; *Morwenoliaid Ynys Môn/Anglesey Terns SPA* is identified for all four features (Arctic tern (*Sterna paradisaea*), Common tern (*Sterna hirundo*), Roseate tern (*Sterna dougallii*) and Sandwich tern (*Sterna sandvicensis*). Identified source-receptor pathways are summarised in Table 5-5.
- 3.1.3 Screening assessment is presented in screening tables in Appendix A of the RIHRA. The conclusions of these statements are summarised in section 6 of the RIHRA, which states that there are: '*...no LSEs on the features of the six European Designated Sites assessed from the SPC Proposals, or on any other European Designated Sites as no, or very weak, source-receptor pathways exist.*'
- 3.1.4 The LSE screening for *Morwenoliaid Ynys Môn/Anglesey Terns SPA* is presented on the screening matrix on page 82 (onwards) of the RIHRA, specifically item 'a' (which applies to all interest features). Item 'a' assesses the nature of the works and the modelled expectations of noise outputs and considers this against field observations at the colony and desk study information and concludes that no LSE would arise as a result of changes to acoustic stimuli³.
- 3.1.5 The amendments to additional seasonal constraints proposed in Section 2 of this RIHRA Addendum will mean that the closest point of any works during the period when terns are likely to be present and breeding increases from

³ This conclusion is not considered to be changed as a result of the recent CJEU Judgment

approximately 505m from the tern colony to just over 1km. This will reduce the noise levels likely to be transmitted to the tern nesting islands from the worst case noise level in the submitted application of 49.7dB_{LAeq, 5min} to 44.5 dB_{LAeq} and from 55dB_{LAm_{ax}} to 49.9dB_{LAm_{ax}}. Details of the additional HRA worst case noise modelling undertaken for the scenario including the additional constraints are provided in a separate technical report [RD2].

- 3.1.6 Monitoring of baseline background ambient noise levels are reported in RD3, which reports that the ambient noise at the colony averaged 55dB.
- 3.1.7 The additional constraint would therefore reduce the potential for disturbing stimuli and bring the noise levels generated during the tern breeding season to commensurate or below ambient levels, demonstrating that there will be '*no or imperceptible*' effects' on any designation features.

3.2 Watercourse alignment

- 3.2.8 The withdrawal of the proposed realignment of the Nant Caerdegog Isaf watercourse represents a reduction in the risk to terrestrial and marine water quality which might result from any in-stream works. Potential source-effect pathways are considered in Table 5-1 of the RIHRA, this specifically considers the Nant Caerdegog Isaf watercourse realignment, but concludes there is no pathway. Therefore, no European Designated Sites were taken to the screening stages. Although the amendment renders the text relating to Nant Caerdegog Isaf watercourse superfluous there is no change to this conclusion⁴.
- 3.2.9 The RIHRA has no reliance on any habitat improvement effects resulting from the realigned water course, therefore the withdrawal of this element does not have any implications on any other conclusions.

⁴Since this element has now been removed from the SPC Proposal, it is not considered in section 5 of this RIHRA Addendum

4 Additional consideration of air quality effects

4.1 Background

4.1.10 Additional information about air quality is has been provided further to the Regulation 22 Letter, consultation responses from NRW and subsequent discussions to clarify expectations. This relates in particular to a question about whether

4.2 Air quality (in respect of European Designated Sites)

Sites for consideration

4.2.1 Section 5 of the RIHRA sets out the results of the study of the potential source-receptor pathways for the SPC Proposals and identifies those European Designated Sites which require an assessment of LSEs. Table 5-1 identifies that there is potential for an effect pathway for ‘SAC habitats and species’ in relation to ‘Changes in air quality’. Table 5-2 identifies SAC qualifying features (species) for consideration at the screening stage; Bae Cemlyn/Cemlyn Bay SAC is identified, other European sites are discounted due to weak or non-existent effect pathways. Identified source-receptor pathways are summarised in Table 5-5.

4.2.2 The LSE screening for *Bae Cemlyn/Cemlyn Bay SAC* is presented on the screening matrix on page 81 of the RIHRA, specifically item ‘b’ (which applies to all interest features). In reference to the air quality assessment undertaken for the EIA [RD5], item ‘b’ concludes ‘*..predicted changes to air quality are below the thresholds at which an LSE would arise.*’

4.2.3 Since the proposed amendments to the SPC Proposals application will not result in any net increase in activities with potential air quality effects, there is no need to reconsider the no LSE conclusion or to consider any sites except *Bae Cemlyn/Cemlyn Bay SAC*.

Consideration of third party projects

4.2.4 A consideration of other developments identified as having a potential temporal and spatial overlap with the SPC Proposals is provided in a technical report [RD4]. Five, third party projects have been identified these are assessed along with the DCO and SPC Proposals.

4.2.5 These other developments are as follows:

- Decommissioning of the Existing Power Station (AN01)
- TPG Wind Limited, Rhyd-y-groes Re-power (AN08⁵)

⁵ References taken from Table 19-2 RFFP short list for the SPC Proposal works [RD5]

- National Grid, North Wales Grid Connection (AN07);
 - Utilities companies (various), removal (and in some instances replacement) of services currently in place on the Wylfa Newydd Development Area (AN20); and
 - Dŵr Cymru Welsh Water, Wylfa Newydd Potable Water Supply (AN25).
- 4.2.6 The technical report [RD4] found that in the case of SPC Proposals in-combination effects for all of these third party projects either could be ruled out due to distance (greater than 200m⁶ from the *Bae Cemlyn/Cemlyn Bay* SAC) or consideration was not possible due to lack of available information.
- 4.2.7 Where there was a lack of information, Horizon used professional judgement based on the available descriptions of these third-party developments to develop likely proposed activities. Based on these assumed activities, professional judgement is that it is extremely unlikely that any of the thresholds requiring further consideration would be breached.
- 4.2.8 Consideration of the Wylfa Newydd DCO
- 4.2.9 With the removal of the watercourse realignment from the scope of the SPC Proposals, the duration of the SPC Proposals would be approximately 13 months. Based on the current DCO submission date, determination period and time required for site mobilisation, it is anticipated that there would not be a direct temporal overlap of the SPC Proposals and the DCO construction activities and the potential for an in-combination effect would be negligible.
- 4.2.10 It should also be noted that all of the activities within the SPC Proposals are also included in the DCO. Therefore, not only does the DCO 'alone' allow for all of the SPC Proposal activities, but it will also mean that upon commencement of the DCO, any outstanding activities listed under the SPC Proposal planning permission will from then on be consented and controlled by the DCO, including requirements for the provision of mitigation.
- 4.2.11 Therefore, the following in-combination assessment with the Wylfa Newydd DCO is precautionary.
- 4.2.12 RD4 provides the predicted increases of NO_x and SO₂ and deposition rates of nitrogen and acid for SPC Proposal activities and for the anticipated DCO proposals due to the project (i.e. Process Contribution (PC)) and total concentrations or deposition rates (i.e. the Predicted Environmental Concentration (PEC)). The relevant assessment criteria are the Air Quality Objective (AQO), European Ambient Air Quality Directive 2008/50/EC (AAD) Limit value, Environmental Assessment Level (EAL) or critical load (CL). For the DCO, two scenarios, DCO Year 2 and DCO Year 5, were chosen to represent works during the peak of activities during the two distinct stages of

⁶ The distance agreed with NRW that beyond which the contribution from emissions from plant and machinery can be screened out from further assessment and would represent a negligible contribution.

Main Construction of the DCO proposals. A scenario representing operation of the combustion plant associated with the operation of the Power Station is also included (“DCO Operation”).

- 4.2.13 The relevant critical levels that were used in the assessment for *Bae Cemlyn/Cemlyn Bay SAC* are summarised in Table 4-2 (below), these follow published guidance and discussions with NRW and are considered appropriate for sites such as *Bae Cemlyn/Cemlyn Bay SAC* since lichens and bryophytes do not form part of the SAC interest features:

Table 4-1 **Air quality thresholds used assessment for Cemlyn Bay SAC**

Pollutant	Standard	EQS ($\mu\text{g}/\text{m}^3$)	Concentration measured as
<i>NO_x (expressed as NO₂)</i>	<i>AAD Limit Value and AQO</i>	30	<i>Annual mean</i>
	<i>EAL</i>	200	<i>Maximum 24-hour mean</i>
<i>SO₂</i>	<i>AAD Limit Value and AQO</i>	20	<i>Annual mean</i>

- 4.2.14 The significance of the predicted long-term (annual mean) NO_x and SO₂ concentrations or deposition at European Designated Sites was determined in line with guidance provided by NRW during consultation, which derives from the Environment Agency guidance ([RD6]). This is summarised below.
- 4.2.15 Where the process contribution (PC) (meaning the contribution made by the activity) is less than 1% of the relevant critical level or critical load, the emission is not likely to be significant alone or in-combination, irrespective of the existing concentrations or deposition rates.
- 4.2.16 Where the contribution is above 1%, further consideration of existing background concentration or deposition rate is required. Then where the total concentration or deposition is less than 70% of the critical level or critical load, calculated in combination with other committed projects or developments, the emission is not predicted to be significant.
- 4.2.17 For annual mean concentrations, where the contribution is above 1%, and the total concentration or deposition rate is greater than 70% of the critical level or critical load, either alone or in combination with other committed projects or developments, then this may indicate that a significant effect could arise and further consideration is required. This should be undertaken on a site-by-site basis through determination of the applicability of the critical levels and critical loads at each site, and further ecological assessment.

- 4.2.18 The above approach is used to give a clear definition of what effects can be regarded as insignificant, and which need to be considered in more detail in relation to the predicted annual mean concentrations or deposition.
- 4.2.19 For short-term mean concentrations (i.e. the 24-hour mean critical level for NO_x), a potentially significant effect would be identified where the predicted contribution from the modelled sources lead to an exceedance of the critical level. In this case, further ecological consideration is required, taking into account factors such as the evidence base for effects due to short-term exposure to elevated NO_x concentrations, the magnitude of the concentrations, the likelihood of occurrence and the duration of the exposure.
- 4.2.20 RD4 demonstrates that the relevant critical level and critical load thresholds are not predicted to be exceeded for any of the pollutants in any of the scenarios. Therefore, the *Bae Cemlyn/Cemlyn Bay* SAC qualifying features are not expected to be significantly affected by air quality effects from construction plant, machinery and marine vessels emissions. Therefore, no adverse effect on the integrity of this European designated site is predicted. The relevant information extracted from RD5 is given in Table 4-3 (below). It should be noted that, although there are instances where the figures below for SPC Proposal and DCO would combine to exceed the threshold (i.e. maximum nitrogen deposition rates 50% + 55% > 70%), it would not be correct to add these numbers together since the DCO already includes for all of the works within the SPC Proposals and also both values include existing contributions and without the double counting of existing values would not exceed thresholds when combined.

Table 4-2 **Comparison of air quality thresholds and modelled outputs for Cemlyn Bay SAC**

Pollutant	Change as a percentage of AQO	Relevant threshold	Total concentration as a percentage of AQO	Relevant threshold	Both Thresholds Breached?
Maximum annual mean NO _x	SPC: +0.27% DCO*: +36%	1%	SPC: 18% DCO: 53%	70%	No
Maximum 24-hour mean NO _x	SPC: +1% DCO: +69%	1%	SPC: 6% DCO: 74%	100%	No
Maximum annual mean SO ₂	SPC: +<0.01% DCO: +1 %	1%	SPC: 7% DCO: 10%	70%	No

Pollutant	Change as a percentage of AQO	Relevant threshold	Total concentration as a percentage of AQO	Relevant threshold	Both Thresholds Breached?
<i>Maximum nitrogen deposition rates</i>	<i>SPC: 0.03% DCO: +5%</i>	<i>1%</i>	<i>SPC: 50% DCO: 55%</i>	<i>70%</i>	<i>No</i>
<i>Acid deposition</i>	<i>N/A</i>	<i>Not sensitive</i>	<i>N/A</i>	<i>Not sensitive</i>	<i>N/A</i>

*In all cases Year 2 is the worst DCO scenario presented in RD4, and is presented here

Conclusion

- 4.2.21 Based on the analysis undertaken as summarised above, it is concluded that the SPC Proposal would not have significant air quality effects on European Designated Sites alone or in-combination with the DCO or any other projects.

5 Consideration of CJEU Judgment

5.1 Context

CJEU Judgment and approach to reassessment

- 5.1.22 The RIHRA submitted in support of the Application has been reassessed in the light of the recent the CJEU judgment which concluded that *'in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site.'* The submitted RIHRA was made in accordance with previous UK case law which held that effective mitigation measures could be considered in undertaking a screening assessment.
- 5.1.23 In the absence of further consideration of the CJEU judgment (particularly in the UK courts) , the approach that has been followed in this reassessment is that measures incorporated within the design of the SPC Proposals (which may act to manage adverse effects) are considered to be part of the SPC Proposal and are therefore appropriately taken into account at the screening stage. Conversely, measures added afterwards (i.e. to 'contain' the effect) are be discounted at screening. Commitments to seasonal scheduling and constraint of activities are considered to be part of the SPC Proposals. Since the Application was made before the CJEU judgment, this distinction is not always made in the RIHRA, but is included where necessary below.
- 5.1.24 Taking a precautionary approach, this reassessment assumes that the CJEU judgment is also relevant to the scoping stages employed in the RIHRA.

5.2 Reassessment of scoping and screening

Site identification and scoping

- 5.2.25 In the RIHRA, Table 4-1 gives screening categories describing potential sources of effect, this does not contain any reference to measures likely to reduce the effects and therefore is not affected by the CJEU judgment
- 5.2.26 Table 4-2 of the RIHRA defines zones of influence (ZOI) for screening categories. Mitigation measures of the SPC Proposals did not impact on identification of the ZOI, therefore the process and conclusions reached in the RIHRA are not affected by the CJEU judgment.
- 5.2.27 Table 5-1 of the RIHRA defined potential sources of effect acting alone from the SPC Proposals. Identified receptors are extracted from table 5-1 of the RIHRA and considered in table 6-1 (below).

Table 5-1 Consideration of whether RIHRA relies on ‘measures’ at scoping

Pathway	Does RIHRA discounting at scoping stage rely on measures intended to avoid or reduce the harmful effects	Conclusion altered by CJEU judgment
Changes in visual and acoustic stimuli	<i>No, measures proposed relate to seasonal constraint and therefore considered to be part of the project</i>	No
Land-take, including seabed or intertidal land	No	No
Changes in terrestrial water quality	<i>In discounting effects relating to accidental spillage, the assessment relies on mitigation measures identified in chapter 20 in volume 1 of the Environmental Statement (e.g. all fuel storage to be within engineered containment facilities or suitably bunded tanks).</i>	<i>Arguably – while Horizon considers these facilities are part of the SPC Proposals, it is possible that they could be considered to be additional mitigation designed to prevent escape of contaminants and should be excluded at screening</i>
Changes in marine water quality	<i>In relation to in channel diversion, the assessment relies on both the short term nature of the effects and sediment protection measures</i>	<i>Yes in respect of the sediment protection measures – CJEU judgment was made on the basis of silt mitigation measures as such it is likely that these measures will be seen as additional mitigation measures and should be excluded at screening screening. However, the in stream works are no longer proposed.</i>

Pathway	Does RIHRA discounting at scoping stage rely on measures intended to avoid or reduce the harmful effects	Conclusion altered by CJEU judgment
Changes in surface and groundwater hydrology	<i>Only in relation to channel diversion</i>	<i>No - Since, the in-stream works are no longer proposed.</i>
Introduction of INNS ⁷	<i>The assessment relies on biosecurity risk assessment and method statement measures to discount this effect pathway</i>	<i>Yes – it is considered that these measures are mitigation measures and should be excluded at screening</i>
Change in air quality	<i>No</i>	<i>No</i>
Physical interaction between species and infrastructure	<i>No</i>	<i>No</i>

5.2.28 Based on the above reassessment, the following pathways will need to be assessed to identify if there is a source receptor pathway.

- Changes in terrestrial water quality
- Changes in marine water quality
- Changes in surface and groundwater hydrology
- Introduction of INNS

5.2.29 Following on from the logic in table 5-1 of the RIHRA, Potential sources of effects acting alone from the SPC Proposals for these additional pathways are considered in table 6-2 (below).

⁷ Invasive Non-Native Species

Table 5-2 **Potential sources of effects acting alone from the SPC Proposals for additional (only) pathways**

Screening categories	Description of activity and potential effect and scoping	European Designated Site qualifying features group (receptor) potentially significantly affected
Changes in terrestrial water quality	<i>This pathway refers to changes to the chemical composition of surface and groundwater that could become loaded with suspended sediment, nutrients or toxic contaminants (e.g. heavy metals, flocculants, hydrocarbons). This category includes sedimentation (both short and long term), changes to water turbidity and the re-suspension of sediment-bound contaminants.</i>	<i>SPA and Ramsar bird qualifying interest features SAC terrestrial freshwater qualifying interest species and habitats</i>
Changes in marine water quality	<i>In stream works are no longer proposed</i>	<i>N/A</i>
Changes in surface and groundwater hydrology	<i>In stream works are no longer proposed</i>	<i>N/A</i>
Introduction of INNS	<i>There is the potential for changes in ecology to occur, potentially affecting prey species for seabirds and marine mammals, due to competition from INNS. Existing INNS could be spread into new areas during works or new INNS could be introduced to the local environment via 'contaminated' machinery or materials. For SPC this is relevant to the terrestrial environment only.</i>	<i>SPA and Ramsar bird qualifying interest features SAC terrestrial and marine qualifying interest species and habitats</i>

5.2.30 Further consideration of these is given in table 6-3 (below).

Table 5-3 European Designated Sites located within the ZOI and Scoping assessment of those sites

Generic screening category	Qualifying interest features	Description of hazard within Screening category	ZOI of the SPC Proposals	Rationale for selected zone of influence	European Sites within ZOI
<i>Changes in terrestrial water quality</i>	<i>SPA and Ramsar bird qualifying interest features SAC terrestrial freshwater qualifying interest species and habitats</i>	<i>Changes to terrestrial water quality as a result of SPC activities</i>	<i>Cemlyn, Afon Cafnan, Existing Power Station, Tre'r Gof and Cemaes Catchments</i>	<i>This area captures all surface water features which have the potential to be affected by the SPC Proposals.</i>	<i>Bae Cemlyn/Cemlyn Bay SAC Morwenoliaid Ynys Môn/Anglesey Terns SPA Glannau Ynys Gybi/Holy Island Coast SPA Glannau Aberdaron ac Ynys Enlli/Aberdaron Coast and Bardsey Island SPA Craig yr Aderyn (Bird's Rock) SPA Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal/Mynydd Cilan, Trwyn y Wylfa and the St. Tudwal Islands SPA</i>

Generic screening category	Qualifying interest features	Description of hazard within Screening category	ZOI of the SPC Proposals	Rationale for selected zone of influence	European Sites within ZOI
<i>Introduction of INNS</i>	<i>SPA and Ramsar bird qualifying interest features SAC terrestrial and marine qualifying interest species and habitats</i>	<i>Effects resulting from the accidental introduction of INNS</i>	<i>Within the boundary of any location where construction works will occur.</i>	<i>The footprint of the works is the area within which the greatest activity that could spread INNS will occur and is also the area within which any control measures will be implemented.</i>	<i>Glannau Ynys Gybi/Holy Island Coast SPA Glannau Aberdaron ac Ynys Enlli/Aberdaron Coast and Bardsey Island SPA Craig yr Aderyn (Bird's Rock) SPA Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal/Mynydd Cilan, Trwyn y Wylfa and the St. Tudwal Islands SPA</i>

5.2.31 Following on from the above assessment, additional source-receptor pathways to European Designated Sites have been identified. These are summarised in table 6-4 (below).

Table 5-4 **Additional source-receptor pathways to European Designated Sites within the ZOI**

European Designated Site	Site Reference number	Hazard	Qualifying feature potentially vulnerable to the hazard
<i>Bae Cemlyn/Cemlyn Bay SAC</i>	<i>UK0030114</i>	<i>Changes in terrestrial water quality</i>	Coastal lagoons Perennial vegetation of stony banks
<i>Morwenoliaid Ynys Môn/Anglesey Terns SPA</i>	<i>UK9013061</i>	<i>Changes in terrestrial water quality</i>	<i>Arctic tern (breeding)</i> <i>Common tern (breeding)</i> <i>Roseate tern (breeding)</i> <i>Sandwich tern (breeding)</i>
<i>Glannau Ynys Gybi/Holy Island Coast SPA</i>	<i>UK9013101</i>	<i>Changes in terrestrial water quality</i>	Red-billed chough (breeding and wintering)
<i>Glannau Ynys Gybi/Holy Island Coast SPA</i>	<i>UK9013101</i>	<i>Introduction of INNS</i>	Red-billed chough (breeding and wintering)
<i>Glannau Aberdaron ac Ynys Enlli/Aberdaron Coast and Bardsey Island SPA</i>	<i>UK9013121</i>	<i>Changes in terrestrial water quality</i>	Red-billed chough (breeding and wintering)
<i>Glannau Aberdaron ac Ynys Enlli/Aberdaron Coast and Bardsey Island SPA</i>	<i>UK9013121</i>	<i>Introduction of INNS</i>	Red-billed chough (breeding and wintering)
<i>Craig yr Aderyn (Bird's Rock) SPA</i>	<i>UK9020283</i>	<i>Changes in terrestrial water quality</i>	<i>Red-billed chough (breeding and wintering)</i>

European Designated Site	Site Reference number	Hazard	Qualifying feature potentially vulnerable to the hazard
<i>Craig yr Aderyn (Bird's Rock) SPA</i>	UK9020283	<i>Introduction of INNS</i>	<i>Red-billed chough (breeding and wintering)</i>
<i>Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal/Mynydd Cilan, Trwyn y Wylfa and the St. Tudwal Islands SPA</i>	UK9020282	<i>Changes in terrestrial water quality</i>	Red-billed chough (breeding and wintering)
<i>Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal/Mynydd Cilan, Trwyn y Wylfa and the St. Tudwal Islands SPA</i>	UK9020282	<i>Introduction of INNS</i>	Red-billed chough (breeding and wintering)

Pathways identified in reassessment of RIHRA scoping

5.2.32 This section presents additional screening of pathways identified above and re-assessment of LSE screening presented in RIHRA.

Bae Cemlyn/Cemlyn Bay SAC Changes in terrestrial water quality:

5.2.33 There are direct pathways into the Cemlyn Bay lagoon from flow via the Nant Cemlyn which drains from a small portion of the site, and through ground water pathways. If water borne contaminants are produced on the site, it is at least conceivable that these could result in adverse effects on the SAC qualifying interest features (1150 Coastal lagoons and 1220 Perennial vegetation of stony banks). It is difficult to see how universal measures such as bunded fuel storage, interceptor trays and safe refuelling locations should not be considered at the screening stage however, should IACC as the Competent Authority wish to take a very precautionary interpretation of the CJEU judgment and consider this to be an LSE requiring appropriate assessment, details are provided in chapter 20 in volume 1 of the Environmental Statement. This effect pathway represents an event risk, rather than any cumulative or incremental burden on a resource and therefore any in-combination assessment of other projects is not considered necessary.

Morwenoliaid Ynys Môn/Anglesey Terns SPA: Changes in terrestrial water quality:

- 5.2.34 There are direct pathways into the Cemlyn Bay lagoon from flow via the Nant Cemlyn which drains from a small portion of the site, and through ground water pathways. If water borne contaminants are produced on the site, it is at least conceivable that these could result in adverse effects on the SPA qualifying interest features (A194 Arctic tern (*Sterna paradisaea*), A191 Sandwich tern (*Sterna sandvicensis*), A192 Roseate tern (*Sterna dougallii*) and A193 Common tern (*Sterna hirundo*)). It is difficult to see how universal measures such as bunded fuel storage, interceptor trays and safe refuelling locations should not be considered at the screening stage however, should IACC as the Competent Authority wish to take a very precautionary interpretation of the CJEU judgment and consider this to be an LSE requiring appropriate assessment, details are provided in chapter 20 in volume 1 of the Environmental Statement. This effect pathway represents an event risk, rather than any cumulative or incremental burden on a resource and therefore any in-combination assessment of other projects is not considered necessary.

Glannau Ynys Gybi/Holy Island Coast SPA, Glannau Aberdaron ac Ynys Enlli/Aberdaron Coast and Bardsey Island SPA, Craig yr Aderyn (Bird's Rock) SPA, and Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal/Mynydd Cilan, Trwyn y Wylfa and the St. Tudwal Islands SPA: Changes in terrestrial water quality:

- 5.2.35 Although there is conceivably a pathway for chough on the Wylfa site to be affected by changes in terrestrial water quality as a result of the SPC proposals, this risk in itself is low. However, the RIHRA concluded that LSE on any SPA sites designated for chough could be discounted due to lack of significant functional linkage⁸. The CJEU judgment has no bearing on this linkage conclusion and therefore LSE in relation to any of the identified SPA sites designated for chough is discounted.

Glannau Ynys Gybi/Holy Island Coast SPA, Glannau Aberdaron ac Ynys Enlli/Aberdaron Coast and Bardsey Island SPA, Craig yr Aderyn (Bird's Rock) SPA, and Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal/Mynydd Cilan, Trwyn y Wylfa and the St. Tudwal Islands SPA: Introduction of INNS:

- 5.2.36 Although there is conceivably a pathway for chough on the Wylfa site to be affected by the spread of INNS, this risk in itself is low. However, the RIHRA concluded that LSE on any SPA sites designated for chough could be discounted due to lack of significant functional linkage. The CJEU judgment has no bearing on this linkage conclusion and therefore LSE in relation to any of the identified SPA sites designated for chough is discounted.

⁸Further expansion of this argument is provided in the Regulation 22 response and in RD7, also submitted in response to this pathway

Reassessment of RIHRA Screening tables

- 5.2.37 This reassessment of the LSE Screening tables provided in Appendix 1 of the RIHRA has found that the remainder of the LSE consideration was sound according to the principles of reassessment set out in paragraph 6.1.22 of this RIHRA Addendum.

6 Summary and Conclusion

- 6.1.1 Further to post submission consultation, Horizon has decided to amend two elements of the SPC Proposals. These amendments comprise the additional seasonal constraint in the western part of the site (no works to the west of the Afon Cafnan in spring and summer) and withdrawal of the proposed watercourse alignment and landscaping element, associated with the Nant Caerdegog Isaf watercourse.
- 6.1.2 Examination of the submitted RIHRA has concluded that these amendments, do not alter the conclusion that the SPC Proposals will have no LSEs in relation to the European Designated Sites. Both amendments further reduce the likelihood of any significant effects to less than in the original submission.
- 6.1.3 Noise modelling of the additional seasonal constraint to works demonstrates there will be '*no or imperceptible effects*' on any designation features as noise experienced by the terns would be below ambient levels. As there would be no effects, the need for any in-combination assessment with any projects on the Wylfa site (or elsewhere) can be discounted.
- 6.1.4 Air quality effects on European Designated Sites have been considered both from the SPC Proposals 'alone' and also in-combination with the DCO and in combination with third party projects. Using an iterative assessment approach, it was concluded that adverse effects can be discounted both alone and in-combination with any other projects.
- 6.1.5 The RIHRA has been re-assessed in light of a recent Judgement from the CJEU. This re-assessment identified a need to consider additional LSE pathways, which has been amended in section 5 of this RIHRA Addendum.

Response to Regulation 22 Letter Schedule

Table 2-1 (below) summarises the Regulation 22 Letter schedule of requests and indicates where responses relevant to HRA can be found. This table does not represent Horizon's formal response to the IACC's Regulation 22 Letter which is provided separately.

Table 6-2 Responses to Regulation 22 Letter relevant to HRA

	Summarised text from schedule of requested information	Response
<i>Body text</i>		
	<i>Consultees, including internal IACC consultees, have raised a number of points which are fundamental to whether a robust HRA decision can be taken now. Further information is accordingly sought on a number of points which are listed in the attached Annex.</i>	Noted, see responses to Annex below
	<i>In addition to the specific information requests, the Planning Authority requires further detail on the in-combination effects with the other Wylfa elements and other projects. Horizon have submitted that “given the extremely limited potential of the SPC Proposals to contribute to LSEs from effects acting alone, it is also considered that there is no potential for the effects to contribute to LSEs when acting in combination with any other plans or project”⁹. It is not considered appropriate to scope out all intra-project and cumulative assessment, particularly given the potential to contribute to the effects of the main consenting which will largely overlap spatially, extend the period of effects and potentially effect the same designated sites ‘ objectives as the Application works.</i>	Horizon maintains that there is no requirement for in-combination assessment. Project changes have been made to strengthen this argument (see section 2 of this RIHRA Addendum) and additional information has been provided to support the LPA in its assessment (see section 3 in relation to noise and section 4 in relation to air quality in-combination effects).
	<i>Until the information identified in the Annex is provided and is sufficient to address the points of doubt currently noted, or, where</i>	No response required

⁹ Report to Inform Habitats Regulations Assessment and Screening, paragraph 5.1.20

	Summarised text from schedule of requested information	Response
	<p><i>following provision of some information further information is considered by the IACC to be necessary, the Council will have no option but to proceed to undertake an Appropriate Assessment as, at this time, likely significant effects cannot reasonably be ruled out.</i></p>	
	<p>Schedule: INTRA-PROJECT INFORMATION</p>	
	<p><i>The purpose of the Site Preparation and Clearance (SPC) proposals is to prepare the Wylfa Newydd Development Area to facilitate the construction activities authorised by the Development Consent Order (DCO). It is therefore the first phase of the overall Wylfa project. Information is therefore required on the intra-project effects (in particular those created by the SPC and main construction) and the intra-project effects together with the cumulative effects of other projects. As part of this, the following specific information has been identified as required:</i></p>	<p>See Regulation 22 Response</p>
	<p><i>a) Air Quality information on predicted emissions for other relevant developments (including DCO proposals) to be provided to demonstrate whether the emissions from the SPC works have the potential to have significant effects cumulatively or in-combination</i></p>	<p>The requested information is provided in section 4 of this RIHRA Addendum</p>
	<p><i>b) Flood Risk information on the modelled outputs which consider pre- and post-development scenarios (shown as changes (increases / decreases) in flood depth) and details of any required floodplain storage.</i></p>	<p>Not considered relevant to HRA, See Regulation 22 Response</p>

	Summarised text from schedule of requested information	Response
	<i>c) In combination/cumulative impacts of SPC and DCO application effects on terns.</i>	See below
	<i>d) Additional information/assessment of the impact on terns including proposed mitigation measures to demonstrate no or imperceptible effects due to disturbance on the tern species of the SPA.</i>	Amendments to the SPC Proposals and assessment of the implications are detailed in section 2 and section 3 of this RIHRA Addendum respectively. With these amendments, noise levels at receptors are considered to be at or below ambient
	<i>e) Set up specifications for species receptor sites.</i>	Not considered relevant to HRA, See Regulation 22 Response
	<i>f) A cumulative impact assessment for chough.</i>	The RIHRA considers effects on chough at the screening stage and concludes no LSE would arise due to weak effect pathways as a result lack of significant functional linkage with the SPA (see also below). Therefore, in-combination assessment is not considered necessary (request for 'cumulative impact assessment; implies that this request relates to EIA).
	<i>g) An assessment of functional linkage of breeding chough contribution to Holy Island Coast SPA breeding colony.</i>	See See Regulation 22 Response, EIA Addendum document and Chough Baseline Report [RD7]
	<i>h) Information/assessment of the impacts on foraging black-headed gulls</i>	This assessment is provided in the EIA Addendum document.

	Summarised text from schedule of requested information	Response
	<i>i) Information/assessment on predator displacement.</i>	This assessment is provided in the EIA Addendum document.

7 References

Table 7-1 Schedule of references

ID	Reference
RD1	<i>Horizon 2017: Wylfa Newydd Project, Report to Inform Habitats Regulations Assessment Screening for Site Preparation and Clearance.</i>
RD2	<i>Horizon 2018: Site Preparation and Clearance Noise Effects - Wylfa Newydd Project: Effects of temporarily ceasing works west of the Afon Cafnan watercourse on the tern nesting islands in Cemlyn Bay. Ref: WN034-JAC-PAC-REP-00161</i>
RD3	<i>Horizon 2017: Wylfa Newydd Project Site Preparation and Clearance Environmental Statement - Volume 3E – Appendix 15-03: Seabird Baseline Report</i>
RD4	<i>Horizon 2018: Wylfa Newydd Project Site Preparation and Clearance: Air Quality Cumulative Effects Technical Note. Ref: WN0904-JAC-PAC-TEC-00001</i>
RD5	<i>Horizon 2017: Wylfa Newydd Project Site Preparation and Clearance Environmental Statement – Volume 1</i>
RD6	<i>Environment Agency 2016. Air Emissions Risk Assessment for your Environmental Permit.</i>
RD7	<i>Jacobs. 2017. Chough Baseline Report; Report on behalf of Horizon Nuclear Power Wylfa Ltd. Ref. No. WN034-JAC-PAC-MEM-00015</i>

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