



Wylfa Newydd Project

6.2.17 ES Volume B - Introduction to the environmental assessments App B1-1 - Transboundary Effects Assessment

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1 Introduction

- 1.1.1 This appendix provides an overview of the requirements relating to the assessment of the transboundary environmental effects of the Wylfa Newydd Development Consent Order (DCO) Project with respect to Environmental Impact Assessment (EIA) and Habitats Regulations Assessment (HRA). This appendix outlines the legislative context to transboundary EIA and HRA, Horizon's approach to the assessments, and the conclusions of those assessments.
- 1.1.2 The information in this appendix is based on chapters C6 (traffic and transport) (Application Reference Number: 6.3.2), C2 (waste and materials management) (Application Reference Number: 6.3.4) and chapters D3 to D15 (socio-economics, public access and recreation, air quality (excluding emissions from traffic), noise and vibration, soils and geology, surface water and groundwater, terrestrial and freshwater ecology, landscape and visual, cultural heritage, coastal processes and geomorphology, the marine environment, radiological effects and shipping and navigation) (Application Reference Numbers: 6.4.3 to 6.4.15) of the Environmental Statement and on the HRA report (Application Reference Number: 5.2).

2 Legislation, policy and guidance

2.1.1 This section outlines the legislative context, policy and guidance on transboundary effects.

2.2 Espoo Convention and Directives that implement it

2.2.1 The Espoo Convention establishes the general obligation of European Economic Area States (EEA States) to notify and consult each other on all major projects under consideration that are likely to cause significant adverse environmental effects across national boundaries.

2.2.2 The EEA comprises all of the Member States of the European Union (EU) as well as Iceland, Liechtenstein and Norway. Switzerland is not an EEA State. The UK, comprising England, Scotland, Wales and Northern Ireland, is an EEA State but does not include the Crown Dependencies of the Isle of Man and the Bailiwicks of Jersey and Guernsey. These Crown Dependencies are not separate EEA States.

2.2.3 The requirements of the Espoo Convention were implemented by Directive 97/11/EC which, together with a number of related Directives (codified in Directive 2011/92/EU), establishes the framework and requirements for EIA at EU level (EIA Directive).

2.2.4 Regulation 24 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended) (EIA Regulations) sets out the basis for statutory notification and consultation with other EEA States. Regulation 24 applies where:

- one of the events in Regulation 4(2) occurs, namely:
 - (a) the SoS is notified under Regulation 6(1)(b) of the EIA Regulations that an environmental statement is to be provided;
 - (b) the SoS adopts a screening opinion under Regulation 6(1)(a) of the EIA Regulations to the effect that development is EIA development; or
 - (c) the SoS makes a direction that development is EIA development pursuant to Regulation 5 of the EIA Regulations;
- the development otherwise comes to the attention of the SoS as being the subject of an EIA application and the SoS is of the view that the development is likely to have significant effects on the environment of another EEA State (Regulation 24(1)(b)); or
- the SoS is so requested by another EEA State likely to be significantly affected by such development (Regulation 24(1)(c)).

2.2.5 The duty to notify and consult with other EEA States applies until the decision on the DCO application is made.

2.3 Planning Inspectorate Advice note 12

2.3.1 The Planning Inspectorate has issued an Advice Note (Advice Note 12) [RD1] which provides guidance to applicants for development consent on the

requirements of Regulation 24 [RD1]. This confirms that the Planning Inspectorate will screen a proposed new nuclear Nationally Significant Infrastructure Project (NSIP) and determine whether the development is, or is not, likely to have significant effects on the environment in another EEA State. In either circumstance, all EEA States will be informed that the Planning Inspectorate has undertaken this screening exercise. The Planning Inspectorate will also inform Switzerland and the Crown Dependencies that it has screened the proposed NSIP for significant transboundary effects. Where the Planning Inspectorate is of the view that the proposed NSIP is likely to have a significant effect on the environment in another EEA State, it will notify the EEA State in accordance with Regulation 24.

- 2.3.2 The Planning Inspectorate's Advice Note 12 [RD1] confirms that the applicant for a DCO has no formal role in the Regulation 24 process. The duties prescribed by Regulation 24 in notifying and consulting with other EEA States on potential transboundary effects are the responsibility of the SoS. However, Advice Note 12 [RD1] states that the applicant is requested to provide information to the Planning Inspectorate to enable a view to be reached as to whether the development in question is likely to have significant transboundary effects on other EEA States. It states that information about potential transboundary effects should be provided by the applicant with the scoping request, if a Scoping Opinion is requested by the applicant from the SoS under Regulation 8 of the EIA Regulations, and with the DCO application.

2.4 Transboundary effects and HRA

- 2.4.1 The Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) and Council Directive 2009/147/EC on the conservation of wild birds (Birds Directive) require the establishment and protection of sites known as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) in order to ensure the protection of important and endangered habitats and species, and rare, vulnerable and migratory birds. SACs, SPAs, sites in the process of designation as SACs and SPAs, and Ramsar wetlands (under UK policy) are each considered as European Designated Sites and are considered as part of the HRA process.
- 2.4.2 In England and Wales, the requirements of the Habitats Directive and Birds Directive are transposed into domestic law by the Conservation of Habitats and Species Regulations 2017, more commonly known as the Habitats Regulations.
- 2.4.3 The Habitats Regulations require that, before authorising a project likely to have a significant effect on a European Designated Site, a competent authority (i.e. the decision maker on any application for development consent) must "*make an appropriate assessment of the implications for that site in view of that site's conservation objectives*" (section 61(1) of the Habitat Regulations). Anyone applying for a Development Consent must therefore provide the competent authority with such information as may reasonably be required "*for the purposes of the assessment or to enable them to determine whether an appropriate assessment is required*" (section 61(2)). Information relevant to an appropriate assessment includes any representations (following

consultation by the applicant) from statutory nature conservation bodies, both within the UK and in other European countries, and how the applicant has had regard to such feedback.

- 2.4.4 The effects of a plan or project on all European Designated Sites must be considered. This includes European Designated Sites both within the UK and in other EU countries.
- 2.4.5 The Planning Inspectorate's Advice Note on HRA relevant to NSIPs (Advice Note 10) [RD2] provides further guidance to applicants in relation to the preparation of an HRA report and the Planning Act 2008 processes relating to HRA. Horizon has had regard to Advice Note 10 [RD2] in undertaking its HRA.

3 Methodology for the consideration of transboundary effects

3.1 Horizon's approach

3.1.1 The Planning Inspectorate's Advice Note 12 [RD1] provides guidance on the applicant's role in the DCO application process with respect to transboundary effects.

- An applicant may wish to consider whether to undertake their own consultation with governmental divisions and interest groups within EEA States. This conclusion could be informed by the applicant's research into environmental issues and by the transboundary screenings issued by the SoS for the NSIP.
- Whilst not a statutory requirement, applicants should have regard to any transboundary screenings issued by the SoS. (The annex to The Planning Inspectorate's Advice Note 12 [RD1] sets out the criteria and relevant considerations that will be taken into account by the SoS.)
- Where the SoS is of the view that the proposed NSIP is likely to have a significant effect on the environment in another EEA State, the applicant may wish to engage with certain appropriate bodies within those EEA States. Such consultation may form part of the applicant's formal or informal consultation under the pre-application stage of the DCO process, and should be evidenced in the consultation report submitted with the DCO application.
- Applicants should undertake such consultation to ensure that the potential issues and concerns are addressed before the DCO application is submitted, where possible, to seek to resolve transboundary effects which otherwise may become an issue during the examination.

3.1.2 Horizon's approach to the assessment of potentially significant transboundary effects has been jointly focused on the requirements of the EIA and HRA processes. The processes for EIA and HRA are inter-related but represent two distinct environmental assessments. However, as the assessments share a common evidence base, information can be and has been shared between the teams responsible for the two assessments, particularly in respect of the identification of source-receptor pathways and mitigation measures. The sections below describe the assessment processes Horizon has followed with respect to transboundary effects in the EIA and HRA.

3.2 Scoping Opinion

3.2.1 Horizon submitted an EIA Scoping Report in March 2016 and a Scoping Report addendum in May 2017 to the SoS to enable the SoS to provide an EIA Scoping Opinion. The EIA Scoping Report and addendum acknowledge the potential for transboundary effects and note that the assessment of transboundary environmental effects will be presented in the Environmental

Statement and the HRA documentation accompanying the DCO application. The SoS issued Scoping Opinions in April 2016 and June 2017.

3.2.2 In relation to transboundary effects, the Scoping Opinion in April 2016 outlines the following points.

- Consideration should be given in the Environmental Statement to any likely significant effects (LSEs) on the environment of another Member State. In particular, the SoS recommends consideration should be given to discharges to the air and water and to potential impacts on migratory species and to impacts on shipping and fishing areas.
- Horizon should provide to the SoS, as soon as possible, any additional available information about potential significant transboundary effects and identify the affected EEA State(s). In order to ensure the efficient and effective examination of applications within the statutory timetable under Section 98 of the Planning Act 2008. It is important that this information is made available at the earliest opportunity to facilitate timely consultations, if required, with other EEA States in accordance with Regulation 24.
- The Environmental Statement will need to address this matter in each topic area and summarise the position on transboundary effects of the proposed development, taking into account the inter-relationships between any impacts in each topic area.
- Natural Resources Wales (NRW) has advised that a transboundary screening matrix should also be completed.

3.2.3 In respect of HRA, the Scoping Opinion states that when considering the aspects of the environment likely to be affected by the proposed development, including flora, fauna, soil, water, air and the inter-relationship between these, consideration should be given to the designated sites in the vicinity of the proposed development.

3.2.4 In relation to transboundary effects, the Scoping Opinion in June 2017 states the following.

- Regulation 24 of the EIA Regulations 2009, which *inter alia* require the SoS to publicise a DCO application if the SoS is of the view that the Proposed Development is likely to have significant effects on the environment of another EEA State and where relevant to consult with the EEA State affected. The SoS considers that where Regulation 24 applies, this is likely to have implications for the Examination of a DCO application.
- The Applicant's 2016 Scoping Report acknowledged the potential for transboundary impacts. The SoS has since notified both France and Ireland of the Proposed Development under Regulation 24 of the EIA Regulations 2009. In response, France confirmed it did not wish to participate in the EIA procedure. However, they wished to be kept

informed about the project. Ireland confirmed that it wishes to participate in the EIA procedure.

- Notwithstanding the above, Regulation 24 of the EIA Regulations 2009 places an ongoing duty on the SoS to consider potential transboundary effects.
- The SoS recommends that the Environmental Statement should identify whether the Proposed Development has the potential for significant transboundary impacts and if so, what these are and which EEA States would be affected.
- The Environmental Statement will also need to address this matter in each topic area and summarise the position on transboundary effects of the Proposed Development, taking into account inter-relationships between any impacts in each topic area.

3.2.5 Horizon has had regard to the Scoping Opinions in undertaking the HRA and EIA.

3.3 Evidence base used in the assessments

3.3.1 Baseline ecological surveys and monitoring have been undertaken within the Wylfa Newydd Development Area since 2009. These surveys have been jointly focused on the requirements of the EIA and HRA processes.

3.3.2 The survey programme has used a multi-method approach to provide an accurate characterisation of the baseline and receptor conditions for a number of ecological receptor groups. This has enabled significant transboundary effects to be considered for the following topic areas:

- terrestrial ecology;
- freshwater ecology;
- ornithology (onshore and offshore);
- marine fish;
- marine benthic habitats; and
- marine mammals.

3.3.3 The assessment of mechanisms of effects through pathway routes, such as noise and vibration, and sediment transport has also been undertaken for the following:

- changes in surface and groundwater quality and/or hydrology and hydrogeology;
- changes in radiation dose levels;
- changes in air quality;
- changes in acoustic and visual stimuli;
- changes in marine water quality;
- introduction of invasive non-native species; and
- alteration of coastal processes and hydrodynamics.

- 3.3.4 Findings of the monitoring and survey work undertaken are set out in the HRA, chapters D9 (terrestrial and freshwater ecology) (Application Reference Number: 6.4.9) and D13 (the marine environment) (Application Reference Number: 6.4.13) and throughout the Environmental Statement in relevant topic chapters.

3.4 Approach to EIA

- 3.4.1 The EIA must consider all potential environmental effects from a project on all environmental receptors and identify any that are both likely and would be significant. Potential significant transboundary effects have been considered for individual topic areas based upon available information and professional judgement.
- 3.4.2 The Environmental Statement details the assessment of transboundary effects for each topic area and for each of the developments as part of the Wylfa Newydd DCO Project.

3.5 Approach to HRA

- 3.5.1 HRA comprises four stages. Stage 1 involves the identification of potentially affected European Designated Sites and a screening process to determine whether or not there are LSEs on the qualifying features of those Sites, whether alone or in combination with other plans or projects. If any LSEs are identified, Stage 2 (appropriate assessment) assesses the implications of the project for the affected Site, in light of that Site's conservation objectives and proposed mitigation, and whether it can be ascertained that the proposal will not adversely affect the integrity of the Site. If it cannot be shown that there will be no adverse effect on the integrity of the European Designated Site, Stage 3 considers whether there are alternative solutions. Where there is an adverse effect on a European Designated Site's integrity but there are no alternative solutions, a project can only be consented where there are imperative reasons of overriding public interest and compensatory measures have been provided. Stage 4 involves an assessment of imperative reasons of overriding public interest.
- 3.5.2 The HRA report explains how Horizon has approached its HRA and identifies the findings of that work, both alone and in-combination, for all development within the Wylfa Newydd DCO Project.
- 3.5.3 Transboundary consultation has been undertaken by Horizon as outlined in section 3.6.

3.6 Consultation undertaken

Horizon consultation on EIA and HRA

- 3.6.2 Horizon has undertaken extensive consultation with Natural Resources Wales (NRW), the Isle of Anglesey County Council (IACC) and environmental non-governmental organisations with respect to EIA and HRA. These consultations are described in the Environmental Statement, HRA report and the Consultation Report.

- 3.6.3 As part of the HRA process, in addition to NRW, Horizon consulted with the statutory nature conservation bodies for Scotland, England, Northern Ireland, France and Ireland on the draft HRA Stage 1 screening assessment in May 2017. The draft Stage 1 screening assessment identified the potential for LSEs on sites in Wales, Scotland, Northern Ireland and Ireland but concluded that the potential for LSEs on European Designated Sites in France can be discounted.

Planning Inspectorate consultation

- 3.6.4 The Planning Inspectorate consulted with all Espoo Convention signatories in February 2017 to provide formal notification under the EIA Directive, as implemented by the EIA Regulations, and also under the Espoo Convention, of the SoS's view on whether the Wylfa Newydd DCO Project is likely to have significant adverse transboundary impacts on their state. Consultation with France and Ireland notified them of the screening opinion that there were likely to be significant adverse transboundary impacts. Consultation with all other states notified them that it was not likely that there would be significant adverse transboundary impacts.

4 Assessment findings

4.1 Consultation responses

Horizon consultation

- 4.1.2 Responses from NRW, the IACC and environmental non-governmental organisations with respect to consultation on EIA and HRA are described in the Environmental Statement, HRA report and the Consultation Report.
- 4.1.3 In response to Horizon's consultation on HRA with statutory nature conservation bodies outside Wales, the statutory nature conservation body for France confirmed that it did not consider it was necessary to participate further, but wished to be kept informed. The Department of Agriculture, Environment and Rural Affairs (Northern Ireland) did not have any technical comment but confirmed it would like to remain part of the consultation process. Ireland acknowledged the consultation but, at the time of writing, had not responded. Natural England stated that provided NRW was being consulted, it did not need to be consulted further. Scottish Natural Heritage suggested that some points of case law relating to HRA were included in the Shadow HRA and commented that the 'pre-screening' phase undertaken by Horizon was not 'common practice' (as indicated in the Shadow HRA) but often undertaken for large projects. In terms of the LSE screening exercise, Scottish Natural Heritage queried whether Scottish candidate SACs for harbour porpoise had been considered. Horizon responded to confirm it has considered all designated sites for harbour porpoise within the Celtic and Irish Seas Management Unit. The Inner Hebrides and the Minches candidate SAC for harbour porpoise is off the west coast of Scotland, in the West Scotland Management Unit. Taking into account the distance of the Wylfa Newydd Development Area from the Inner Hebrides and the Minches candidate SAC, Horizon believes that there is no potential for LSEs.

Planning Inspectorate consultation

- 4.1.4 Consultation responses from 13 states (including the Isle of Man and Jersey) were received by the Planning Inspectorate. The majority wished to participate further in the process and/or be registered as an interested party, particularly with regard to accidental releases. The French and Polish authorities do not consider it necessary to participate in the procedure but wish to be kept informed about the project. The Jersey authorities did not wish to participate in the process and the authorities of Greece and Bosnia and Herzegovina only confirmed receipt of the consultation.

4.2 EIA

- 4.2.1 On the basis of the Environmental Statement, no significant adverse transboundary impacts are considered likely. This conclusion is consistent with the findings of the Government's strategic level Appraisal of Sustainability undertaken as part of its analysis of the suitability of potential sites for the development of new nuclear power stations (Strategic Siting Assessment). Paragraph 1.7.4 of the *National Policy Statement for Nuclear Power*

Generation (EN-6) [RD3] states that significant transboundary effects arising from the construction of new nuclear power stations are not considered likely.

Traffic and transport

- 4.2.2 Effects on traffic and transportation have been identified only on the road network within Anglesey and North Wales. Therefore, no transboundary effects on traffic and transport are predicted.

Waste

- 4.2.3 Transboundary effects could occur if wastes were transported beyond UK borders. However, it is anticipated that wastes generated during the construction and operation would be treated within north Wales and/or north-west England, albeit with the possibility that recycled materials could be exported to be manufactured into new products. Transboundary effects are, therefore, negligible.

Socio-economic

- 4.2.4 No socio-economic transboundary effects are expected during the construction, operation or decommissioning of the Wylfa Newydd DCO Project.

Public access

- 4.2.5 Effects on public access and recreation would be restricted to receptors located within 2km of the Wylfa Newydd Development Area, an area entirely within UK borders. Therefore, no transboundary effects on public access or recreation are predicted.

Air quality

- 4.2.6 Transboundary effects could occur with regard to emissions to air from the construction, operation and decommissioning of the Power Station, and marine vessels at ports located in other states. However, the contribution to air pollution at the nearest State (the Republic of Ireland, which is approximately 100km to the west of the Power Station Site) due to emissions from these potential pathways would be extremely small and not significant.

Noise and vibration

- 4.2.7 The noise and vibration study area does not extend beyond UK borders. There is no possibility of significant transboundary noise or vibration effects

Soils

- 4.2.8 There is no potential for significant transboundary impacts as the geographical extent of any effects would be local within the study area.

Surface water and groundwater

- 4.2.9 Transboundary effects could occur through modification of the flow and quality in surface watercourses and subsequent discharge to the marine

environment. This could be in the form of fluvial morphological changes and/or changes in groundwater quality. However, the drainage system is designed to maintain natural conditions as far as possible. Marine modelling shows that any contaminants discharged are very rapidly diluted in the immediate vicinity of the site. Fluvial geomorphology effects would be restricted to within 1km of the site. No effects on groundwater would be seen beyond the local aquifer. There would, therefore, be no transboundary effects.

Terrestrial ecology

- 4.2.10 Transboundary effects could occur through effects on European eel, river lamprey and sea trout (during periods of the lifecycle within rivers). As well as breeding and over-wintering bird species, all of which migrate between different states' territories. Potential effects on these species include some habitat loss and temporary disturbance during construction, but extensive suitable alternative habitat exists in the immediate area. No significant effects on these species have been identified. Thus, it is unlikely that significant transboundary effects would exist.

Landscape and visual

- 4.2.11 The Zone of Theoretical Visibility does not extend beyond UK borders. Therefore, there is no possibility of significant transboundary effects.

Cultural Heritage

- 4.2.12 Effects on Cultural heritage would be restricted to receptors located entirely within the UK. Therefore, no transboundary effects on cultural heritage are predicted.

Coastal processes

- 4.2.13 The Power Station Main Site and Holyhead North Disposal Site are over 100km from the Irish coast. Changes to waves and currents are localised to Cemlyn Bay and to the Holyhead North Disposal Site and extend less than 10km. Suspended sediment plumes arising from dredging and disposal would only extend for around 12km in the worst case. There are, therefore, no significant transboundary effects predicted.

Marine environment

- 4.2.14 Transboundary effects could occur through effects on marine mammals (cetaceans and pinnipeds); European eel, river lamprey and sea trout (during periods of their lifecycle in the sea); fish of commercial importance; and seabirds. These species all have very large home ranges and can travel large distances, including within other states' territories. Due to the mobility of these species, it is possible that individuals associated with populations from international waters could be affected. There is the potential for minor adverse effects on marine mammals, but these would be temporary and in the immediate vicinity of the works. The effects on European eel, river lamprey, sea trout and commercial fish are considered negligible due to the very low numbers of individuals that may be affected. Effects on seabird populations

in the area are not considered to be significant. As effects on marine features are not considered to be significant in the local area, or of a minor/temporary nature, it is considered that there would be no significant transboundary effects.

Radiological

- 4.2.15 Transboundary effects could occur through routine or accidental releases of radiation to water, soil or air. Within the EU, every time a Member State plans to alter the way it disposes of radioactive waste or has a new facility that may increase emissions, it must make a submission to the European Commission as part of the Euratom Treaty, known as an Article 37 submission. The Article 37 submission provides enough data to determine whether the Wylfa Newydd DCO Project is liable to result in the radioactive contamination of the water, soil or airspace of another Member State. The Article 37 assessment includes the effects from routine operations and a consideration of potential accident scenarios.
- 4.2.16 In terms of radiological effects from routine releases, there would be no significant effects resulting from discharges of radioactive waste from the Power Station. As effects are assessed for receptors in the immediate vicinity of the Power Station, it can be assumed that they are bounding, and that equivalent receptors in neighbouring states would incur much lower doses due to the exponential decreases in radioactivity concentrations seen with distance from release. Collective dose results have also been assessed and the risks are minuscule and can be ignored. It follows that there would be no significant transboundary radiological effects from routine releases.
- 4.2.17 As noted in *National Policy Statement for Nuclear Power Generation (EN-6)* [RD3] (para 1.74) "*Due to the robustness of the regulatory regime there is a very low probability of unintended release of radiation, and routine radioactive discharges will be within legally authorised limits.*" Authorised discharge limits for the Power Station would be set such that the resulting doses to the local population would meet legal dose constraints. An impact assessment of accidental releases is provided in section 6 of appendix D14-2 (Analysis of accidental releases) (Application Reference Number: 6.4.98). Extensive use is made of material presented in the Article 37 submission within appendix D14-2 (Application Reference Number: 6.4.98). Radiation doses for the local population are assessed as negligible for loss of coolant accidents, fuel-handling accidents, and off-gas system failures. A severe accident is assessed as small significance for local populations. Doses in the nearest Member State are two to three orders of magnitude lower than this, with the resulting impact and significance assessed as negligible. Assuming an inverse square relationship between air concentration, dose and distance from the Power Station, impacts at greater distance would also be much lower than this. There would, therefore, be no significant transboundary effects from accidental releases.

Shipping

- 4.2.18 Transboundary effects could occur across national boundaries arising from additional vessel movements as a result of the Wylfa Newydd DCO Project.

However, heightened risk associated with navigation would be limited to the Wylfa Newydd Development Area within UK territorial waters. Therefore, negligible transboundary effects are predicted.

4.3 HRA

- 4.3.1 At the scoping stage, Horizon identified a potential pathway for effects on European Designated Sites in the UK, France and Ireland. At the HRA Stage 1 screening assessment stage, it was concluded that there was no potential for LSEs on any European Designated Sites in France, but European Designated Sites in Wales, England, Ireland, Northern Ireland and Scotland were carried forward to the HRA Stage 2 appropriate assessment, as potential LSEs could not be excluded.
- 4.3.2 Details of these European Designated Sites, together with details of their qualifying features, can be found in the appendices to the HRA report. Many of these European Designated Sites are distant from the Wylfa Newydd DCO Project and are being considered because of the presence of wide-ranging mobile species that have the potential to interact with the zone of influence for various environmental effects of the Wylfa Newydd DCO Project.
- 4.3.3 In accordance with The Planning Inspectorate’s Advice Note 12 [RD1], a screening matrix for potential transboundary effects has been undertaken, for ornithology and marine mammals, identified at the HRA Stage 1 screening assessment stage. The screening matrices are based on the assessment of effects and consultation with relevant statutory and non-statutory bodies (see table 4-1).
- 4.3.4 Stage 2 of the HRA further assessed all LSEs identified at Stage 1 and concluded that there would not be an adverse effect on integrity of any European Designated Sites, whether in the UK or in other EEA states. Full details of the HRA process and its findings are reported in the HRA report (application reference 5.2).

Table 4-1 HRA screening matrix for LSEs of the Wylfa Newydd DCO Project on the environment of another EEA state

Relevant considerations	Consideration with regard to ornithology and marine mammals
Characteristics of the development	
Size of the development	The Wylfa Newydd Power Station would be a new build Nuclear Power Station with two Reactors and marine facilities, within the Wylfa Newydd Development Area of 410ha.
Use of natural resources	Sea water would be drawn from Porth-y-pistyll and returned to it for cooling purposes. Fresh water would be obtained from local supplies. Nuclear fuel would be sourced from outside the EEA States.

Relevant considerations	Consideration with regard to ornithology and marine mammals
Production of waste	Nuclear waste would be produced and securely stored on site. There is strict regulation of the management and storage of nuclear wastes. No other waste other than recyclable materials would be transported outside the UK.
Pollution and nuisances	A full EIA has been carried out on releases to ground, water and air and no significant releases are predicted within the UK. Dispersal of air pollutants, suspended solids and contaminants has been modelled to disperse within the immediate vicinity of the Wylfa Newydd DCO Project, within UK air and waters.
Risk of accidents	There is a very low probability of unintended release of radiation. Any other environmental accidents would only affect the local area within the UK territory.
Use of technologies	Best available technologies are proposed within the design and mitigation measures.
Geographical area	
What is the extent of the area of a likely impact under the jurisdiction of another EEA state?	None. The only potential significant effects on another EEA State are through mobile species that range between states' territories being affected whilst in UK territory.
Location of development	
What is the existing use?	The site is currently mostly agricultural.
What is the distance to another EEA state? (Name EEA state.)	The Republic of Ireland is the nearest EEA state; it is approximately 100km to the west of the Power Station Site.
Cumulative impacts	
Are other major developments close by?	None that would materially contribute to significant transboundary effects
Carrier	
By what means could impacts be spread (i.e. what pathways)?	Airborne and waterborne effects are conceivable, but the EIA modelling shows dispersal to be within UK territory.

Relevant considerations	Consideration with regard to ornithology and marine mammals
Environmental importance	
Are particular environmental values (e.g. protected areas – name them) likely to be affected?	A number of European Designated Sites in the Republic of Ireland have been considered in Stage 2 of the HRA for potential effects on marine mammals and seabirds for which they are designated and which range into UK territory. However, it can be concluded that no adverse effects would occur on any of these sites.
Capacity of the natural environment	The EIA and HRA demonstrate that the natural environment has capacity to be resilient in the context of the Project. The natural environment of other states would not be affected.
Wetlands, coastal zones, mountain and forest areas, nature reserves and parks, Natura 2000 sites, areas where environmental quality standards already exceeded, densely populated areas, landscapes of historical, cultural or archaeological significance	No ecosystems in other States would be affected by the Wylfa Newydd DCO Project as demonstrated in the EIA. Some mobile species utilising other states' coastal and marine areas have been considered during Stage 2 of the HRA, but no adverse effects on the integrity of those sites can be concluded.
Extent	
What is the likely extent of the impact (geographical area and size of the affected population)?	All zones of influence lie within UK territory.
Magnitude	
What will be the likely magnitude of the change in relevant variables relative to the status quo, taking into account the sensitivity of the variable?	No environmental changes would occur in any part of another state's territory.
Probability	

Relevant considerations	Consideration with regard to ornithology and marine mammals
<p>What is the degree of probability of the impact? Is the impact likely to occur as a consequence of normal conditions or exceptional situations, such as accidents?</p>	<p>There is no probability of significant effect on another State in the construction and normal operation of the Wylfa Newydd DCO Project. Accidental release of radiation has been assessed in the Environmental Statement and it has been concluded that there would be no significant transboundary effect.</p>
Duration	
<p>Is the impact likely to be temporary, short-term or long-term? Is the impact likely to relate to the construction, operation or decommissioning phase of the activity?</p>	<p>There is some potential for minor temporary effects during construction of the marine facilities on marine mammals from other states' European Designated Sites, but this would not be significant.</p>
Frequency	
<p>What is likely to be the temporal pattern of the impact?</p>	<p>Non-significant effects could occur through the period of construction of the marine facilities.</p>
Reversibility	
<p>Is the impact likely to be reversible or irreversible?</p>	<p>The only (non-significant effects) would be temporary displacement of individuals of marine mammal species that had migrated from other states' territories, so the effect would be reversible post-construction.</p>

5 Conclusions

- 5.1.1 Potential significant transboundary effects have been considered for individual topic areas, based upon available information and professional judgement. The Environmental Statement details the assessment for each topic area and for each of the developments as part of the Wylfa Newydd DCO Project. The potential for transboundary effects (i.e. effects predicted outside UK territory) is considered for each topic area and concludes whether or not they are likely. LSEs have also been considered in the HRA, including the potential for significant transboundary effects.
- 5.1.2 Horizon consulted with NRW, the IACC and environmental non-governmental organisations with respect to EIA and HRA. Horizon also consulted with the statutory nature conservation bodies for Scotland, England, Northern Ireland, France and Ireland on a draft HRA screening assessment. The Planning Inspectorate consulted with all Espoo Convention signatories in February 2017 on the SoS's view on whether the Wylfa Newydd DCO Project is likely to have significant adverse transboundary impacts on their state.
- 5.1.3 Responses from NRW, the IACC and environmental non-governmental organisations with respect to consultation on EIA and HRA are described in the Environmental Statement, HRA report and the Consultation Report. In response to Horizon's consultation on HRA with statutory nature conservation bodies outside Wales, the statutory nature conservation body for Ireland confirmed that it agreed with the findings of the draft screening assessment. No response was received from France. Consultation responses from 13 states (including the Isle of Man and Jersey) were received by the Planning Inspectorate. The majority wished to participate further in the process and/or be registered as an interested party, in particular with regard to accidental releases. The French and Polish authorities do not consider it necessary to participate in the procedure, but wish to be kept informed about the project. The Jersey authorities did not wish to participate in the process and the authorities of Greece and Bosnia and Herzegovina only confirmed receipt of the consultation.
- 5.1.4 No significant transboundary effects have been identified in either the Environmental Statement or the HRA.

6 References

ID	Reference
RD1	Planning Inspectorate. 2015. <i>Advice Note twelve: Regulation 24 of the EIA Regulations</i> . [Online]. [Accessed: 5 July 2017]. Available from: https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2013/04/Advice-note-12v2.pdf
RD2	Planning Inspectorate. 2012. <i>Advice Note ten: Habitat Regulations Assessment relevant to nationally significant infrastructure projects</i> . [Online]. [Accessed: 5 July 2017]. Available from: https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2012/10/Advice-Note-10-HRA.pdf
RD3	Department of Energy and Climate Change. 2011 <i>National Policy Statement for Nuclear Power Generation (EN-6)</i> . London: The Stationery Office.