



Overview - Transboundary screening undertaken by the Secretary of State	
Project name:	Wylfa Newydd Generating Station
Address/Location:	Anglesey, North Wales
Planning Inspectorate Ref:	EN010007
Date(s) screening undertaken:	First screening – 1 February 2017 following the Applicant’s request for a scoping opinion in March 2016
EEA States identified for notification:	First screening: <ul style="list-style-type: none"> • Republic of Ireland • France

FIRST TRANSBOUNDARY SCREENING UNDERTAKEN BY THE SECRETARY OF STATE	
Document(s) used for transboundary Screening:	<p>Wylfa Newydd Generating Station Environmental Impact Assessment Scoping report dated 15 March 2016 ('the Scoping Report') (available on the Planning Inspectorate website https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010007/EN010007-000263-Applicant's%20scoping%20report.pdf)</p> <p>Wylfa Newydd Project Pre-Application Consultation – Stage Two: Preliminary Environmental Information Report ('PAC 2 PEIR'), including Appendix 4 – Transboundary Effects (available via the Applicant’s consultation website http://consultation.horizonnuclearpower.com/stage-2/technical-documents)</p> <p>Wylfa Newydd Project Pre-Application Consultation – Stage Two: Habitats Regulations Assessment Interim Report ('PAC 2 HRA Interim Report') (available via the Applicant’s consultation website http://consultation.horizonnuclearpower.com/stage-2/technical-documents)</p>
Date	1 February 2017
Screening Criteria:	Secretary of State Comments:
Characteristics of the Development	<p>The proposed development comprises a new nuclear electricity generating station on land adjacent to the existing Wylfa Nuclear Generating Station in Anglesey, north Wales. The generating station would have an electrical output of approximately 2,700 megawatts (MW).</p> <p>The Scoping Report details the following elements of the generating station:</p>

- main plant – this would comprise two units (Unit 1 and Unit 2), each of which would comprise:
 - reactor building and main stack housing an advanced boiling water reactor;
 - turbine building;
 - service building;
 - control building;
 - heat exchanger building;
 - filter vent building;
 - back-up buildings;
 - standby AC power generation;
 - condensate storage tanks;
 - generator transformer and auxiliary transformers;
 - gas storage facilities; and
 - suppression pool drain.
- common plant – these would be shared between Unit 1 and Unit 2 and therefore there would be one of each of the following:
 - circulating water biocide treatment plant;
 - demineralised water treatment plant;
 - auxiliary boiler and tanks;
 - fire water pump house;
 - emergency response facilities;
 - supporting facilities, buildings, structure and features:
 - administration building;
 - maintenance and workshop building;
 - Horizon training and simulator building;
 - site perimeter fence and entrance buildings;
 - outage building;
 - marine off-loading facility (MOLF);
 - lighting; and
 - landscaping.
- radioactive waste buildings;
- cooling water system and breakwaters; and
- off-site facilities (located outside of Wylfa Newydd Development Area, but still on Anglesey):
 - the Alternative Emergency Control Centre (AECC) and Environmental Survey Laboratory (ESL); and
 - the Mobile Emergency Equipment Garage (MEEG).

	<p>'Enabling works' (to be consented separately under an alternative consenting regime) are anticipated to take place from mid-2016 until late-2018 and the main construction stage would take place from mid-2018 until mid-2026. The start of commissioning and operation would be mid 2023, with commercial operation of the proposed development commencing in 2026.</p>
<p>Geographical area</p>	<p>The Scoping Report and PAC 2 HRA Interim Report acknowledge the potential for the proposed development to give rise to significant transboundary effects in respect of the following countries and receptors:</p> <ul style="list-style-type: none"> • ornithology (Republic of Ireland and France); and • marine mammals (Republic of Ireland and France).
<p>Location of Development (including existing use)</p>	<p>The 'Wylfa Newydd Development Area' is located on the north coast of Anglesey and covers approximately 380 hectares of land extending into the Irish Sea at Porth-y-pistyll. The Wylfa Newydd Development Area is defined within the Scoping Report as all areas of land and sea that would be used for the construction and operation of the generating station.</p> <p>The northern section of the Wylfa Newydd Development Area partially overlaps with the southern part of the existing Wylfa generating station, which is owned by the Nuclear Decommissioning Authority and operated by Magnox. It ceased generation on 31 December 2015 and will undergo defueling lasting around three years.</p> <p>A small section of the western part of the main application site is within the Anglesey Area of Outstanding Natural Beauty (AONB), as shown on Figure 15.2 of the Scoping Report. Away from the coast, the land generally comprises rough grazing with exposed rock and gorse thickets. Farther inland the land is low lying and gently undulating with scattered farms, small settlements and isolated woodland.</p> <p>There would also be areas of land needed outside of the Wylfa Newydd Development Area for the AECC, ESL and MEEG which comprise agricultural land and are crossed by hedgerows and watercourses.</p> <p>Additional development would also be required which will not be included within the application for development consent and would be applied for through alternative consenting regimes.</p> <p>The Scoping Report and PAC 2 PEIR and HRA documents do not identify the distance between the site and another EEA State.</p>
<p>Cumulative impacts</p>	<p>Table 21.3 of the Scoping Report presents a list of reasonably foreseeable future projects which includes on-going and upcoming projects across a wide geographical area (Wales, north-west England, the Isle of Man and the Republic of Ireland). The list includes other new nuclear generating station projects (Hinkley Point C, Sizewell C and Moorside), as well as the decommissioning of the existing Wylfa nuclear generating</p>

	<p>station. Table 21.4 of the Scoping Report provides a refined list of projects that have been scoped into the cumulative assessment.</p> <p>The Scoping Report also identifies numerous applications associated with the generating station that will be made under the Town and Country Planning Act ('Associated Development') and confirms that the cumulative effects of these works will also be assessed. This includes the 'Enabling works' referred to above in this document.</p> <p>The PAC2 PEIR confirms that further discussions are being held with the Isle of Anglesey County Council to finalise the projects to be considered in the cumulative assessment and that the assessment will be presented in a Cumulative Effects Report.</p>
<p>Carrier</p>	<p>Potential pathways are through air, land and water.</p> <p>Birds and marine mammals</p> <p>The PAC 2 HRA Interim Report considers the following potential impacts to birds and marine mammals:</p> <ul style="list-style-type: none"> • changes in visual and acoustic stimuli; • land take, including seabed or intertidal land; • changes in marine water quality; • changes in terrestrial water quality; • changes in surface and groundwater hydrology; • introduction of invasive non-native species; • change in radiation levels; • change in air quality; • alteration of coastal processes and hydrodynamics; and • physical interaction between species and project infrastructure. <p>Shipping and navigation</p> <p>The PAC 2 PEIR considers the potential for effects on established navigation routes, transit times, marine risk (for example; collisions, grounding, and fire/explosion), search and rescue implications, and requirements for aids to navigation.</p> <p>Fisheries</p> <p>The PAC 2 PEIR considers the potential for displacement of fishing activity and impacts on fish (resulting from the noise, vibration and visual disturbance during construction; loss of habitat; changes to water quality/temperature; and impingement during water abstraction).</p> <p>Radiological exposure</p> <p>The PAC 2 PEIR acknowledges the potential for exposure to radiation from discharges of aerial and liquid radioactive emissions and direct radiation from radioactive sources.</p>

Environmental Importance

European sites

The PAC 2 PEIR Appendix 4 identifies 54 European Designated Sites within the UK that have the potential to be affected by the proposed development. It also acknowledges the potential for effects on 21 European sites outside of the UK which are considered because of the presence of a particular wide ranging mobile species (birds and marine mammals). These sites are listed below.

The PAC 2 HRA Interim Report provides the relevant qualifying features for the 54 European sites, however does not state for which of these feature(s) a likely significant effect has been identified. The approximate distance of the European site from the proposed development is given in brackets below.

Birds

- Ireland:
 - Lady's Island Lake Special Protection Area (SPA) (50-100km);
 - Malahide Estuary SPA (100-150km);
 - Ireland's Eye SPA (100-150km);
 - Lambay Island SPA (100-150km);
 - Dundalk Bay SPA (100-150km);
 - Poulaphouca Reservoir SPA (100-150km);
 - Rockabill SPA (100-150km);
 - Saltee Islands SPA (100-150km);
 - Wexford Harbour and Slobbs SPA (150-200km);
 - The Murrough SPA (150-200km); and
 - The Raven SPA (150-200km).

Marine mammals

- Ireland:
 - Rockabill to Dalkey Island Special Area of Conservation (SAC) (100-150km);
 - Blasket Islands SAC (100-150km); and
 - Roaringwater Bay and Islands SAC (150-200km).
- France:
 - Capp d'Erquy-Cap Frehel SAC (150-200km);
 - Baie De Morlaix SAC (150-200km);
 - Chaussee de Sein SAC (300-400km);
 - Tregor Goëlo SAC (400-450km);
 - Côte de Granit Rose-Sept-Iles SAC (300-400km);
 - Ouessant-Molène SAC (400-450km); and

	<p>- Abers - Côtes des Légendes SAC (400-450km).</p> <p>Shipping and navigation</p> <p>The Port of Holyhead is located 25km south west of the site and provides passenger services to Dublin, Ireland. The port also has commercial and recreational fishing activity.</p> <p>The PAC 2 PEIR notes that approximately 60 vessels per month pass within two nautical miles of the Wylfa Newydd Development Area. Some vessels are believed to be on transit to Dublin; however, the origin of vessels involved has not been specified.</p> <p>The main navigational feature north-west of Anglesey is The Skerries Traffic Separation Scheme (TSS). A deep water anchorage is located two nautical miles north-east of Moelfre.</p> <p>Commercial fisheries</p> <p>The Scoping Report notes there are a number of EU fishery protected areas in the eastern Irish Sea and Liverpool Bay; however, details of these fisheries and the nationalities of the fishermen that utilise them have not been provided.</p>
<p>Extent</p>	<p>Birds and marine mammals</p> <p>The PAC 2 Interim HRA Report notes that typical foraging ranges of marine birds from breeding sites are generally known and the maximum area of sea space which might be potentially affected can be calculated; therefore any European site with qualifying bird species that might make use of the potentially affected sea space would be considered. The maximum area of sea space potentially affected has not been specified by the Applicant; however, European sites located within the UK, France and Ireland that have migratory bird species as qualifying features have been identified as being potentially affected by the proposed development.</p> <p>The spatial extent within which marine mammals could be affected has not been explained within the Scoping Report or PAC 2 documentation; however, European sites located within the UK, France and Ireland that have migratory marine mammals as qualifying features have been identified as being potentially affected by the proposed development.</p> <p>Shipping and navigation</p> <p>New seabed obstructions (i.e. the breakwater and MOLF) would be located within the application site. During operation, vessels are likely to be excluded from the area immediately surrounding the MOLF. This area does not extend to international waters, nor does it encroach on the TSS navigational feature.</p> <p>Commercial fisheries</p> <p>Displacement of fishing from the construction of the breakwater and MOLF would occur within the application site. Vessels (including fishermen) will also likely be excluded from the area immediately surrounding the MOLF. Neither the Scoping Report</p>

	<p>nor the PAC 2 documentation identifies this as an important area for fisheries.</p> <p>The results of hydrodynamic modelling are detailed in the PAC 2 PEIR and show that changes to sea temperature and biocide concentrations would extend up to 2.6km from the proposed development.</p> <p>Radiological exposure</p> <p>The PAC 2 PEIR confirms that doses to the local population will meet legal requirements and will be controlled through an Environmental Permit. The levels will be modelled both for the local population and within the nearest member state (Republic of Ireland) and an assessment of effects presented within the Environmental Statement.</p>
<p>Magnitude</p>	<p>Birds and marine mammals</p> <p>The magnitude of impacts on birds and marine mammals is reported in Table B10.1 of PAC 2 PEIR as being small to medium, depending on the impact in question.</p> <p>Further modelling will be carried out to understand the underwater noise levels from construction activities.</p> <p>Shipping and navigation</p> <p>The PAC 2 PEIR states that vessel movements predicted in the construction period (two movements per day) would be readily absorbed into the regional marine traffic.</p> <p>Commercial fisheries</p> <p>The PAC 2 PEIR acknowledges the potential for an increase in temperature and biocide in a small area of sea (in relation to the size of the coastal water body), but concludes that the warmer water and chemicals would be rapidly diluted and dispersed as a result of currents and wave action. The resultant magnitude of impact to fish and fisheries is considered to be small to medium and the Applicant concludes the potential effects on fish and fisheries to be minor adverse.</p> <p>Radiological exposure</p> <p>Based on professional judgement, the PAC 2 PEIR considers that possible doses to members of the public from operational activities would be less than 20µSv/y, and as such would be judged as being of negligible effect. Potential dose rates to non-human species are judged to be lower than 10µGy/hr and are also judged as being of negligible effect. Further modelling and qualitative assessments will be undertaken by the Applicant and that significance of effects will be reported in the Environmental Statement.</p> <p>The PAC 2 PEIR further confirms that discharge limits to the local population will be controlled by an Environmental Permit and will meet legal dose constraints. It considers that the environmental concentrations of radioactivity in the vicinity of the Republic of Ireland will be much lower than those close to</p>

	<p>the generating station.</p> <p>The assessment of doses resulting from accidental release scenarios will be undertaken to inform the Article 37 assessment of transboundary impacts for the generating station.</p>
<p>Probability</p>	<p>Birds and marine mammals</p> <p>The PAC2 PEIR acknowledges the potential for impacts on marine mammals and birds, including disturbance, vessel collision risk and loss of habitat. These effects would be mitigated by various measures including a Construction Noise and Vibration Management Plan; a Code of Construction Practice; marine mammal exclusion zones; ramp-up techniques for piling and drilling; a Lighting Strategy; and a Blasting Management Plan.</p> <p>In EIA terms, the residual effects are predicted to range from minor to moderate adverse, depending on the receptor (Table B10.1). Similarly, the HRA Interim Report acknowledges a potential for likely significant effects on seabird and marine mammal qualifying features of European sites.</p> <p>Shipping, navigation and commercial fisheries</p> <p>The Scoping Report and PAC 2 documentation do not identify the area in the vicinity of the proposed development as being of high importance to foreign vessels, and there is no evidence to suggest that effects on foreign vessels would be significant. A Navigational Risk Assessment will be undertaken and presented with the DCO application which will consider the need for mitigation measures.</p> <p>There are three known spawning grounds located on the east of Anglesey and a whiting spawning ground is located to the north of Anglesey. The PAC 2 PEIR confirms that these are all located outside the waters affected by the cooling water discharge therefore impacts on them are unlikely.</p> <p>The cooling water intake system has been designed with low water velocity and an acoustic fish deterrent, screens and a recovery and return system. With mitigation in place, the Applicant concludes that impacts on fish and fisheries would be minor adverse.</p> <p>Radiological exposure</p> <p>The PAC 2 PEIR confirms that the production of energy from nuclear fuels will generate radioactively contaminated material. The discharge, storage, transport and disposal of radioactive material may also result in direct radiation. However, Best Available Techniques and the use of the waste hierarchy would be employed to manage radioactive wastes and operational wastes would be controlled by an Environmental Permit. The Applicant is developing a Radioactive Waste and Spent Fuel Management Strategy which will detail the systems and procedures for handling and processing radioactive waste and spent fuel. The generating station would also be required to comply with radioactive limits set out in the Environmental</p>

	<p>Permitting (England and Wales) Regulations 2010.</p> <p>The PAC 2 PEIR does not conclude on the significance of radiological effects; however, given the measures to be employed (as detailed above), there is no evidence to suggest that there would be significant adverse effects from routine operations.</p> <p>The PAC 2 PEIR Appendix 4 considers that the likelihood of accidental releases is extremely low and explains that the Applicant will report on accidental release scenarios as part of the Article 37 assessment of transboundary impacts. It also reiterates the National Policy Statement for Nuclear Power Generation EN-6 (para 1.74) which states that "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."</p>
Duration	<p>Birds and mammals</p> <p>Birds and marine mammals could be affected by disturbance, displacement and/or loss of habitats or species during both construction and operation of the proposed development.</p> <p>Shipping and navigation</p> <p>The potential for effects applies during the construction phase and potentially during subsequent maintenance operations.</p> <p>Commercial fisheries</p> <p>Commercial fisheries could be affected during construction by disturbance of fish species and displacement of fishing vessels. During operation fish populations could be affected by changes in marine water quality, entrapment, impingement and entrainment in the cooling water intake. Fishing vessels could be displaced for the operational phase by the presence of marine infrastructure associated with the generating station.</p> <p>Radiological exposure</p> <p>Emissions to air and water could occur during operation of the generating station and in the longer term in the case of long-lived radionuclides. Such emissions would be subject to controls through the Environmental Permitting regime.</p>
Frequency	<p>Birds and marine mammals</p> <p>Potential effects would be intermittent during construction and continuous during operation of the proposed development.</p> <p>Shipping and navigation</p> <p>Potential effects would be intermittent during construction and continuous during operation of the proposed development.</p> <p>Commercial fisheries</p> <p>Potential effects would be intermittent during construction and continuous during operation of the proposed development.</p> <p>Radiological exposure</p>

	Potential effects would be continuous during operation of the proposed development and in the longer term (in the case of long-lived radionuclides). Such emissions would be subject to controls through the Environmental Permitting regime.
Reversibility	<p>Birds and marine mammals</p> <p>The reversibility of impacts is not specified within the Scoping Report or PAC 2 PEIR documentation.</p> <p>Shipping and navigation</p> <p>The reversibility of impacts is not specified within the Scoping Report or PAC 2 PEIR documentation.</p> <p>Commercial fisheries</p> <p>The reversibility of impacts is not specified within the Scoping Report or PAC 2 PEIR documentation.</p> <p>Radiological exposure</p> <p>The reversibility of impacts is not specified within the Scoping Report or PAC 2 PEIR documentation.</p>

Transboundary screening undertaken by the Secretary of State

Under Regulation 24 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended) (the EIA Regulations) and on the basis of the current information available from the Applicant, the Secretary of State is of the view that the proposed development **is likely** to have a significant effect on the environment in another EEA State.

In reaching this view the Secretary of State has applied the precautionary approach (as explained in the Planning Inspectorate's Advice Note 12: Transboundary Impacts Consultation); and taken into account the information currently supplied by the Applicant.

Action:

Transboundary issues notification under Regulation 24 of the EIA Regulations is required.

States to be notified:

- Republic of Ireland (potential impacts on birds and marine mammals)
- France (potential impacts on birds and marine mammals)

Date: 1 February 2017

Note: The Secretary of State's duty under Regulation 24 of the EIA Regulations continues throughout the application process.

Note:

The Secretary of State's screening of transboundary issues is based on the relevant considerations specified in Annex 4 to the Planning Inspectorate's Advice Note 12, available on our website at <http://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>