



Wylfa Newydd Project

8.13 Wylfa Newydd Code of Operational Practice

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Executive Summary

This Wylfa Newydd Code of Operational Practice (CoOP) covers the operational phase of the permanent elements of the Wylfa Newydd Development Consent Order (DCO) Project, i.e. the elements that will remain after the construction of the Power Station is complete.

The Wylfa Newydd CoOP sets out Horizon's commitments to mitigating the environmental effects upon people, businesses and the natural and historical environment of the Wylfa Newydd DCO Project during its operational phase. The document covers the following elements:

- the Power Station, including the permanent Power Station main plant, common plant, and supporting facilities, buildings, structures and features, Grid Connection, together with its permanent landscape setting, car parks and access routes within the Wylfa Newydd Development Area (WNTA);
- the Marine Works, comprising the Cooling Water System (CWS), intake and outfall, breakwaters and the Marine Off-Loading Facility (MOLF), within the WNTA; and
- the Off-Site Power Station Facilities, which comprise the Alternative Emergency Control Centre (AECC), Mobile Emergency Equipment Garage (MEEG) and Environmental Survey Laboratory (ESL).

Although this Wylfa Newydd CoOP covers the environmental management requirements for the operational phase, it does not replicate the separate requirements of the Nuclear Site Licence or the site's Environmental Permit(s).

1 Introduction

1.1 General

- 1.1.1 This Wylfa Newydd CoOP sets out general and topic-specific environmental requirements, standards and measures described in the Environmental Statement¹ as well as requirements identified through the other assessment processes undertaken for the Wylfa Newydd DCO Project, such as the Welsh Language Impact Assessment [APP-432] and [APP-433]; Health Impact Assessment Report [APP-429]; Shadow Habitats Regulations Assessment Report [APP-050 and APP-051]; Water Framework Directive Compliance Assessment [APP-444] (as updated); and Equality Impact Assessment [APP-434]. The series of controls within this Wylfa Newydd CoOP serve to demonstrate the effective planning, management and control associated with the operation of the Wylfa Newydd DCO Project.
- 1.1.2 This Wylfa Newydd CoOP is a 'certified' document pursuant to Article 76 of the Wylfa Newydd (Nuclear Generating Station) Order (Order).
- 1.1.3 This Wylfa Newydd CoOP supports the planning and delivery of the Wylfa Newydd DCO Project in as sustainable, efficient and cost-effective a manner as possible. It describes Horizon Nuclear Power Wylfa Ltd.'s commitments to mitigate the environmental effects upon people, businesses and the natural and historical environment of the Wylfa Newydd DCO Project during its operational phase.
- 1.1.4 Herein, the term 'Horizon' refers to Horizon Nuclear Power Wylfa Ltd. or any other undertaker to whom the benefit of the Order is transferred to under Article 9 of the Order.
- 1.1.5 This Wylfa Newydd CoOP covers the operational phase of the permanent elements of the Wylfa Newydd DCO Project, i.e. the elements that will remain after the construction of the Power Station is complete. These are as follows:
- the Power Station, including the permanent Power Station main plant, common plant, supporting facilities, buildings, structures and features, Grid Connection, together with its permanent landscape setting, car parks and access routes within the WNDA;
 - the Marine Works, comprising the Cooling Water System (CWS), intake and outfall, breakwaters and the Marine Off-Loading Facility (MOLF), within the WNDA; and
 - the Off-Site Power Station Facilities, which comprise the Alternative Emergency Control Centre (AECC), Mobile Emergency Equipment Garage (MEEG) and Environmental Survey Laboratory (ESL).
- 1.1.6 Although this Wylfa Newydd CoOP covers the environmental management requirements for the operational phase, it does not replicate the separate

¹ Any reference to the Environmental Statement in this Wylfa Newydd CoOP, includes reference to the Environmental Statement Addendum (a certified document listed in Schedule 18 of the Order).

requirements of the Nuclear Site Licence or the site's Environmental Permit(s) (see section 2).

1.1.7 This Wylfa Newydd CoOP does not cover the following.

- The Park and Ride facility, which will have been decommissioned after construction of the Power Station in accordance with the detailed decommissioning scheme approved by Isle of Anglesey County Council (IACC) in accordance with the Requirements in the Order. The site will have been restored and maintained by Horizon for a defined period until responsibility of managing the area is taken over by the land-owner in accordance with a handover environmental management plan agreed with the IACC. The operational environmental management arrangements for the Park and Ride facility are within the scope of the Park and Ride sub-Code of Construction Practice (sub-CoCP).
- The Logistics Centre at Parc Cybi, which will have been partly decommissioned after construction of the Power Station, suitable for some future use of the site. The operational environmental management arrangements for the Logistics Centre are within the scope of the Logistics Centre sub-CoCP.
- The A5025 Off-Line Highway Improvements, which will have been in place before the Power Station is operational and become highway maintainable at public expense at the expiration of the one-year maintenance period in accordance with the Order. Landscaping for the A5025 Off-Line Highway Improvements will have been in accordance with the landscape designs approved by the IACC pursuant to the Requirements in the Order, and maintained by Horizon for a period of five years after planting unless otherwise agreed with the IACC.
- The decommissioning of the Power Station, which will be subject to separate requirements.

1.1.8 This Wylfa Newydd CoOP sets out the project-wide and site-specific controls to be complied with, covering the following aspects of the Wylfa Newydd DCO Project during operation of the Power Station:

- communications and community and stakeholder liaison;
- general site operations;
- traffic and transport;
- public access;
- air quality;
- noise and vibration;
- geological conservation;
- surface water and groundwater;
- terrestrial and freshwater ecology;
- landscape and visual;

- cultural heritage;
- coastal processes and marine environment; and
- waste.

1.1.9 For the purposes of this CoOP, the term 'Horizon' refers to Horizon Nuclear Power Wylfa Ltd (or any other undertaker to whom the benefit of the Order is transferred to under Article 9 of the Order), its appointed representatives and the appointed construction contractors.

1.1.10 Where this Wylfa Newydd CoOP refers to Horizon application documents, the Examination Library reference has been provided. External documentation available in the public domain is referenced in section 16 of this Wylfa Newydd CoOP. Those documents that are 'certified documents' pursuant to Article 76 of the Order and listed in Schedule 18 of the Order are not provided a reference for the purposes of this Wylfa Newydd CoOP

1.2 Responsibilities

1.2.1 Horizon is the responsible party for the delivery of the Wylfa Newydd DCO Project, in whom the powers of the Order would be vested. Horizon is responsible for all operational aspects, which include overseeing and assuring the activities carried out by contractors, and the coordination between contractors.

2 Approach to environmental management

2.1 Introduction

- 2.1.1 Figure 2-1 outlines the overall approach to environmental management across the Wylfa Newydd DCO Project. The following sections provide further detail to the various elements of the approach.

2.2 Environmental Impact Assessment

- 2.2.1 This Wylfa Newydd CoOP has been informed by the Environmental Impact Assessment (EIA) undertaken for the Wylfa Newydd DCO Project and the Environmental Statement prepared in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 and the Marine Works (Environmental Impact Assessment) Regulations 2007, as well as the other 'stand-alone' assessments (such as a Welsh Language Impact Assessment [APP-432] and [APP-433], Health Impact Assessment [APP-429], Shadow Habitats Regulations Assessment Report [APP-050] and [APP-051], Water Framework Directive Compliance Assessment [APP-444] (as updated) and Equality Impact Assessment [APP-434]) carried out as part of the planning of the Wylfa Newydd DCO Project.
- 2.2.2 The content of this Wylfa Newydd CoOP has been prepared with cognisance of consultations with stakeholders and the local community, as well as ongoing focus groups with key stakeholders such as the IACC and Natural Resources Wales (NRW).

Mitigation

- 2.2.3 The term 'mitigation' describes committed measures used to prevent or reduce the potential adverse effects of a development project on the environment.
- 2.2.4 Three types of mitigation were considered for the Wylfa Newydd DCO Project, as described below.
- 'Embedded mitigation' includes all those measures to avoid or reduce environmental effects that are directly incorporated into the design of the development.
 - 'Good practice mitigation' contains measures that would occur with or without input from EIA feeding into the design process (for example, mitigation that represents established industry practice or would be undertaken to meet existing legal compliance).
 - 'Additional mitigation' measures are measures that have been identified through the EIA or other assessment processes to further reduce environmental effects.
- 2.2.5 The approach in paragraph 2.2.4 accords with the Institute of Environmental Management and Assessment guidance [RD1], which describes 'primary' (embedded) mitigation, 'secondary' (additional) mitigation and 'tertiary' (good practice) mitigation.

- 2.2.6 Embedded mitigation integral to the Wylfa Newydd DCO Project is secured through the design principles set out within certified 'control' documents, such as the Design and Access Statements, Volumes 1, 2 and 3 and the landscape and habitat principles set out in the Landscape and Habitat Management Strategy (LHMS) in respect of the WNDA.
- 2.2.7 Good practice and additional mitigation relevant to the operational phase is contained within the management strategies of this Wylfa Newydd CoOP.
- 2.2.8 During the operational phase, arrangements will be documented in the operating model which will ensure compliance with site licence conditions, permits and nuclear standards (e.g. Suitably Qualified and Experienced Persons). Standards of behaviour for personnel will also be contained in these arrangements, which will be developed closer to the operational phase.
- 2.2.9 Commitments from other assessments (such as the Health Impact Assessment [APP-429]) and strategies that are not 'control' documents (such as the Jobs and Skills Strategy [APP-411]) are secured either in this Wylfa Newydd CoOP or in the DCO s.106 agreement.
- 2.2.10 Due to the need for further operational arrangements to be made before the commencement of operation, in line with the requirements of the Nuclear Site Licence and Environmental Permit(s) (see below), relevant operational management 'schemes' for the management of specific issues will be further developed (see figure 2-1) in accordance with the principles set out in this Wylfa Newydd CoOP. Such schemes will be submitted to and approved by the relevant discharging authority in advance of the commencement of operation and in accordance with the Order.

2.3 Nuclear Site Licence

- 2.3.1 A Nuclear Site Licence is required under the Nuclear Installations Act 1965 to install and operate the Power Station.
- 2.3.2 The Nuclear Site Licence places Horizon under the auspices of the Office for Nuclear Regulation which will oversee Horizon's control of the safety of the Power Station. This includes operational management, including the storage of radioactive waste and emergency management.
- 2.3.3 This Wylfa Newydd CoOP does not replicate the likely requirements of the Nuclear Site Licence. Horizon will operate the Power Station in full compliance with the requirements of the Nuclear Site Licence.

2.4 Environmental Permits

- 2.4.1 The Environmental Permitting (England and Wales) Regulations 2016 require Environmental Permits to be obtained for the operation of the Power Station.
- 2.4.2 The Environmental Permit(s), issued by NRW, set limits for and control the main emissions and discharges from the Power Station. This is a separate consenting process to the DCO.

- 2.4.3 This Wylfa Newydd CoOP does not replicate the likely requirements of the Environmental Permit(s). Horizon will operate the Power Station in full compliance with the requirements of the Environmental Permit(s).

2.5 Environmental management system

- 2.5.1 Horizon will operate the Wylfa Newydd DCO Project under management systems accredited to British Standard (BS) EN ISO 14001: 2015 [RD2].
- 2.5.2 Horizon will be compliant with and maintain ISO 14001 accreditation throughout the operation of the Wylfa Newydd DCO Project. Accreditation will be periodically audited by accredited external bodies in line with ISO 14001 procedures.

2.6 Enforcement

- 2.6.1 This Wylfa Newydd CoOP is a certified document and approved under Article 76 of the Order. Under the requirements in Schedule 3 of the Order, the operation of the Wylfa Newydd DCO Project (as described in Schedule 1 of the Order) must be carried out in accordance with the Wylfa Newydd CoOP, unless otherwise agreed by the IACC as the relevant discharging authority. As noted above, the inclusion of “*unless otherwise agreed by the IACC*” enables revisions to this document, provided the proposed revision(s) are unlikely to give rise to any materially new or different environmental effects from those assessed in the Environmental Statement.

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Horizon's environmental and sustainability corporate policies																					
DCO		DCO		DCO		DCO															
CONSTRUCTION						OPERATION		DECOMMISSIONING													
DCO Environmental Statement and other impact assessment reports																					
Securing mechanisms (DCO requirement/S106)																					
Phasing Strategy (PW2) Identifies the triggers for the delivery of key Project mitigation (i.e. the Site Campus and Park and Ride Facility)		Management Plans relating to Site Waste, Construction Traffic, Handover Environmental Management and Construction Environmental Management etc <i>(prepared by the Contractor in accordance with the principles in the WNCaCP for Horizon approval)</i>				Wylfa Newydd Code of Operational Practice (CoOP) Contains Horizon's operational management strategies (WN13)		Management Plans (Operational Traffic Management etc) <i>(prepared by the Contractor in accordance with the principles in the WNCaCP for Horizon approval)</i>													
Construction Method Statement (PW3) Identifies the proposed construction methodology to be used within the Power Station Site										Decommissioning Scheme for the Power Station, Grid Connection and Off-site Power Station Facilities (PW10) <i>To be submitted 24 months after cessation notice being served under PW9</i>											
Wylfa Newydd Code of Construction Practice (CoCP) (PW7) With sub-CoCPs, contains Horizon's construction management strategies and controls relating to noise, public access, air quality and traffic etc																					
Sub-CoCPs (WN1, WN20, OPSF1, PR1, LC1, OH1) for the Main Power Station Site, Marine Works, Off-Site Power Station Facilities, Park and Ride, A5025 Off-line Highway Improvements and the Logistics Centre																					
												Landscape and Habitat Management Strategy (Article 76) (LHMS) outlines the design and management principles that apply to the creation and long term management of habitats and within the WNDA									
														Design and Access Strategy (Article 76) (DAS) outlines the design and landscaping principles that apply to the development of detailed design drawings							
																Workforce Management Strategy (Article 76 and PW8) (WMS) outlines the principles that will apply to workforce and employer behaviour during construction					
																		Decommissioning Schemes for Site Campus (WN27), Park and Ride (PR8) and Logistics Centre (LC8) <i>(prepared by Horizon and submitted to IACC for approval prior to the anticipated Unit 2 Commissioning Date)</i>			
																				Digital Infrastructure Plan (New Requirement – PW11) <i>(prepared by Horizon following technical assessment and submitted to the Welsh Government for information)</i>	
		Community Safety Management Scheme (PW7) <i>(submitted to IACC for approval following consultation with Emergency Service and BCUHB)</i>																			
				Abnormal Indivisible Load Management Scheme (WN1) <i>(prepared by Horizon in accordance with Schedule 4 for IACC approval following consultation)</i>																	
						Protest Management Scheme (WN1) <i>(prepared by Horizon in accordance with Schedule 4 and submitted to IACC for approval following consultation)</i>															
Parking Phasing Scheme (PW7) <i>(prepared by Horizon in accordance with Schedule 4 for IACC approval following consultation)</i>																					
								Overarching Construction Drainage Scheme (WN1) <i>(prepared by Horizon in accordance with Schedule 4 and submitted to IACC for approval following consultation)</i>													
										Tre'r Gof SSSI Hydro-ecological Monitoring and Mitigation Scheme (WN1) <i>(prepared by Horizon in accordance with Schedule 4 for IACC approval following consultation)</i>											
												Cae Gwyn SSSI Hydro-ecological Monitoring Scheme (WN1) <i>(prepared by Horizon in accordance with Schedule 4 for IACC approval following consultation)</i>									
														Phased construction drainage designs (WN2) <i>(prepared by Horizon in accordance with the Overarching Construction Drainage Scheme, and submitted to IACC and NRW for information)</i>							
																WNDA Overarching Construction Lighting Scheme (WN1) <i>(prepared by Horizon in accordance with Schedule 4 for IACC approval following consultation)</i>					
																		WNDA Phased Construction Lighting Scheme (WN3) <i>(prepared by Horizon in accordance with Overarching Construction Lighting Scheme and submitted to IACC and NRW for information)</i>			
		Management Plans relating to Construction Environmental Management and Vessel Management etc <i>(prepared by the Contractor in accordance with the principles in the WNCaCP for Horizon approval)</i>																			
				Lighting Schemes for A5025 and OPSF (Construction only) and Lighting Schemes for LC, P&R (Construction and Operation) (OH1, OPSF1, LC1, PR1) <i>(prepared by Horizon in accordance with Schedule 4 for IACC approval following consultation)</i>																	
						Archaeological Mitigation Schemes for WNDA, LC, P&R, A5025 and OPSF (WN1, OH1, OPSF1, LC1, PR1) <i>(prepared by Horizon in accordance with Schedule 4 for IACC approval following consultation)</i>															
Design of landscaping and habitat created within the WNDA during construction (WN10/WN11) and prior to operation (WN12) <i>(final operational design to be in accordance with the LHMS Principles and submitted to IACC for approval, following consultation, within 24 months of FNC for Unit 1)</i>																					
								Management Schemes for landscape and habitat created during construction, operation and the Ecological Compensation Sites (WN14, ECS3) <i>(prepared by Horizon in accordance with the Management Principles in the LHMS and submitted to IACC for approval following consultation)</i>													
										Management Schemes for the Ecological Mitigation Sites (WN15-17) <i>(prepared by Horizon in accordance with the Management Principles in the LHMS and submitted to IACC for approval, following consultation, prior to completion of works)</i>											
												Detailed design drawings for buildings/structures (all Works) and associated landscaping <i>(prepared by Horizon in accordance with the Design and Landscaping Principles in the DAS, Approved Plans, parameters in Schedule 3 and Limits of Deviation. Submitted to IACC for approval, following consultation, prior to commencement of operation or occupation)</i>									
														Wylfa Newydd Code of Conduct (PW8) <i>(prepared by Horizon in accordance with the principles in WMS and submitted to IACC for information)</i>							

Control documents approved through the DCO

Required under a control document or Requirement to be prepared following grant of DCO and approved by the discharging authority

Required under a control document or Requirement to be prepared following grant of DCO and approved by Horizon

Other Consents, Licences and Agreements
(Environmental Permits, Nuclear Site Licence, Marine Licence etc)

Horizon's procurement and contractual arrangements
(opportunities for continual standards improvement, for example as per Horizon's ISO14001 Environmental Management System)

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3 Communications and community/stakeholder liaison

3.1 Community and stakeholder liaison

Community Involvement Officers

- 3.1.1 In accordance with the DCO s.106 agreement, Horizon will employ a Community Involvement Officer for the duration of the operational period (unless otherwise agreed with IACC). The roles and responsibilities of the Community Involvement Officer will be agreed between Horizon and IACC prior to commencement of the operational period.
- 3.1.2 Horizon will coordinate a series of regular communication meetings with key stakeholders including local communities.
- 3.1.3 The purpose is to exchange information and encourage dialogue between Horizon and the local community during operation by:
- continuing and enhancing local community relationships between Horizon, key stakeholders and the wider community;
 - providing a conduit for the dissemination of information to, and input from, community members and other key stakeholders;
 - identifying and commenting on concerns raised by the community, with suggested action that could be undertaken to alleviate these concerns; and
 - discussing operational issues and providing suggestions for mitigating the local effects.
- 3.1.4 Horizon will identify and further consult with groups who represent people with characteristics protected under the Equality Act 2010 in order to determine whether there are any additional issues which may require reasonable adjustments to be made.

3.2 Welsh language and culture

- 3.2.1 Horizon's extensive commitments to Welsh Language are secured in the DCO s.106 agreement.

3.3 Enquiries and complaints

- 3.3.1 Horizon will maintain a system for dealing with enquiries or complaints during the operation of the Power Station and Off-Site Power Station Facilities, staffed by bilingual Welsh- and English-speaking personnel.
- 3.3.2 A complaints register will be maintained by Horizon. All calls will be logged and mapped, together with a record of the responses and action taken. The system will ensure that appropriate action is taken and within a reasonable timescale.

4 General site operations

4.1 Introduction

4.1.1 The following infrastructure is covered by this Wylfa Newydd CoOP.

- Power Station: the proposed new nuclear power station, including two UK Advanced Boiling Water Reactors to be supplied by Hitachi-GE Nuclear Energy Ltd., supporting facilities, buildings, plant and structures.
- Other on-site development, including landscape works and planting, drainage, surface water management systems, public access works including permanent closures and diversions of Public Rights of Way (PRoWs), the new Power Station Access Road and internal site roads, car parking.
- Marine Works, comprising a CWS intake and outfall, MOLF and breakwater structures.
- Off-Site Power Station Facilities, comprising the AECC, ESL and MEEG.

4.2 Environmental emergency management

4.2.1 Horizon will identify potential environmental emergencies throughout the operational phase of the Power Station, and will put in place a procedure for managing and responding to those identified potential emergencies. Horizon will periodically test the emergency management and response procedures to ensure they are effective and that any learning can be identified to continually improve the procedures.

4.3 Lighting

4.3.1 Lighting will be provided on the WNDA primarily to ensure safe working conditions and to maintain security during operation. Lighting control measures will be incorporated into the lighting design and operation. This will limit visual intrusiveness to occupied residential properties, limit light spill to surrounding areas (including the Isle of Anglesey Area of Outstanding Natural Beauty and Heritage Coast) and sensitive wildlife, and recognises Anglesey's aim of achieving international Dark Skies status, while maintaining safe and secure light levels on the WNDA.

4.3.2 Appropriate good practice lighting control measures will be identified, giving consideration to BS EN 12464-2:2014 Light and lighting – Lighting of work places. Part 2: Outdoor work places [RD3] and the Institute of Lighting Engineers' Guidance Notes for the Reduction of Obtrusive Light GN01:2011 [RD4].

4.3.3 Prior to operation of the Power Station, Horizon will prepare and submit for approval a WNDA Operational Lighting Scheme for the WNDA in accordance with the Requirements in Schedule 3 and Schedule 4 of the Order. The WNDA Operational Lighting Scheme will be prepared in accordance with the principles set out in section 4.3 of this Wylfa Newydd CoOP, the design principles in volume 2 of the Design and Access Statement, and the lighting

parameters set out in Appendix D10-10 [APP-201] of the Environmental Statement. The approved WNDA Operational Lighting Scheme (or any approved variations) will be implemented for the duration of the operational period.

- 4.3.4 The Off-Site Power Station Facilities will have three lighting levels. This will be achieved by adjusting the lighting units.
- Everyday lighting to allow staff to enter, exit, and perform work safely in accordance with BS EN 12464-2:2014 [RD3];
 - Evening security lighting for after working hours to comply with Centre for the Protection of National Infrastructure standards; and
 - Emergency lighting levels to allow safe access to heavy machinery and equipment during emergency events or drills.
- 4.3.5 Prior to operation of the Off-Site Power Station Facilities, Horizon will also prepare and submit for approval an Off-Site Power Station Facilities Operational Lighting Scheme in accordance with the Requirements in Schedule 3 and Schedule 4 of the Order. The Off-Site Power Station Facilities Operational Lighting Scheme will be prepared in accordance with the principles set out in section 4.3 of this Wylfa Newydd CoOP and the design principles in volume 3 of the Design and Access Statement. The approved Off-Site Power Station Facilities Operational Lighting Scheme (or any approved variations) will be implemented for the duration of the operational period.

4.4 Operational training exercises and drills at the Off-Site Power Station Facilities

- 4.4.1 Prior to operation of the Off-Site Power Station Facilities, Horizon will notify occupiers of nearby properties and Llanfaethlu Primary School in relation to the safe nature of regulated activities at these facilities and regulatory requirements Horizon must follow in operating the facilities. Community information sheets will be circulated at least two weeks before operation of the facility commences. Information will also be disseminated to people in Llanfaethlu to provide reassurance in relation to the nature of regulated testing activities at these facilities and the safety of such activities in relation to adjacent dwellings and the new primary school.
- 4.4.2 Horizon will, where feasible, schedule training exercises/drills at the Off-Site Power Station Facilities to avoid peak drop-off and pick-up times at Llanfaethlu Primary School. This will reduce the potential for any reduction in road safety at times when, for example, young people are most active on the road network.
- 4.4.3 Prior to training exercises/drills at the Off-Site Power Station Facilities, Horizon will notify occupiers of nearby properties and Llanfaethlu Primary School in advance. The nature and timing of training exercises/drills at the Off-Site Power Station Facilities could be widely publicised (particularly in Llanfaethlu and at the new primary school) to avoid adverse effects on community well-being from uncertainty about whether the increase in activity at the site is training or emergency-related.

5 Traffic and transport strategies

5.1 General

- 5.1.1 Horizon's traffic and transport management during operation of the Power Station is based on the requirements set out in this Wylfa Newydd CoOP. During the operational phase of the Wylfa Newydd DCO Project, the A5025 Off-line Highway Improvements will be in place.
- 5.1.2 The operational strategy for delivery and servicing is set out in section 5.2 below. The Operational Travel Strategy for staff travel to site is set out in section 5.3.

5.2 Operational delivery and servicing and maintenance strategy

- 5.2.1 This section sets out the delivery and servicing and maintenance strategy for the operation of the Wylfa Newydd DCO Project, which Horizon will implement, with the aim of ensuring that servicing and delivery practices work efficiently and disruption to the local highway network and site operations are reduced. It does not consider the transport of nuclear material/waste and any outage requirements. In accordance with the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009, Horizon will use robust transport containers to transport radioactive materials and waste associated with its operations.

Road freight

- 5.2.2 The majority of deliveries to the Power Station by heavy goods vehicles are expected between 07:00 and 19:00 during weekdays only. The majority of operational deliveries are likely to be made by smaller rigid type vehicles, i.e. medium and light goods vehicles.
- 5.2.3 In line with the measures set out in the Operational Travel Strategy set out in section 5.3, heavy goods vehicles travelling to and from the site will be required to travel via the A5025 to the south (i.e. via Valley), as per the construction stage, and use the A5025 Off-line Highway Improvements, unless a particular supplier is located to the east along the A5025 (between the Power Station Site and A5025 at A55 Junction 8) or other extenuating circumstances prevail.

Sea freight

- 5.2.4 The MOLF employed during the construction stage of the development will be made available to be used for the transportation of bulk components if required during the operational period of the Power Station.

Delivery management

- 5.2.5 In order to ensure that deliveries are managed according to the capacity of the loading facilities available at the Power Station, a delivery booking system will be implemented.

Monitoring and review

- 5.2.6 Servicing and maintenance activities will be regularly reviewed by Horizon with a view to continually improving efficiency, and as a result reducing the impact of servicing and maintenance activities on the transport network.

5.3 Operational Travel Strategy

- 5.3.1 This section sets out Horizon's Operational Travel Strategy for the Wylfa Newydd DCO Project, which aims to encourage Project Operational staff and visitors to travel to the site by sustainable modes, in order to mitigate the anticipated increase in motor traffic created by the development on the local road network.
- 5.3.2 Sustainable modes of travel are defined as:
- walking;
 - cycling;
 - shuttle buses (if available);
 - public transport; and
 - car sharing.
- 5.3.3 The Operational Travel Strategy will reduce the environmental effects of operational traffic by encouraging and promoting car sharing, bus services, cycle parking and key walking routes, including through the measures outlined below.

Travel Plan Coordinator

- 5.3.4 All measures to encourage sustainable travel will be promoted by a Travel Plan Coordinator for the Power Station during the operational phase. The Travel Plan Coordinator will be suitably trained and qualified for the role.
- 5.3.5 The Travel Plan Coordinator is key to the success of the Operational Travel Strategy and will represent the main driving force behind the application of travel planning. The key responsibilities of the TPC will be as follows:
- lead, actively promote and publicise the Operational Travel Strategy;
 - ensure that information on sustainable travel opportunities is provided (and regularly updated);
 - ensure information on the Operational Travel Strategy is easily available (by a variety of platforms);
 - ensure the Operational Travel Strategy becomes part of the site management policy and its aims and information are broadcast via other associated literature;
 - be a point of contact for information and resolve any transport-related problems;
 - develop new initiatives, implement and manage the Operational Travel Strategy and disseminate information to staff at regular intervals;

- develop and launch a staff travel survey to inform future Operational Travel Strategy development; and
- ensure that the objectives and targets under the Operational Travel Strategy are set up and being met.

Marketing and communication

- 5.3.6 Sustainable travel information outlining the travel options to the Power Station and Off-Site Power Station Facilities, links to the car-share database and other websites displaying key information will be part of the induction materials provided to staff.

Parking management

- 5.3.7 All members of staff will be required to pre-register any vehicle parking on-site, and no unauthorised vehicles will be allowed to park on-site.
- 5.3.8 Electric vehicle charging points will be provided in the main staff car park within the Power Station Site, compatible with others across Anglesey and North Wales. The number and type of charging points will be determined prior to the site becoming operational in line with prevailing technology and uptake at the time.

Smarter choices

- 5.3.9 'Smarter choices' measures consider ways of mitigating the effects of travel associated with the Power Station site or, in some cases, removing the need to travel. The 'smarter choices' measures identified for the operational site are identified below.
- 5.3.10 Staff will be encouraged to use Traveline Cymru to plan their most efficient travel route(s). If this service is not available, the TPC will look at alternative systems. New members of staff joining the Project Operational staff post-opening will be similarly encouraged to use these systems.
- 5.3.11 Canteen facilities will be provided on-site to reduce the need for trips during working hours.
- 5.3.12 Methods and facilities (such as video conferencing) will be provided and promoted as a method of holding meetings rather than travelling.
- 5.3.13 Where appropriate, staff will be provided with suitable equipment to enable flexible working, for example, working from home and away from the office.

Car sharing

- 5.3.14 Parking spaces on-site for car sharers will be prioritised, and a suitable number of car-share spaces will be available.
- 5.3.15 Horizon will promote car sharing and lift sharing between employees using internal media, for example the intranet or a mobile app. Car sharing will also be promoted using other appropriate methods, which if required, could include a suitable car-share website or a web-based platform. This will allow potential

car sharers to be matched so that Project Operational staff travelling from a similar area by car can share their journey.

- 5.3.16 The car-sharing strategy will be promoted, monitored, managed and enforced by Horizon through its supply chain. Project Operational staff will be recommended via appropriate channels to car-share with others to reduce the number of journeys being made, in particular across the Britannia Bridge.
- 5.3.17 Horizon will target an average share ratio of 1.5 permanent Project Operational staff per vehicle. Monitoring and enforcement mechanisms will be consulted upon and agreed with the IACC in advance of the Power Station becoming operational.

Public transport

- 5.3.18 Horizon will promote and encourage the use of public transport by staff.
- 5.3.19 Horizon will work with the IACC and local public transport operators to provide adequate local bus services to and from the Power Station in response to demand at the time.

Cycling and walking

- 5.3.20 Horizon will promote and encourage cycling and walking to work. Relevant information will be provided to staff as part of induction materials provided upon the commencement of employment.
- 5.3.21 On-site cycle facilities will be provided and maintained for members of staff and visitors including cycle parking, changing facilities with showers and lockers, and areas where wet clothes can be dried.
- 5.3.22 If still available when the site becomes operational, Horizon will sign up to the UK Government's Cycle to Work scheme, which enables employees to purchase a bicycle and ancillary equipment through their employer, providing tax benefits. If the Cycle to Work scheme has been discontinued, the TPC will look at alternative options available.
- 5.3.23 Safe walking routes to the site connected to the local network will be maintained throughout operation of the Power Station.

Professional visitors

- 5.3.24 The operational Power Station will have a variety of visitors, including professionals (e.g. attending meetings or assisting with the operation of the site).
- 5.3.25 Horizon will make available, e.g. via its website, information on how to travel to and from the Power Station to assist professional visitors to plan their travel routes including by use of public transport.

Monitoring and review

- 5.3.26 A review of the Operational Travel Strategy will be undertaken with the IACC and Welsh Government on a regular basis by the Travel Plan Coordinator. Appropriate monitoring will be discussed and agreed.

6 Public access management strategy

6.1 General

6.1.1 During the operational phase of the Power Station, Horizon will regularly inspect and maintain the public access infrastructure on land under its control, in order to allow and ensure the safe and convenient passage of members of the public through and within the WNDA, including the following facilities:

- a replacement car park at a similar location as the current Ty Croes (Fisherman's car park);
- a picnic area with bilingual interpretation boards above Porth yr Ogof, which will be accessible by wheelchair from a car park at a similar location to the existing Fisherman's car park;
- new PRowS created on re-profiled land outside of the Power Station Site, linking to the Wales Coast Path, existing PRow network and Cemaes;
- the Wales Coast Path diverted via a shorter route than used during construction, including a new nature trail with information boards and interest points suitable for all ages, with digital and paper-based maps of the trail made available in Welsh and English;
- a new wildlife-watching shelter and information boards provided at the location of the former coastguard lookout on Wylfa Head; and
- interpretation boards provided at Porth Wnal, which will reference the GeoMôn Geopark and the specific geology of this area, in Welsh and English.

6.1.2 For the Off-Site Power Station Facilities, the southern portion of the site surrounding the overflow parking area and adjacent to PRow 29/008/1 will be soft-landscaped in order to protect the recreational amenity of footpath users during use of the overflow car park. This woodland will be maintained during the operational phase.

6.2 Ecological Compensation Sites

Cors Gwawr and Ty Du

6.2.1 PRow 23/001/2 and PRow 23/001/3 will be reinstated following construction works to the Cors Gwawr site.

6.2.2 Where the PRowS are routed across land within the Order Limits, they will be maintained.

7 Air quality strategy

7.1 General

- 7.1.1 The Operational Travel Strategy (see section 5.3) will reduce the effects of operational road traffic on the environment, including the effects on air quality.
- 7.1.2 Emissions to atmosphere from the Power Station will be regulated by the Environmental Permits issued by NRW. Horizon will comply with all relevant limits and conditions of the Environmental Permits for the site.
- 7.1.3 The testing of the emergency mobile plant stored in the MEEG/AECC building at the Off-Site Power Station Facilities will take place at the Power Station Site.

7.2 Ultra-low sulphur fuel

- 7.2.1 All combustion plant (including the standby generator) will operate on ultra-low sulphur diesel, which has a sulphur content of 10 parts per million or less (i.e. no more than 0.001% sulphur content), where this does not compromise safety and operational requirements. This will reduce emissions of sulphur dioxide from the exhaust by a factor of 100 compared to standard gas oil with a sulphur content of 0.1%.

7.3 Generator testing

- 7.3.1 The selection and procurement of the standby generator will ensure selected equipment has good combustion controls and complies with the relevant European or international emissions standards for emergency generating sets.
- 7.3.2 The standby generators and boilers will as a minimum be operated in line with the selected equipment manufacturer's operating procedures, and in many cases, these will be superseded by Horizon's operating procedures as a nuclear operating facility. Horizon will undertake appropriate routine maintenance and testing of all proposed combustion plant to optimise combustion parameters and avoid abnormal or elevated emissions.
- 7.3.3 For planned testing (post commissioning), only one generator will ever be tested at any one time. In addition, no planned tests on other standby generators will be undertaken within the same day, to eliminate the potential for any combined short-term effects. Additional testing will need to be undertaken in line with commissioning and operating procedures, which may include same-day testing during commissioning and other infrequent occurrences (e.g. in the unlikely event of a generator breakdown or failures to start).

8 Noise and vibration strategy

8.1 General

- 8.1.1 The Operational Travel Strategy (see section 5.3) will minimise project-wide effects from operational traffic and transport, including in relation to noise and vibration.
- 8.1.2 In relation to the Power Station and Off-Site Power Station Facilities, noise emissions will be associated with:
- the normal operation of power generation;
 - the testing of the emergency mobile plant stored in the MEEG/AECC building at the Off-Site Power Station Facilities which will take place at the Power Station Site;
 - scheduled outages; and
 - the testing of emergency alarms, as well as any emergency responses.

8.2 Operational noise management

- 8.2.1 The combined noise level from transformers at the Power Station, including auxiliary transformers and associated cooling systems (hereafter referred to as 'transformer noise'), has the potential to cause disturbance at local receptors. Therefore, transformer noise shall be subject to appropriate near field limits, selected to achieve a free-field transformer noise level of 25dB $L_{Aeq,T}$ or below at the closest residential receptors. Near field limits will also be selected such that the unweighted transformer noise level does not exceed a level of 38dB within the 125Hz octave band at the same locations.
- 8.2.2 The levels above do not include the contributions of any sources outside the Power Station. Transformer noise will represent a component part of the overall noise from the Power Station at the closest residential receptors.
- 8.2.3 Operational noise and vibration effects will be managed through the application of embedded mitigation in design, as well as the use of the following good practice measures, including:
- selection of low-noise generating equipment where appropriate;
 - regular inspection and maintenance of equipment;
 - ensuring doors and windows of enclosed areas are closed;
 - ensuring all equipment is operated by trained and experienced staff;
 - avoiding noisy activities at night which affect local receptors;
 - implementing measures to control noise during maintenance activities;
 - locating the majority of proposed noise sources (e.g. turbines, back-up generators) within buildings;
 - locating the majority of main power generation equipment in buildings;

- including acoustic attenuators in the combustion air intake and exhaust systems for all combustion units;
- fitting air handling systems with acoustic attenuators, where appropriate; and
- ensuring detailed design of the buildings minimises the potential for noise leakage through openings and penetrations in the building envelopes.

8.2.4 Operational noise associated with the combustion plant is not expected to cause a disturbance or nuisance. Monitoring will be undertaken on a limited spot check basis at locations agreed with NRW, to ensure that operational noise remains within permitted limits under the Environmental Permit. However, in the event that environmental noise complaints are received or monitoring identifies a breach of permitted operational limits, found to be caused by operational sources at the Power Station, Horizon will seek to reduce noise levels to within permissible limits, as soon as reasonably practicable. In the event of a serious breach, or a continuing breach, Horizon will undertake appropriate actions in consultation with NRW to address the problem, including developing and implementing on site:

- a programme for conducting routine noise monitoring;
- a noise reduction programme, identifying noise reducing techniques and equipment;
- a protocol for responding to noise incidents containing appropriate actions, channels and timelines; and
- a review of historic noise incidents, corrective actions and dissemination of noise incident knowledge to the affected parties.

8.3 Noise monitoring

8.3.1 Details of operational monitoring will be established as part of the final specification of the equipment and operations at the Off-Site Power Station Facilities. It is anticipated that the eventual monitoring will involve off-site spot check noise surveys at receptors, and some on-site monitoring near particular noise sources at long-term intervals, to be agreed with the IACC. Initial monitoring would be carried out quarterly, with results reviewed to determine if the frequency of monitoring should be adjusted. The following measures will be implemented during operation:

- the combined noise rating level from all fixed plant will be designed to be as quiet as reasonably practicable and no greater than background level (L_{A90}) +5dB at nearest residential receptors;
- testing of back-up generator to be carried out during daytime periods only; and
- the use of the fuel pump will be restricted to daytime periods except during an incident or emergency.

8.4 Traffic noise

- 8.4.1 Horizon is committed to a voluntary Local Noise Mitigation Strategy which will offer secondary glazing to residential properties that experience significant noise effects associated with the Wylfa Newydd DCO Project, including changes in traffic, within defined areas near the Power Station Site and A5025 Highway Improvements. A small number of properties may qualify for inclusion in the Local Noise Mitigation Strategy during operation of the Wylfa Newydd DCO Project. However, these are likely to have already qualified during the construction phase.

9 Geological conservation strategy

9.1 Porth Wnal geological site

- 9.1.1 Horizon will continue to allow access (available via a formal request to Horizon), to the Porth Wnal Dolerite Regionally Important Geodiversity Site (RIGS) for geologists, for geological study of exposed cliff faces at Porth Wnal (subject to works and safety requirements) as exposure of new rock during excavations may provide new insight into the geological setting.
- 9.1.2 Horizon will maintain the presence of bilingual information board(s) at Wylfa Head on the GeoMôn geological trail in Cemaes to complement that amenity and highlight the importance of the geology of the area. (The Gwna Mélange in this area is the 'world type site' i.e. the benchmark for everywhere else.)

10 Surface water and groundwater strategy

10.1 General

10.1.1 Horizon will put in place procedures to protect water resources from any works that may be required during operation, in general accordance with relevant measures used during construction, in relation to:

- protection of watercourses;
- site drainage;
- control of pollution;
- flooding; and
- monitoring.

10.2 Pollution prevention

10.2.1 The overarching pollution management principles to be applied throughout the operation of the Power Station are as follows.

10.2.2 All fuel and chemical storage at the Power Station and Off-Site Power Station Facilities will be within engineered containment facilities, including (where appropriate) suitably bunded tanks, and will comply with the requirements of the Wylfa Newydd DCO Project's Environmental Permit(s). The below-ground fuel storage tanks will comply with The Association for Petroleum and Explosives Administration's 'Blue Book' guidance [RD5] and will meet the requirements of *The Environment Agency's approach to groundwater protection* (which has been adopted by NRW) [RD6]. Above-ground fuel storage of over 200 litres will comply with the Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016.

10.2.3 At all sites, storage areas for fuel and chemicals will be located more than 15m away from watercourses and protected to avoid damage by plant and vehicles. Operational pollution prevention controls will be defined at all sites and will include measures relating to:

- the designation of refuelling areas and areas for handling liquid chemicals;
- operational controls around access to and use of refuelling and chemical storage facilities;
- regular inspection and maintenance of fuel and chemical storage facilities and associated equipment, including oil interceptors;
- spill response and clean-up procedures;
- inspection and regular maintenance of any on-site sewage pipes and any on-site treatment systems or related sewage infrastructure;
- cleaning out of any sediment traps on the drainage system; and
- regular inspection of the parking areas for fuel and oils.

10.3 Flooding

- 10.3.1 A documented flood mitigation action plan will be developed to ensure that, in the event of flooding occurring on site, appropriate plans are in place to manage the risks and ensure that there is no increased risk to human health and that risks to property are managed appropriately. The plan will, as a minimum, include details of the requirements for monitoring regulatory flood warning alerts, identification of safe meeting areas, access and egress routes, activities required to secure plant and equipment in the event of a flood being forecast, checking of drainage systems, roles and responsibilities and checking procedures.
- 10.3.2 The flood mitigation action plan will be submitted to NRW for approval in advance of permanent elements of the Power Station and Off-Site Power Station Facilities becoming fully operational. The flood mitigation action plan will be reviewed and updated as deemed necessary in the event of changes to guidance or internal procedures.

10.4 Drainage management

Power Station

- 10.4.1 Foul water discharge will be to the Dŵr Cymru Welsh Water Sewage Treatment Works. Foul water will not be discharged to the surface water environment.
- 10.4.2 Horizon will develop a passive engineered drainage system by completion of construction as set out in the LHMS. This drainage system will be managed in relation to sensitive ecological receptors and incorporate appropriate attenuation to prevent any increase to flood risk off-site and reduce significant effects on water availability.

Off-Site Power Station Facilities

- 10.4.3 Horizon will maintain the swale between the main part of the Off-Site Power Station Facilities site and the area of additional car parking. Maintenance will include regular inspection and, if necessary, clearing out to ensure that the swale does not become overgrown or blocked such that it would limit water movement.

10.5 Maintenance

- 10.5.1 Inspection and maintenance (where inspection has identified this requirement) of the drainage system will be undertaken, particularly of oil water separators, attenuation facilities and culverts and below-ground pipes, to ensure they are operating effectively and to prevent pollution and flooding.

10.6 Monitoring

- 10.6.1 A monitoring regime will be developed for the surface water and groundwater environment at and around the Power Station as appropriate, and to be agreed with the regulator. This will include appropriate monitoring of water

quality and quantity (groundwater levels and surface water flows) at and around Tre'r Gof Site of Special Scientific Interest (SSSI) and Cae Gwyn SSSI to identify any changes to baseline conditions, for a period of at least five years following completion of the landform, which may require management.

11 Terrestrial and freshwater ecology strategy

11.1 Landscape and habitat management

11.1.1 The LHMS, a certified document, secures the creation and management of a range of key landscape elements and wildlife habitats during the construction and operation stages of the Power Station, within the WNDAs. The LHMS applies to a range of habitats including but not restricted to:

- Tre'r Gof SSSI, including botanical monitoring to identify any hydrological impacts;
- the Notable Wildlife Enhancement Site at Pen Carreg;
- the Reptile Receptor Site at Mynydd Ithel;
- the Ancient Woodland Receptor Site;
- maintenance of artificial red squirrel nest boxes in the Dame Sylvia Crowe wooded mounds; and
- habitat management for chough at Wylfa Head.

11.2 Licence requirements

11.2.1 European Protected Species Mitigation Licences will be obtained for the Wylfa Newydd DCO Project from NRW in relation to great crested newt and bats as a part of the construction of the Wylfa Newydd DCO Project. A Conservation Licence will also be obtained from NRW in relation to water voles.

11.2.2 Horizon will comply with the terms of all protected species licences obtained, which will have been determined by NRW, including any operational management requirements arising.

11.3 Bat boxes

11.3.1 As set out in section 11.15 of the Main Power Station Site sub-CoCP, to compensate for the loss of potential roost features due to building demolition and tree felling, an appropriate number of bat boxes will have been hung within an area of retained woodland to the east of the Power Station. Annual monitoring and replacement of damaged or missing boxes will have been undertaken throughout the duration of the construction period.

11.3.2 Boxes will continue to be retained and replaced when required during the operation of the Power Station, but annual monitoring will no longer take place beyond an initial ten-year period following their instalment.

12 Landscape and visual strategy

12.1 General

- 12.1.1 Within 24 months of First Nuclear Concrete from Unit 1, Horizon will prepare and submit for approval a final landscape and habitat scheme for the WNDA during the operational phase in accordance with the Requirements in Schedule 3 of the Order. Horizon will implement and maintain the final landscape and habitat management scheme for the WNDA, to ensure successful establishment of proposed landscaping and long-term viability of planting. The final landscape and habitat management scheme will be prepared in accordance with the overarching and operational principles set out in the LHMS and the WNDA Retention Plans.

12.2 Spent Fuel Storage Facility and Intermediate Level Waste Storage Facility

- 12.2.1 The area reserved for the proposed Spent Fuel Storage Facility and Intermediate Level Waste Storage Facility will be temporarily seeded and managed as grassland until the area is required for development.

12.3 Off-Site Power Station Facilities

- 12.3.1 Horizon will continue the landscape site inspections set out in section 11.2 of the Off-Site Power Station Facilities sub-CoCP for the remainder of the 10 year inspection period that crosses into the operational phase of the Off-Site Power Station Facilities. In the event that these inspections identify that planting has not established, replacement planting on a like-for-like basis will be undertaken at the first available planting season.
- 12.3.2 The following landscape management techniques will be used as appropriate:
- species-rich grassland – grass cutting and weed control;
 - native hedgerow with trees – pruning, hedge cutting, weed control, treatment of arisings, replanting of gaps and accommodating trees when cutting; and
 - dense planting/woodland – pruning, hedge cutting, weed control, treatment of arisings and chemical treatments.
- 12.3.3 Planting will be maintained to keep a 3m distance from the security fence.

13 Cultural heritage strategy

13.1 General

- 13.1.1 Should any earthworks be required during operation, works will proceed in accordance with measures set out in section 12 of the Wylfa Newydd Code of Construction Practice (CoCP) and relevant sections of any relevant sub-CoCP.
- 13.1.2 This means that, if unknown archaeological remains are discovered and construction works will affect those remains, works in that area will cease immediately so that appropriate mitigation measures could be developed in consultation between Horizon and the IACC. Works would continue in the vicinity of the remains upon implementation of the approved mitigation.

14 Coastal processes and marine environment strategy

14.1 General

- 14.1.1 Horizon will put in place mitigation to reduce, as far as practicable, adverse effects on the surrounding environment, including those relating to coastal processes and coastal geomorphology and the marine environment, during the operation of the Power Station through the application of appropriate strategies as set out below.

14.2 Cooling Water System

- 14.2.1 Horizon will implement a monitoring programme for entrapment (impingement and entrainment) associated with the CWS intake. This will assess the effectiveness of fish protection measures embedded in the system during the operation of the Power Station, through a programme to be agreed with NRW through the operational water discharge Environmental Permit. The monitoring programme will enable any improvements to mitigation measures to be made where necessary.
- 14.2.2 To control biofouling, treatment of the CWS is required. Sodium hypochlorite or appropriate alternatives will be used for this purpose. Management of the biocide dosing regime, while preventing harm to fish impinged on screens, will be in line with best practice. Continuous dosing will be applied during a higher fouling risk period. The biocide dosing regime will be designed to reduce biofouling risk, normally between April and December, when sea temperatures are above 10°C. Typically, biocide dosing will be applied to all areas of the CWS except around the fine mesh screens to prevent harm to fish impinged upon them.

14.3 Invasive Non-Native Species

- 14.3.1 Horizon will monitor for Invasive Non-Native Species (INNS) during operation of the Power Station to enable early detection should introduction of INNS occur within the WNDA. The following approaches will be used:
- Regular surveys of marine structures will be undertaken to enable early detection of previously unrecorded INNS. Specific management measures will be required should surveys indicate the presence of new INNS.
 - Monitoring surveys will record presence and abundance of INNS with reporting in agreement with NRW through the Marine Licence or Environmental Permit consenting regimes.
 - To mitigate the risk of transferring INNS on dredged materials from maintenance activities, the area to be dredged will be inspected for the presence of INNS first. Disposing of dredged materials at Disposal Site IS043 Holyhead North, as for construction, will further reduce the risk of INNS transfer as the Disposal Site is close to the source and at a greater

depth than the source environment. Dredging and disposal controls will be agreed with NRW under a Marine Licence.

- Continued surveys will be used to monitor for the presence of INNS in the area where there is the potential for changes in water temperatures from the Cooling Water discharge. Water discharge controls will be agreed with NRW under the operational water discharge Environment Permit.

14.3.2 To prevent the transfer of INNS through biofouling and ballast water of vessels, the following approaches will be used:

- Vessel movements inside the harbour will be limited to periodic maintenance dredging activities to ensure sufficient depth for the intake, and very infrequent movements (less than one per year) linked to the delivery of Abnormal Indivisible Loads during operation.
- Use of a number of small vessels will be required to transfer workers from land onto the MOLF during operation. These vessels will be limited to operating within Porth-y-pistyll; journeys to and from other ports will not normally be required.
- All vessels will comply with the Ballast Water Management Convention [RD7] and will ensure they are free from biofouling material prior to arrival on site, and prior to departing for vessels which have remained on site.
- As recommended in the International Maritime Organization's Biofouling Guidelines [RD8], vessels will implement biofouling practices to include in-water inspections, cleaning of hulls and removal of biofouling (e.g. through dive surveys), ensuring that the biofouling material does not enter the marine environment. According to these guidelines, inspections and cleaning will be undertaken periodically as a means of routine surveillance but may be specifically appropriate before and after any planned period of vessel inactivity.

14.3.3 Corrective actions for vessels will be set out in the event of a biosecurity breach, for example a vessel being allowed to arrive at the MOLF but on arrival found to have significant biofouling or incorrect paperwork. Corrective actions will include:

- informing relevant authorities where appropriate, i.e. for non-compliant vessels;
- moving vessel offshore;
- deciding on appropriate action to clean the vessel while minimising any further risks, e.g. dry docking for cleaning or returning to port of origin; and
- investigating the cause of the incident and putting measures in place to prevent it happening again, e.g. stop using a particular supplier of vessels.

14.3.4 A monitoring programme for INNS will have commenced once construction of the breakwaters and MOLF is completed. The ongoing requirement for

monitoring during the operational phase will be regularly reviewed and agreed with NRW.

14.4 Marine monitoring programme

- 14.4.1 Horizon will implement a marine monitoring programme to assess the effectiveness of the marine ecological enhancement measures against a suite of clearly defined environmental objectives. This will be a continuation of work during the construction phase of the Power Station and the Marine Works. Details of the monitoring programme (e.g. survey type and frequency), assessment approach (e.g. the environmental objectives and metrics) and potential remedial action will be discussed and agreed with NRW through the marine licensing process. However, this is expected to include examining the success of marine restoration and ecological enhancement measures and investigating the potential establishment of non-native species. The monitoring data will be used to inform the decision to implement further ecological enhancement if necessary, and the programme will cease once it has been demonstrated that the environmental objectives have been met.

15 Waste management strategy

15.1 General

- 15.1.1 Horizon will manage waste generated during the operation of the Power Station in accordance with its Waste Hierarchy and utilising the nearest appropriate installation, taking into consideration several factors including proximity.

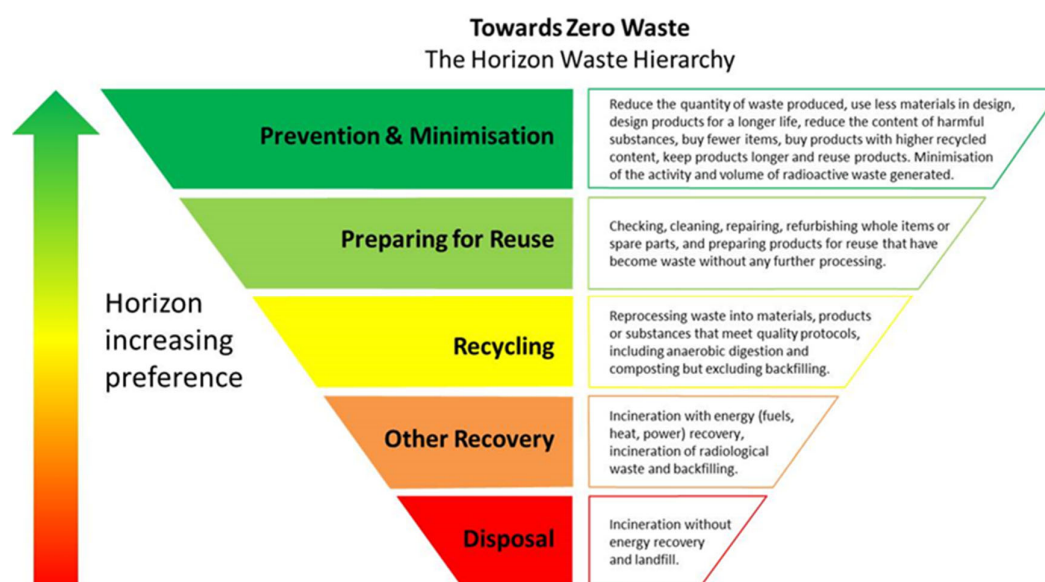
15.2 Radioactive waste management

- 15.2.1 As stated in section 2.3, the Office for Nuclear Regulation will oversee Horizon's control of the safety of the Power Station, including the accumulation, storage and management of radioactive waste, in accordance with the requirements of the Nuclear Site Licence.
- 15.2.2 The Radioactive Substances Regulation Environmental Permit (Environmental Permitting (England and Wales) Regulations 2016), which permits the discharge and disposal of radioactive wastes. Horizon will be required to comply with the limits and conditions associated with the Environmental Permit (regulated by NRW).

15.3 Integrated waste management

- 15.3.1 The basis of the approach to waste management across the Wylfa Newydd DCO Project is Horizon's Waste Hierarchy (figure 15-1). It aims to encourage the management of waste proactively in order to minimise the amount that is discarded and to recover the maximum value from the wastes that are produced, with disposal as a final option.

Figure 15-1 The Horizon Waste Hierarchy



15.3.2 Horizon will review all waste management licences, Environmental Permits or exemptions of the services Horizon procures, to ensure all waste carriers, brokers and holders are licensed and permitted to handle the specific types of wastes in transit, from transfer from sites or offices to the final point of disposal.

15.3.3 Horizon will comply with all relevant waste legislation.

15.4 Waste controls on all sites

15.4.1 Horizon will implement waste controls to manage conventional operational waste including, for example:

- optimising opportunities for reuse, recycling and recovery of wastes through segregation;
- taking a proportionate and scalable approach to managing office waste; and
- identifying the most appropriate management route of a particular waste, depending on its characteristics and classification as non-hazardous or hazardous waste.

15.5 Waste duty of care

15.5.1 Horizon will categorise waste according to the European Waste Catalogue, and classify materials as hazardous, non-hazardous or inert according to their physical, chemical and biological properties.

15.5.2 Horizon will comply with, and ensure that others under Horizon's control comply with, its statutory obligations with respect to waste, including the 'duty of care' requirements which will apply under Section 34 of the Environmental Protection Act 1990, and the requirement to arrange legal and compliant waste management services, including review of the transfer note (non-hazardous including inert) or consignment note (hazardous).

15.6 Waste handling and treatment facility

15.6.1 The majority of all Horizon's conventional wastes generated at the Power Station Site will be handled at a waste handling and treatment facility (Conventional and Hazardous Waste Building and Conventional Waste Storage Compound) which will be located on the Power Station Site. This will be a fenced facility managing waste in accordance with Horizon's Waste Hierarchy, to include (but not be limited to) the following:

- waste will be received within a reception area;
- waste will be dismantled into individual waste types;
- hazardous and non-hazardous wastes will be segregated and stored in designated storage areas;
- recyclables (such as plastics, cardboard and/or paper) will be segregated and stored in a separate area; and
- large containers and portable compactors will be stored in an external yard.

- 15.6.2 Horizon will retain conventional waste until it is removed from site by a licensed waste management carrier to an appropriately licenced waste management facility. This waste may be managed through the waste handling and treatment facility, but some waste will be removed directly from site such as project waste, water intake screenings, medical waste and hygiene waste.
- 15.6.3 The waste handling and treatment facility will enable the safe segregation and storage of conventional wastes in compliance with relevant legislation and regulation prior to transferring the wastes to an appropriately licenced waste management facility. This shall be in accordance with Horizon's Waste Hierarchy and associated management arrangements.
- 15.6.4 As with the approach followed during construction, Horizon will fulfil the requirements of the Waste (England and Wales) Regulations 2011 (amended 2014) and the Environment (Wales) Act 2016 in applying the Waste Hierarchy (see figure 15-1), wherever practicable, and ensuring that pre-treatment of waste is undertaken prior to reuse, recycling, recovery or disposal to landfill.

16 References

Table 16-1 Schedule of references

ID	Reference
RD1	Institute of Environmental Management and Assessment. 2015. <i>Delivering Quality Development</i> . Lincoln: IEMA.
RD2	British Standards Institution. 2015. <i>BS EN ISO 14001:2015 Environmental management systems. Requirements with guidance for use</i> . London: British Standards Institution.
RD3	British Standards Institution. 2015. <i>BS EN 12464-2:2014 Light and lighting – Lighting of work places. Part 2: Outdoor work places</i> . London: British Standards Institution.
RD4	Institute of Lighting Engineers. 2011. <i>Guidance Notes for the Reduction of Obtrusive Light GN01:2011</i> . Rugby: Institution of Lighting Engineers.
RD5	The Association for Petroleum and Explosives Administration and Energy Institute. 2011. <i>Guidance for Design, Construction, Modification, Maintenance and Decommissioning of Filling Stations</i> . London: The Association for Petroleum and Explosives Administration and Energy Institute.
RD6	Environment Agency. 2017. <i>The Environment Agency's approach to groundwater protection. Version 1.0</i> . Bristol: Environment Agency.
RD7	International Maritime Organization. 2018. <i>International Convention for the Control and Management of Ships' Ballast Water and Sediments</i> (Ballast Water Management Convention). London: International Maritime Organization.
RD8	International Maritime Organization. 2012. <i>Guidelines for the Control and Management of Ships' Biofouling to Minimise the Transfer of Invasive Aquatic Species</i> (2012 Edition). London: International Maritime Organization.

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