

Wylfa Newydd Project

6.2.10 ES Volume B - Introduction to the environmental assessments B10 - Landscape and visual

PINS Reference Number: EN010007

Application Reference Number: 6.2.10

June 2018

Revision 1.0

Regulation Number: 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

[This page is intentionally blank]

Contents

10	Landscape and visual.....	1
10.1	Introduction.....	1
10.2	Legislation, policy and guidance.....	2
	Key legislation	2
	Key policy	2
	Key guidance.....	10
10.3	Consultation	11
	<i>Planning Inspectorate Scoping Opinion</i>	11
	Statutory consultation.....	31
	Non-statutory consultation.....	40
10.4	Topic-specific methodologies and assessment criteria	55
	<i>Introduction</i>	55
	<i>Assessment of parameters</i>	55
	<i>Identification of study areas</i>	55
	<i>Identification of receptors</i>	56
	<i>Identification of baseline conditions</i>	57
	<i>Assessment of effects</i>	61
	<i>Design Manual for Roads and Bridges assessment methodology for the A5025 Off-line Highway Improvements</i>	70
	<i>Night-time visual effects assessment methodology for the Power Station</i>	78
	<i>Limitations</i>	79
10.5	References	81

[This page is intentionally blank]

10 Landscape and visual

10.1 Introduction

10.1.1 This chapter provides an introduction to the technical basis for the Landscape and Visual Impact Assessment (LVIA) for the Wylfa Newydd Project. It includes a summary of legislation, policy and guidance; key points arising in consultation that have guided the (LVIA); and assessment methodologies and criteria.

10.1.2 LVIA is defined in the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3), by the Landscape Institute and Institute of Environmental Management and Assessment [RD1], as a tool to identify and assess the significance of change resulting from a proposed development. LVIA addresses two separate but related issues, namely:

- effects on the landscape as a resource; and
- effects on people's views and visual amenity.

10.1.3 Landscape effects relate to changes in aesthetic and perceptual aspects of landscape character, including any physical changes to landscape elements that contribute to landscape character. Visual effects relate to changes in people's views and to their general visual amenity.

10.1.4 The assessment of effects for landscape and visual is included in the following chapters:

- chapter D10 (Application Reference Number: 6.4.10) for the WNDA Development;
- chapter E10 (Application Reference Number: 6.5.10) for the Off-Site Power Station Facilities;
- chapter F10 (Application Reference Number: 6.6.10) for the Park and Ride;
- chapter G10 (Application Reference Number: 6.7.10) for the A5025 Off-line Highway Improvements; and
- chapter H10 (landscape and visual) (Application Reference Number: 6.8.10) for the Logistics Centre.

10.1.5 The effects on historic landscape are considered in the following cultural heritage chapters:

- D11 (Application Reference Number: 6.4.11) for the WNDA Development;
- E11 (Application Reference Number: 6.5.11) for the Off-Site Power Station Facilities;
- F11 (Application Reference Number: 6.6.11) for the Park and Ride;

- G11 (Application Reference Number: 6.7.11) for the A5025 Off-line Highway Improvements; and
- H11 (Application Reference Number: 6.8.11) for the Logistics Centre.

10.2 Legislation, policy and guidance

10.2.1 The following legislation, policy and guidance have been used to inform the scope and content of the LVIA; assist in the identification of potential effects and mitigation; and influence the design of the Wylfa Newydd Project to reduce the significance of effects.

Key legislation

10.2.2 The relevant legislation applicable to this assessment is set out in table B10-1.

Table B10-1 Summary of key legislation

Legislation	Description
Countrywide and Rights of Way Act 2000	The Act clarifies the purpose of designating Areas of Outstanding Natural Beauty (AONBs) and consolidates the provisions of previous legislation. It requires local authorities to produce management plans for each AONB and to have regard to the purpose of conserving and enhancing the natural beauty of AONBs when performing their functions. It also provides for better management of AONBs.

Key policy

10.2.3 The relevant policy applicable to this assessment is set out in table B10-2.

Table B10-2 Summary of key policy

Policy	Description
<i>Overarching National Policy Statement (NPS) for Energy (EN-1) [RD2]</i>	<p>This NPS designated by the Secretary of State (SoS) in July 2011, sets out the overarching national policy for delivery of major energy infrastructure projects.</p> <p>Section 5.9 provides general guidance on LVIA for energy projects, including consideration of measures for reducing significant adverse effects. It also includes guidance for decision makers in relation to developments proposed within designated landscapes, such as AONBs.</p> <p>The policy requires that landscape character assessments and associated policies should be</p>

Policy	Description
	<p>considered during LVIA (see paragraph 5.9.6). It also sets out in paragraph 5.9.7 that “<i>the assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include light pollution effects, including on local amenity, and nature conservation</i>”. It is noted there are likely to be some long-lasting, adverse effects on landscape character of the AONB and views.</p>
<p><i>National Policy Statement for Nuclear Power Generation (EN-6) [RD3]</i></p>	<p>This NPS, designated by the SoS in July 2011, sets out national policy on new Nuclear Power Stations identified as potentially suitable for deployment by 2025.</p> <p>In section 3.10, the NPS notes the similarities of potentially suitable sites, in that they are generally in areas of low population that may have value for visual amenity and as landscape resources, and that the scale of the facilities means that the scope for visual mitigation is quite limited. The policy also notes (paragraph 3.10.2) that, because of the timescales involved, there is some uncertainty over future land uses once sites are decommissioned.</p> <p>The NPS states that, in assessing a proposal for a new nuclear power station, the Infrastructure Planning Commission should not expect the visual impacts be eliminated with mitigation, and notes that the scope for visual mitigation will be quite limited. The NPS does state, however, that mitigation should be designed to reduce the visual intrusion of the project as far as reasonably practicable (paragraph 3.10.8).</p>
<p><i>Planning Policy Wales (Edition 9) [RD4]</i></p>	<p>This document sets out the land use planning policies of the Welsh Government, forming a strategic framework to guide development.</p> <p>Chapter 5 (Conserving and Improving Natural Heritage and the Coast) defines the natural heritage of Wales as geology, landform, biodiversity and its natural beauty and amenity. Section 5.3 sets out the Welsh Government’s measures to conserve landscape and biodiversity.</p> <ul style="list-style-type: none"> • AONBs should be given the highest status of

Policy	Description
	<p>protection from inappropriate development. Great weight should be given to the conservation and enhancement of their natural beauty.</p> <ul style="list-style-type: none"> • Non-statutory designations such as Special Landscape Areas (SLAs) should be protected. • LANDMAP [RD5 to RD9] provides an important information resource to use in undertaking landscape assessments which inform decision making. <p>The character and landscape of the undeveloped coastline should be protected and enhanced.</p>
<i>Technical Advice Note (TAN) 12: Design [RD10]</i>	<p>TAN 12 sets out advice for designing development and promoting overall sustainability. It urges planning authorities and developers to engage constructively to deliver climate-responsive developments and buildings through a range of sustainable design solutions.</p> <p>This Advice Note states that local context should be appraised and understood in order to deliver good design. Local context comprises the characteristics and setting of the area, including features such as natural and human history, buildings and spaces, ecology and archaeology.</p> <p>LANDMAP [RD5 to RD9] and seascapes character assessments can be used as a framework from which good design and management can be developed. Good design will be dependent on working within the natural constraints and historic character of the landscape.</p>
<i>TAN 14: Coastal Planning [RD11]</i>	<p>TAN 14 provides guidance on key issues for planning for the coastal zone.</p> <p>The coastal zone is described as an area of land and adjacent sea considered to be mutually independent. Heritage coasts are a non-statutory designation used to provide a management tool for balancing conservation and access. They are primarily designated for their quality.</p>
<i>New Nuclear Build at Wylfa: Supplementary Planning Guidance [RD12]</i>	<p>The purpose of this Supplementary Guidance is to provide advice on important local matters relating to the proposed Wylfa Newydd Project and its Associated Developments and to set out the Isle of</p>

Policy	Description
	<p>Anglesey County Council's (IACC's) response to national and local policy and strategies in the context of the Wylfa Newydd Project.</p> <p>Under Guiding Principle 20, the IACC expects the project promoter to demonstrate that the new nuclear build, either alone or in combination with other proposals, such as electricity transmission infrastructure, would not have significant adverse effects on important landscapes, including the Isle of Anglesey AONB, Landscape Character Areas (LCAs), the Heritage Coast and SLAs. This is inconsistent with the NPS for Nuclear Power Generation (EN-6) [RD3], which acknowledges that “<i>...there are likely to be some long-lasting, adverse effects on the landscape character of the AONB and views</i>”.</p> <p>The principle also states that, wherever possible, the IACC will expect the project promoter to explore opportunities to enhance the island's natural environment and ecosystem services including the provision of green and blue networks of infrastructure.</p>
<p><i>Anglesey and Gwynedd Joint Local Development Plan (JLDP) 2011 - 2026 - Written Statement</i> [RD13]</p>	<p>The JLDP covers the local authorities of the IACC and Gwynedd Council and forms the basis for land use planning in these areas. The JLDP covers the period 2011 to 2026.</p> <p>Strategic Policy PS5 (Sustainable Development) states that all proposals should protect and improve the quality of the natural environment, its landscapes and biodiversity assets.</p> <p>Policy PCYFF3 (Design and Place Shaping) states that all proposals should “demonstrate high quality design which fully takes into account the natural, historic and built environmental context, and contributes to the creation of attractive, sustainable places”. The local landscape should be considered including topography, principal gateways and materials and incorporate hard and soft landscape screening where appropriate.</p> <p>Policy PCYFF4 (Design and Landscaping) requires that all proposals should integrate into their surroundings. Proposals should consider landscape from the outset in terms of LCAs,</p>

Policy	Description
	<p>topography, views, retention of landscape features, mitigation and new landscape planting of local provenance.</p> <p>Strategic Policy PS9 (Wylfa Newydd and Related Development) sets out the considerations that the Councils will take into consideration in the preparation of a Local Impact Report in relation to Wylfa Newydd and related development. This includes <i>“the scheme layout and design and the scale of open spaces, landscaping, planting (including hedging and tree belts), waterways and similar features proposed should avoid, minimize, mitigate or compensate for visual, landscape and ecological impacts on the local and wider area, as well as on cultural and historic aspects of the landscape, both in the short and longer term. Proposals will be expected to be commensurate with the scale of the development, and the extent of its impact”</i>. Where proposals are of a temporary nature, the proposals should consider legacy uses, so that elements including ecological and landscape works bring long term benefits.</p> <p>Strategic Policies PS10, PS11 and PS12 relate specifically to campus style accommodation for construction workers, logistics centres and park and ride facilities respectively.</p> <p>Policy PS19 (Conserving and where appropriate enhancing the natural environment) states that development will be managed so as to conserve and enhance the distinctive natural environment, countryside and coastline. In determining applications consideration should be given to landscapes, protection or enhancement of sites and designations of international, national, regional and local importance (to meet international and national obligations), LCAs and trees, hedgerows and woodland of visual, ecological, historic, cultural or amenity value.</p> <p>Policy AMG 1 (Area of Outstanding Natural Beauty Management Plans): “Proposals affecting the setting and/or significant views into and out of the Areas of Outstanding Natural Beauty must, where appropriate, have regard to the Area of Outstanding Natural Beauty Management Plan.”</p>

Policy	Description
	<p>Policy AMG 2 (Special Landscape Areas): “When considering proposals within Special Landscape Areas (SLA) as identified by the proposals map and listed below, there will be a need to appropriately consider the scale and nature of the development ensuring that there is no significant adverse detrimental impact on the landscape”. Proposals should have regard to the 'Statements of Value and Significance', and, in exceptional circumstances, where development is necessary and could result in significant impact on the landscape, appropriate mitigation and compensation measures should be provided.</p> <p>Policy AMG 3 (Protecting and enhancing features and qualities that are distinctive to the local landscape character): the policy states that <i>“Proposals that would have significant adverse impact upon landscape character as defined by the Landscape Character Areas included within the current Landscape Strategy for the relevant authority, must demonstrate through a landscape assessment how landscape character has influenced the design, scale, nature and site selection of the development... Measures should be taken to ensure that development does not:</i></p> <ul style="list-style-type: none"> • cause significant adverse impact to the character of the built or natural landscape; • fail to harmonise with, or enhance the landform and landscape; or • lose or fail to incorporate traditional features, patterns, structures and layouts of settlements and landscapes of both the built and natural environment”. <p>Policy AMG 4 (Coastal protection): proposals on the coast should consider a number of criteria including that the development must be located on the coast due to its nature and that <i>“there is an overriding economic and social benefit from the development”</i> and the development would not cause unacceptable harm to the built environment or the landscape or seascape character. Priority is given to <i>“locations with a close visual connection to current buildings or existing structures”</i></p> <p>Policy AT 1 states that proposals within or affecting</p>

Policy	Description
<p><i>The Isle of Anglesey Area of Outstanding Natural Beauty (AONB) Management Plan Review 2015 – 2020 [RD14]</i></p>	<p>the setting and/ or significant views into and out of Conservation Areas, World Heritage Sites and registered historic landscapes, Registered Parks and Gardens should (where appropriate) have regard to character appraisals, delivery strategies and management plans related to the designated areas.</p> <p>The plan defines special qualities of the Isle of Anglesey AONB, which should be considered to determine whether they would be affected by development.</p> <p>All proposed development as part of the IACC Energy Island Programme should have regard to the Isle of Anglesey AONB designation in terms of the AONB's primary purpose of conserving and enhancing natural beauty.</p> <p>Policy Enhancing the Countryside and Coastal Character (CCC) 1.1 and 1.2 states that LANDMAP [RD5 to RD9] and the Anglesey seascape character assessment (presented in the Anglesey and Snowdonia Seascape Character Assessment [RD15]) should be used in assessment work.</p> <p>Policy CCC 3.1 requires all development proposals within and up to 2km adjacent to the Isle of Anglesey AONB to be subjected to rigorous assessment to reduce inappropriate development.</p> <p>Policy CCC 3.2 states that all new development within and up to 2km adjacent to the Isle of Anglesey AONB should adopt the highest standard of design, materials and landscaping to ensure that they complement the special qualities of the AONB. Proposals that are based upon the principles of sustainable development and that are of an appropriate scale and nature to the special qualities of the Isle of Anglesey AONB will be supported.</p> <p>Policy CCC 4.1, 4.2 and 4.3 are policies working towards maintaining the solitude and natural beauty of the Isle of Anglesey AONB, securing Dark Skies status for Anglesey and ensuring noise intrusion is kept within acceptable limits.</p> <p>Policy Maintaining the Living and Working Landscape (LWL) 6.3 requires that the special qualities and features of the Isle of Anglesey AONB</p>

Policy	Description
	<p>should be fully respected by transport schemes. Policy LWL 6.4 states that the Isle of Anglesey AONB should be a model for high standards of design in highway schemes, infrastructure and associated landscaping, which complement the special qualities of the AONB.</p>
<p><i>Review of Special Landscape Areas in Gwynedd and Anglesey [RD16]</i></p>	<p>This review is a supporting document to the JLDP. The review identifies six SLAs on Anglesey rather than the former island-wide designation outwith the Isle of Anglesey AONB. The Wylfa Newydd Development Area does not lie within any of the SLAs, the nearest being Mynydd Mechell & Surrounds SLA to the south. The update to the SLA designation is reflected in the Anglesey and Gwynedd Joint Local Development Plan 2011 - 2026 - Written Statement [RD13].</p>
<p><i>Supplementary Planning Guidance, Design Guide For The Urban & Rural Environment [RD17]</i></p>	<p>This is a supporting document to the JLDP. The guidance notes that form this supplementary planning guidance provide advice on good design. Guidance Note 2: Sustainable Design promotes sustainable design, including advice that <i>“...development should enhance the quality of landscape, ecology, biodiversity and culture”</i> and <i>“...be sympathetic to local distinctiveness.”</i> Guidance Note 10: Lighting states that the natural dark skies of Anglesey should be preserved where possible, considering local landscape character and the effect of lighting in relation to the special qualities and tranquillity of the Isle of Anglesey AONB in particular. <i>“In rural areas lighting should be kept to an absolute minimum for human health, road safety, night time heritage and biodiversity reasons.”</i> Guidance Note 12: Boundaries, Landscape & Trees suggests measures to enhance and integrate development into surroundings. <i>“New development should make best use of topography, site features and local conditions.”</i> Existing hedgerows should be retained where possible and field boundaries reinforced and enhanced. New landscaping should fit with the locality, with native species preferred in rural areas. Boundaries should comprise a stone faced bank or a dry stone wall, with or without a</p>

Policy	Description
	<p>hedgerow.</p> <p>Guidance Note 30: Development in the AONB states that <i>“All development should be sympathetic to the unique characteristics and local distinctiveness of the AONB.”</i> The LANDMAP dataset should be used to inform development in the Isle of Anglesey AONB.</p>

Key guidance

10.2.4 The LVIAs have been undertaken in line with a number of key technical guidance documents. These guidance documents are widely used across the UK and represent standard good practice for the assessment for the various consenting regimes. These are summarised in table B10-3.

Table B10-3 Summary of key guidance

Guidance	Description
<i>Guidelines for Landscape and Visual Impact Assessment (third edition)</i> (GLVIA3) [RD1]	These Guidelines provide overarching guidance for the assessment of landscape and visual effects, and have been used to assess the effects arising from the construction and operation of the Power Station, Off-Site Power Station Facilities, Park and Ride and Logistics Centre. The effects arising from the construction and operation of the A5025 have been assessed in accordance with Interim Advice Note 135/10 as outlined below.
<i>Photography and Photomontage in Landscape and Visual Impact Assessment</i> (Landscape Institute Advice Note 01/11) [RD18]	This Advice Note provides guidance on photography and photomontages for the assessment of landscape and visual effects.
<i>LANDMAP</i> [RD5 to RD9]	Referenced within GLVIA3 [RD1] as a source of landscape baseline data for use in the assessment of landscape effects in Wales. LANDMAP [RD5 to RD9] is a landscape information resource for Wales. Characteristics, qualities and influences on the landscape are recorded as five themed spatial layers. Geographically discrete areas are identified and mapped in Geographical Information System by

Guidance	Description
	<p>their landscape qualities and characteristics. The five spatial layers comprise:</p> <ol style="list-style-type: none"> 1. geological landscape; 2. landscape habitats; 3. historic landscape; 4. visual and sensory; and 5. cultural landscape.
<p><i>Approach and Methodology for Environmental and Cumulative Impact Assessment, Guidance for Developers, Planning Officers and Consultants [RD19]</i></p>	<p>Provides local guidance for Environmental Impact Assessment (EIA) and cumulative impact assessment.</p>
<p><i>Interim Advice Note 135/10 (W), Landscape and Visual Effects Assessment, Wales Only. (IAN 135/10 (W)) [RD20]</i></p>	<p>This is the overarching guidance document for the assessment of landscape and visual effects of highway schemes in Wales. The guidance has been followed in the assessment of the A5025 Off-line Highway Improvements in terms of defining the study area, desk study and identification of impacts and assessment of effects. Criteria tables for sensitivity, magnitude of impact and significance of effect have also been used.</p>

10.3 Consultation

10.3.1 This section provides a topic-specific account of scoping, statutory and non-statutory consultation undertaken to support the assessment. For a full overview of the environmental consultation activities undertaken for the Wylfa Newydd Project, please refer to chapter A6 (EIA Scoping Report and Addendum) (Application Reference Number: 6.1.6) and chapter A7 (consultation with environmental stakeholders) (Application Reference Number 6.1.7).

Planning Inspectorate Scoping Opinion

10.3.2 In March 2016, Horizon submitted an updated Wylfa Newydd Project EIA Scoping Report to the Planning Inspectorate. In May 2017, Horizon submitted an Addendum to the March 2016 Wylfa Newydd Project EIA Scoping Report to the Planning Inspectorate. Following a period of

consultation with stakeholders, a further Scoping Opinion was received from the SoS (via the Planning Inspectorate) on 14 June 2017.

10.3.3 The Wylfa Newydd Project EIA Scoping Report, Addendum and the subsequent Scoping Opinions inform the approach to the assessment. Table B10-4 provides an account of how comments raised by stakeholders in the Scoping Opinion have been considered in the LVIA.

Table B10-4 Key issues raised through Scoping

Key issue raised	Action taken
<p>“The Applicant’s attention is drawn to IACC comments (Appendix 3 of this Opinion) regarding sources that could be used to define the existing environment.” [RD21]</p> <p>Paragraph 8.3.1.1 of The IACC Response to Scoping Request: Horizon Nuclear Power Wylfa Newydd [RD22] (included in appendix 3 of the Scoping Opinion [RD21]) states that:</p> <p>“The list of sources references should be supplemented through the use of <i>The Anglesey, Gwynedd and Snowdonia National Park Landscape Sensitivity and Capacity Assessment</i> [RD23]. Use should be made of all five aspects of LANDMAP including the Historic landscape layer which should be used to identify the potential for significant effects upon the historic landscape as defined by <i>LANDMAP</i> and the historic landscape description contained within the LCA. <i>NPS EN-6 Volume II</i>, with reference to Wylfa recognises <i>LANDMAP</i> to be a valuable resource (paragraph C9.73).” [RD22].</p>	<p>Reference has been made in section 10.4 of this chapter, to the Isle of Anglesey, Gwynedd and Snowdonia National Park Landscape Sensitivity and Capacity Assessment, Final Report [RD23] for information about likely man-made influences which could affect the evolution of the baseline character within the study area.</p> <p>Reference is made in chapter D10 (Application Reference Number: 6.4.10) and G10 (Application Reference Number: 6.7.10) to all five aspects of LANDMAP [RD5 to RD9], which have been used to inform the project-level local landscape and seascape character study set out in appendix D10-3 (local landscape and seascape character study) (Application Reference Number: 6.4.60) of this Environmental Statement. The effects on historic landscape are considered in the cultural heritage chapters D11 (Application Reference Number: 6.4.11), E11 (Application Reference Number: 6.5.11), F11 (Application Reference Number: 6.6.11), G11 (Application Reference Number: 6.7.11) and H11 (Application Reference Number: 6.8.11) of this Environmental Statement.</p>
<p>“The [SoS] welcomes that the definition of visual receptors, study area and locations of key representative viewpoints will be agreed with IACC and Natural Resources Wales (NRW) and</p>	<p>The study area for LVIA and selection of key representative viewpoints to be used for the visual impact assessment was discussed with the IACC and NRW. Visual receptors identified for the assessment of visual impact were set</p>

Key issue raised	Action taken
<p>recommends that any discussions with these parties also seek to agree the assessment methodology and required mitigation measures.”</p>	<p>out in the Pre-Application Consultation Stage Two Preliminary Environmental Information Report.</p> <p>A stakeholder meeting was held with the IACC and NRW on 1 April 2016, to discuss the proposed methodology for the LVIA, following which minor amendments were made to address comments.</p> <p>A stakeholder meeting was also held with representatives from NRW, the IACC and the National Trust on 21 June 2016 to discuss the Landscape and Environmental Masterplan (LEMP), information from which is now incorporated in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16). This would be the main delivery mechanism for landscape mitigation measures. Design development of the illustrative landscape proposal figures included within the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) has been informed by feedback from these meetings.</p>
<p>“The [SoS] recommends that static receptors are presented on a figure within the Environmental Statement. It is unclear how Dame Sylvia Crowe’s landscape design for the existing power station is a receptor and this should be explained within the Environmental Statement.” [RD21]</p>	<p>The locations of key receptors are shown on figures contained in the figure booklets for volume D (Application Reference Number: 6.4.101), volume E (Application Reference Number: 6.5.27), volume F (Application Reference Number: 6.6.38), volume G (Application Reference Number: 6.7.48) and volume H (Application Reference Number: 6.8.29) of this Environmental Statement, covering:</p> <ul style="list-style-type: none"> • landscape planning context; • landscape character; • local landscape and seascape character; • seascape character;

Key issue raised	Action taken
	<ul style="list-style-type: none"> landscape features; and representative and night-time viewpoint locations. <p>The Dame Sylvia Crowe landscape design for the Existing Power Station contributes to the cultural value of the existing local landscape character. Appendix D11-5 (Assessment of Significance of Dame Sylvia Crowe's Landscape Design at the Existing Power Station) (Application Reference Number: 6.4.76) of this Environmental Statement presents a statement of significance on the landscape design, which has informed the description of the baseline landscape for the Wylfa Landscape Setting Local Landscape Character Area (LLCA). The Dame Sylvia Crowe landscape design, including the constituent mounding and woodland, is a key feature of this LLCA receptor.</p>
<p>“The Scoping Report does not identify how potential landscape and visual impacts resulting from the off-site facilities i.e. the AECC [Alternative Emergency Control Centre] ESL [Environmental Survey Laboratory] and MEEG [Mobile Emergency Equipment Garage] will be assessed; the [SoS] recommends that the assessment methodology for these project elements is also discussed by the relevant bodies.” [RD21]</p>	<p>The assessment methodology for the Off-Site Power Station Facilities (AECC, ESL and MEEG) and Associated Development is consistent with the methodology for other Development Consent Order (DCO) developments as agreed with the IACC and NRW and as set out in this chapter, noting the slight variation for the A5025 Off-line Highway Improvements.</p>
<p>“Section 10.4.1 of the Scoping Report refers to an overarching study area of 15km and a detailed study area of 6km from the tallest proposed structures. It is unclear how the assessments will differ within the different study areas and this should be clearly explained and</p>	<p>The two-tier study area for the LVIA for the Wylfa Newydd Development Area is explained in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement. The detailed study area which extends up to 6km has been based on the principal area of theoretical visibility and where site</p>

Key issue raised	Action taken
justified within the Environmental Statement.” [RD21]	appraisal has indicated that there is greater potential for significant landscape and visual effects. Baseline studies within the 6km study area have therefore been undertaken to a greater level of detail than within the broader 15km study area where significant effects are not anticipated.
“The Scoping Report provides a preliminary Zone of Theoretical Visibility (ZTV) for the main power station site. The [SoS] advises that the Environmental Statement should describe the model used, provide information on the area covered and the timing of any survey work and methodology used.” [RD21]	An explanation of the general methodology used to prepare the ZTV for the Wylfa Newydd Development Area is included in this chapter, while information regarding assessment points and the limit to the ZTV is included in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement.
“The Environmental Statement should assess the potential impacts on landscape character.” [RD21]	The effect on landscape character forms part of the LVIA in chapters D10 (Application Reference Number: 6.4.10), E10 (Application Reference Number: 6.5.10), F10 (Application Reference Number: 6.6.10), G10 (Application Reference Number: 6.7.10) and H10 (Application Reference Number: 6.8.10) of this Environmental Statement.
<p>“The [SoS] welcomes that the [Isle of] Anglesey AONB has been identified as a receptor within the Scoping Report and refers the Applicant to the comments of the IACC (see Appendix 3 of this Opinion) with regards to assessing potential impacts on this designation.” [RD21]</p> <p>Paragraph 8.3.2.2 of the IACC Response to Scoping Request: Horizon Nuclear Power Wylfa Newydd (included in appendix 3 of the Scoping Opinion [RD21]) states that:</p> <p>“The council is concerned about the</p>	An integrated landscape, heritage and architecture plan, included in appendix D11-8 (Integrated Landscape Heritage and Architectural Plan for the Wylfa Newydd Project, Application Reference Number: 6.4.79), is summarised in volume 2 of the Design and Access Statement for the Power Station Site (Application Reference Number 8.2.2). This plan sets out the broad principles proposed to mitigate landscape and cultural heritage effects within the AONB presented in chapter D10 (Application Reference Number: 6.4.10) and D11 (Application Reference Number: 6.4.11).

Key issue raised	Action taken
<p>potential for effects upon the [Isle of Anglesey] AONB, both direct landscape effects but also secondary or indirect effects arising from changes to the historic environment present within it. This concern appears to be recognised within <i>National Policy Statement EN-6 Volume II</i> (paragraph C9.72), where Government notes the potential for effects on the AONB and advocates that to understand the effects and the effectiveness of any mitigation proposed that an integrated landscape, heritage and architecture plan be produced. The council would wish to see such a document produced as part of the application.” [RD22]</p>	
<p>“The [SoS] advises that the Applicant gives consideration to the potential impact of smoke and steam on amenity.” [RD21]</p>	<p>Chapter D10 (Application Reference Number: 6.4.10) considers visible discharges (plumes) from the house boilers during certain weather conditions. No other visible plumes are anticipated from the Wylfa Newydd Power Station, such as the main stacks, or from stacks on the Emergency Diesel Generator, Back-up Building Generators, Diverse Additional Generator and ancillary support generators.</p>
<p>“The [SoS] welcomes the production of a Landscape and Environmental Masterplan (LEMP) covering the Wylfa Newydd Development Area and recommends that a draft is provided with the DCO application. The LEMP should provide details of the earth mounding and woodland planting that is proposed to screen the development including for example the location, dimensions and details of how long planting would take to establish. The LEMP</p>	<p>The Landscape and Habitat Management Strategy (Application Reference Number: 8.16) (incorporating information from the former LEMP) forms part of the application. Landscape mitigation measures encompassed by the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) include proposed landscape mounding and woodland planting designed to soften views of the Wylfa Newydd Power Station and the reinstatement of a</p>

Key issue raised	Action taken
<p>should include any measures that would be implemented at the off-site facilities i.e. the [Alternative Emergency Control Centre], [Environmental Survey Laboratory] and [Mobile Emergency Equipment Garage]." [RD21]</p>	<p>landscape pattern in keeping with the locality on completion of construction. An indication of the likely height of proposed woodland planting 15 years after completion of Main Construction and landscaping is provided in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement.</p> <p>A landscape masterplan for the Off-Site Power Station Facilities, included in volume 3 of the Design and Access Statement for the Associated Developments and Off-Site Power Station Facilities (Application Reference Number 8.2.3), provides a similar level of detail on landscape mitigation proposals.</p>
<p>"Cumulative and combined impacts should not be overlooked, in particular the need to consider the potential landscape and visual implications of transmission infrastructure, and the decommissioning works at the existing power station." [RD21]</p>	<p>Cumulative effects are considered in volume I (Application Reference Numbers: 6.9.1 to 6.9.14) of this Environmental Statement, including assessment of effects of the different developments within the Wylfa Newydd Project and the cumulative effects of the Wylfa Newydd Project together with Reasonably Foreseeable Future Projects.</p> <p>Combined topic effects, which may arise from a combination of individual effects reported within one topic chapter or multiple topic chapters for each development are reported in dedicated chapters at the end of each volume D to H (Application Reference Numbers: 6.4.1 to 6.8.29) and are not reported in volume I (Application Reference Numbers: 6.9.1 to 6.9.14).</p>
<p>"Reference is made to the consideration of potential effects upon the setting of the Parys Mountain Landscape of Historic Interest, Cestyll Garden and</p>	<p>Where there is public access to key heritage assets, a visual impact assessment has been made from representative viewpoints. For example, representative viewpoints have been</p>

Key issue raised	Action taken
<p>associated kitchen garden, Listed Buildings and Scheduled Ancient Monuments being considered in the Archaeology and Cultural Heritage chapter of the Environmental Statement, with reference to the visual impact assessment where appropriate. This is considered acceptable. Where there is public access to these features then the potential for visual effects upon visitors for example should be set out within the visual assessment. Equally should the features be noted as contributing to the landscape character of an area, then potential effects upon them should also feature within the landscape assessment.” [RD22]</p>	<p>identified from:</p> <ul style="list-style-type: none"> • Parys Mountain Landscape of Historic Interest; and • standing stones north-west of Llanfechell. <p>A representative viewpoint has also been considered from Cestyll Garden, although there is currently only discretionary and occasional public access allowed to this garden.</p> <p>The landscape impact assessment has had regard to the presence of any heritage assets identified in published sources as contributing to landscape character.</p>
<p>“The council concurs with the 1km study area from the edge of the Wylfa Newydd Development Area to be adopted for the assessment of effects upon views from residential properties although cautions that this should not be an absolute cut-off and that flexibility should be provided to consider properties outside of 1km where particular circumstances may indicate it appropriate to do so.” [RD22]</p>	<p>Visual effects on views from individual private residential properties are not assessed in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement. Instead, the effects on the visual amenity of local communities have been assessed. This approach was set out in the methodology document provided to the IACC and discussed during the stakeholder meeting on LVIA methodology held on 1 April 2016 where the IACC expressed support for a community views approach to the assessment and accepted that there would be some variation in scope of assessment depending on the nature of the project, with a different approach appropriate in relation to the A5025 Off-line Highway Improvements.</p>
<p>“The locations to be used for the photomontages have been discussed previously with the council, although at that stage the development and mitigation</p>	<p>Night-time viewpoints were included with appendix 23.10 of the EIA Progress Report, on which some comments were provided by NRW including a request for an assessment of night-time views</p>

Key issue raised	Action taken
<p>proposals had not been confirmed. The council is not aware of any discussions held to discuss the locations to be used for the assessment of night-time effects and the use of night-time photography. The council should be consulted on and agree with the applicant a <i>definitive list of viewpoints.</i>" [RD22]</p>	<p>for visitors to the AONB including Cemlyn Bay. The set of viewpoints used for the night-time visual impact assessment in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement includes viewpoints within the AONB and a viewpoint from the public car park at Cemlyn Bay.</p>
<p>"Section 3.2.3.7 states that the power station lighting is yet to be fully designed. Sufficient information will be required to inform the assessment for the potential of significant effects arising from lighting upon landscape and visual receptors including residential amenity and ecological receptors. The applicant should refer to the council's response at [Pre-Application Consultation Stage One] PAC 1 and also to NPS EN6 [Habitats Regulations Assessment] where significant effects resulting from lighting upon European sites could not be ruled out. As per previous council comments made at PAC 1 the topic of lighting may be best presented as an individual Environmental Statement topic or sub-topic." [RD22]</p>	<p>An Environmental Lighting Impact Assessment is included in appendix D10-10 (Application Reference Number: 6.4.67) of this Environmental Statement. An assessment of night-time visual effects for the Wylfa Newydd Power Station is also included in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement. In addition, an assessment of effects of lighting on ecology is presented in chapter D9 (terrestrial and freshwater ecology) (Application Reference Number: 6.4.9) of this Environmental Statement.</p>
<p>"The Environmental Statement should include outline landscape designs for the site and its immediate surroundings sufficient to inform the relevant topic chapters." [RD22]</p>	<p>The illustrative landscape proposal figures in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) have been used to inform the LVIA presented in chapter D10 (Application Reference Number: 6.4.10).</p>
<p>"A Residential Amenity Assessment should be undertaken to consider potential effects on occupiers of residential properties affected by the</p>	<p>Horizon has discussed the visual assessment methodology with the IACC and agreed that the assessment would focus on community level effects rather</p>

Key issue raised	Action taken
<p>development. The assessment should include for the consideration of visual effects as well as effects arising from noise, dust and lighting. The assessment should consider the construction and operational phases with an overview of potential effects at decommissioning provided also. The potential for artificial light to create a Statutory Nuisance (under the provisions of the Environmental Protection Act 1990 (as amended) should also be scoped into the assessment with regard adjacent residential properties.” [RD22]</p>	<p>than those on individual private residential properties.</p> <p>The effects on the visual amenity of local communities have been assessed in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement, including effects of lighting on selected night-time views. Visual effects on views from individual private residential properties are not assessed in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement. The assessment of effects arising from noise and dust is presented in chapters D6 (noise and vibration) (Application Reference Number: 6.4.6) and D5 (air quality (excluding emissions from traffic)) (Application Reference Number: 6.4.5) respectively. The combined visual, noise and air quality effects are considered in chapter D16 (combined topic effects) (Application Reference Number: 6.4.16).</p>
<p>The IACC drew attention to guidance on cumulative impact assessment in relation to LVIA included in GLVIA3 [RD1], the <i>TAN 8: Planning for Renewable Energy</i> [RD24] and <i>Assessing the Cumulative Impact of Onshore Wind Energy Developments</i> [RD25] stating that:</p> <p>“In LVIA cumulative impact assessment, it is particularly important to use the methodology provided in this IACC Guidance document to consider and identify cumulative impacts (additive and interactive) which may not have been significant under an EIA for a single development but which become significant impacts when considered cumulatively with other developments.” [RD22]</p>	<p>As noted above, cumulative effects are considered in volume I (Application Reference Numbers: 6.9.1 to 6.9.14) of this Environmental Statement.</p> <p>The methodology recognises that individual effects that would for one development be insignificant could become significant when assessed cumulatively. It is for that reason that individual effects of minor significance have been included in the scope of the cumulative effects assessment. LVIA inputs to the cumulative effects assessment have been based on specific development assessments, which are in accordance with GLVIA3 [RD1]. It is noted that the other two listed advice documents are for renewable energy/windfarm projects and therefore are not directly applicable.</p>

Key issue raised	Action taken
<p>“Section 10.2.4 identifies the [Isle of] Anglesey Area [of] Outstanding Natural Beauty (AONB) as a key receptor. The Wylfa Newydd Development Area is located adjacent and partly within the [Isle of] Anglesey AONB, and NRW consider that the Wylfa Newydd DCO Project has the potential to have significant adverse effects on the special qualities of the AONB.” [RD26]</p>	<p>Chapters D10 (Application Reference Number: 6.4.10) and G10 (Application Reference Number: 6.7.10) of this Environmental Statement provide an assessment of the likely effects on the landscape character of the Isle of Anglesey AONB, based on published sources of baseline landscape character and the special qualities relevant to landscape.</p>
<p>“NRW advise that the Environmental Statement should fully consider impacts on the special qualities of the [Isle of Anglesey] AONB. An assessment of impacts on the AONB will need to consider the physical and visual effects upon the area’s Natural Beauty – the scenic quality, distinctiveness, sense of place and special qualities of the area. The [Isle of Anglesey] AONB management plan sets out special qualities that it seeks to conserve and enhance. These are often elements, features and attributes that the landscape contains, which contribute to character. The Environmental Statement will need to demonstrate through its landscape and visual assessment and development proposals how it has positively addressed the special qualities of the [Isle of Anglesey] AONB and explain the iterative design process taken to minimise adverse effects.” [RD26]</p>	<p>Where relevant, chapters D10 (Application Reference Number: 6.4.10), E10 (Application Reference Number: 6.5.10), F10 (Application Reference Number: 6.6.10), G10 (Application Reference Number 6.7.10) and H10 (Application Reference Number: 6.8.10) provide an assessment of the likely effects on the landscape character of the Isle of Anglesey AONB, based on published sources of baseline landscape character and the special qualities relevant to landscape.</p> <p>The iterative design process is explained in chapter A4 (strategic alternatives) (Application Reference Number: 6.1.4) of this Environmental Statement.</p>
<p>“Given the scale of the proposal and sensitive landscape and seascape location, we considered that the draft principles for the Landscape and</p>	<p>The Landscape and Habitat Management Strategy (Application Reference Number: 8.16) (incorporating information from the former LEMP) has</p>

Key issue raised	Action taken
<p>Environmental Masterplan (LEMP) need to develop and flow from a landscape character approach so that factors contributing to landscape aesthetics (e.g. designing with the landscape form, scale, pattern of land cover, habitat potential, colour and architectural options) are developed as one scheme through the analysis of the key viewpoints.” [RD26]</p>	<p>been developed in order to reflect the existing landscape and seascape character of the surrounding area and from analysis of representative viewpoints discussed with the IACC and NRW. A key aim is to recreate a natural agricultural landscape surrounding the Wylfa Newydd Power Station on completion of Main Construction, in order to help blend it into the existing landscape.</p>
<p>“There is no mention of assessment of lighting and night time assessments. NRW consider that the operational phase, and particularly the construction phase, has the potential to cause light pollution. NRW advise that night time assessments on visitors to the [Isle of Anglesey] AONB should be undertaken. There is potential for people to be at Cemlyn Bay within the AONB at around dusk time, as a result of activities such as experiencing sunsets and wildlife watching. Understanding the baseline experience of lighting is necessary to the lighting strategy for the development.” [RD26]</p>	<p>An assessment of night-time visual effects is included in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement for the Wylfa Newydd Power Station. This incorporates assessment of effects on viewpoints within the AONB, including a viewpoint from Cemlyn Bay.</p> <p>Night-time effects are also considered in chapter G10 (Application Reference Number: 6.7.10) and appendix G10-4 (visual effects schedule) (Application Reference Number: 6.7.36) as part of the visual assessment for the A5025 Off-line Highway Improvements, in accordance with guidance in IAN 135/10 (W) [RD20].</p> <p>A high-level assessment of night-time effects is included in chapters E10 (Application Reference Number: 6.5.10), F10 (Application Reference Number: 6.6.10) and H10 (Application Reference Number: 6.8.10).</p>
<p>“Inclusion of the on-site campus for temporary works’ accommodation and car parking within the site: this will be included within the assessment of the power station. From our review of the proposed location in relation to the AONB, we consider that development</p>	<p>Chapter D10 (Application Reference Number: 6.4.10) provides an assessment of the likely effects on the landscape character of the Isle of Anglesey AONB, based on published sources of baseline landscape character and the special qualities relevant to landscape and</p>

Key issue raised	Action taken
<p>integration within the open coastal characteristics of the locality will be important to minimising change to westerly views across Cemaes Bay from the AONB. The existing power station has established presence, however factors such as development height, massing, colouring and night-time lighting will have a bearing on visibility and contrast with the natural qualities of the coastline edge.” [RD27]</p>	<p>representative viewpoints including night-time viewpoints.</p>
<p>“Building platform levels for the power station have been raised: Paragraph 4 (section 10.1) notes that landscape mounding will still remain in scale with the surrounding drumlins. We advise that the revised LEMP illustrate the new earthworks design with i) a contour plan; ii) cross section drawings; and iii) photomontage images to illustrate the visual relationship and fit with the existing drumlin landscape, in order to fully understand the implications of the revised level changes.” [RD27]</p>	<p>The Landscape and Habitat Management Strategy (Application Reference Number: 8.16) (incorporating information from the former LEMP) has been updated in accordance with the revised building platform levels, including revised contours and cross sections. Chapter D10 (Application Reference Number: 6.4.10) includes a series of photomontage views in order to illustrate the effect of the Power Station within the landscape from representative viewpoints.</p>
<p>“The height of the heavy lifting crane during construction would be +250m high: We consider the 15km study area set out in the 2016 Scoping report is adequate in order to identify potential significant visual effects of a structure in the order of 250m high. Snowdonia National Park lies at considerable greater distance and we do not anticipate significant visual effects upon this designated landscape. Accordingly, Snowdonia is not included within the scope of the EIA.” [RD27]</p>	<p>No action required. The 15km study area has been used.</p>
<p>“We note the Associated Development off-site works comprising Park and Ride facility at</p>	<p>The assessment of effects on the AONB in chapters F10 (Application Reference Number: 6.6.10), G10 (Application</p>

Key issue raised	Action taken
<p>Dalar Hir, the Logistics Centre and the A5025 Off-line Highway Improvements are now included within the DCO. These sites in the main lie within local landscapes. The Parc Cybi site associated with the Logistics Centre is however located within the Ynys Mon/Anglesey AONB and the A5025 Off-line Highway Improvement borders the AONB in some locations. Aspects relevant to the AONB are scoped sufficiently in Section 10.2.2 (Potential Environmental Effects and Mitigation) of the Addendum.” [RD27]</p>	<p>Reference Number: 6.7.10) and H10 (Application Reference Number: 6.8.10) has been undertaken with regard to section 10.2.2 of the Addendum to the March 2016 Scoping Report [RD27]. This includes the effects on views and scenic quality of the AONB.</p>
<p>“Paragraph 30 of the Addendum which discusses mitigation measures should also include reinstatement of stone walls referred to previously under paragraph 26.” [RD27]</p>	<p>Chapter D10 (Application Reference Number: 6.4.10), section 10.4 includes the reinstatement of stone walls as an embedded mitigation measure.</p>
<p>“we note and agree with the statement in section 10.3.1 that the Wales Coastal Path should be noted as a sensitive receptor in relation to landscape and visual effects.” [RD27]</p>	<p>The overall sensitivity of walkers using the WCP has been assessed as high in chapters D10 (Application Reference Number: 6.4.10) and G10 (Application Reference Number: 6.7.10).</p>
<p>“The Park and Ride constraints plan (figure C-1) includes ‘zone of theoretical visibility’ (ZTV) within the legend. It is unclear whether this refers to a ZTV for the Park and Ride because it shows areas within the Park and Ride site itself as not being visible and as chapter 10 paragraph 34 implies a ZTV is yet to be developed. Any figure(s) used to depict the ZTV should be clearly legible and inclusive of the entirety of the proposed development.” [RD28]</p>	<p>The ZTV in chapter F10 (Application Reference Number: 6.6.10) and shown on figure F10-1 (Application Reference Number: 6.6.38) is clearly legible and inclusive of the entirety of the proposed development.</p>
<p>“The Scoping Report addendum states that the maximum height of</p>	<p>Visual impacts on the mainland have been scoped out of chapter D10</p>

Key issue raised	Action taken
<p>the main very heavy lifting crane would be approximately +250m above ground level. This is stated to theoretically be visible from the mainland (Snowdonia mountain range) but visual impacts would be negligible. The SoS therefore assumes the Applicant is proposing to scope out this potential impact. Given the distance of the site from the mainland and on the basis that visual effects of the crane will be considered within the existing 15km study area, the SoS agrees that visual impacts on the mainland during construction can be scoped out.” [RD28]</p>	<p>(Application Reference Number: 6.4.10) assessment.</p>
<p>“The Scoping Report addendum states that the scope of the assessment for the off-site facilities remains unchanged. However, as stated within the 2016 Scoping Opinion, the SoS was unable to locate details of how potential landscape and visual impacts resulting from the off-site facilities (i.e. the AECC, ESL and MEEG) will be assessed. The assessment methodology for these works should therefore be discussed and agreed with the relevant bodies, and detailed within the Environmental Statement.” [RD28]</p>	<p>The assessment methodology for the Off-Site Power Station Facilities (MEEG, AECC and ESL) is consistent with the methodology for other DCO developments as agreed with the IACC and NRW and as set out in this chapter.</p>

10.3.4 In addition, the Wylfa Newydd Project: A5025 improvements EIA Scoping Report, and the subsequent Scoping Opinion for A5025 highway improvements between Valley and Cemaes by the IACC [RD29] inform the approach to the assessment presented in chapter G10 (Application Reference Number: 6.7.10) of this Environmental Statement. Table B10-5 provides an account of how comments raised by stakeholders in the Scoping Opinion for the A5025 highway improvements have been considered in the LVIA.

Table B10-5 Key issues raised through Scoping for the A5025 Highway Improvements

Key issue raised	Action taken
<p>“The council’s landscape section concur with the extent of the proposed ZTV at 3km from carriageway centre line and residential at 1km unless the potential for significant effects are identified beyond this distance. The LVIA should also demonstrate how it has informed the road layout, landscape proposals and any mitigation of effects.” [RD29]</p>	<p>An iterative design process has been followed throughout and this is discussed in chapter G2 (alternatives and design evolution) (Application Reference Number: 6.7.2) and appendix G10-9 (A5025 Landscape Scheme) (Application Reference Number: 6.7.41) of this Environmental Statement.</p>
<p>“The council’s landscape section concurs that no seascape assessment is required due to the limited extent of potential visibility of the A5025 proposals from these locations.” [RD29]</p>	<p>Comment noted.</p>
<p>“As stated in paragraph 10.1.4 of the Scoping Report all viewpoints for assessment from sensitive receptors will be agreed in writing with the IACC planning service in conjunction with NRW.” [RD29]</p>	<p>The IACC and NRW have been consulted on viewpoint locations (correspondence sent 23rd February 2015). Both organisations responded in writing to agree the chosen viewpoints and to request additional viewpoints. These requests have been acted on and the additional viewpoints have been included in the assessment in chapter G10 (Application Reference Number: 6.7.10) of this Environmental Statement.</p>
<p>“Details of any proposed mitigation measures to prevent reduce or offset any adverse effects to landscape character and visual amenity, to include consideration of visual screening and landscaping, should be provided. Details of the likely effectiveness of any proposed mitigation measures, which should include outline planting plans and arrangements for future</p>	<p>A Landscape Scheme has been prepared in line with the <i>Design Manual for Roads and Bridges Volume 10</i> [RD30]. The Landscape Scheme, included in volume 3 of the Design and Access Statement for the A5025 Off-line Highway Improvements (Application Reference Number 8.2.3) (refer to figures G1-5a to G1-5j, Application Reference Number 6.7.48), is a set</p>

Key issue raised	Action taken
<p>management, should also be provided. Consideration should also be given to opportunities to enhance the landscape character.” [RD29]</p>	<p>of drawings illustrating the embedded landscape mitigation measures along the A5025 Off-line Highway Improvements. Details of seeding and planting mixes and a brief specification for implementation and management have been provided in appendix G10-9 (Application Reference Number: 6.7.41), summarised in volume 3 of the Design and Access Statement for the A5025 Off-line Highway Improvements (Application Reference Number 8.2.3).</p>
<p>“The applicant is referred to the [Isle of Anglesey] AONB Management Plan 2009-2014 and the Anglesey AONB Management Plan Review 2015-2019. The applicant is advised to consult with the council’s AONB officer as regards the AONB Management Plan. The scope of the Environmental Statement should include an understanding of the key qualities of this part of the [Isle of Anglesey] AONB and an assessment of significant effects on all the policy elements in ...the AONB Management Plan. As such there will be crossover with other topic areas in the Environmental Statement which should be clearly explained. It is suggested that this could usefully be demonstrated in a matrix.” [RD29]</p>	<p>The LVIA in chapter G10 (Application Reference Number: 6.7.10) of the Environmental Statement considers the effects of the A5025 Off-line Highway Improvements on the landscape character of the Isle of Anglesey AONB, in particular with regard to the conservation and enhancement of the AONB’s natural beauty. Chapter G12 (combined topic effects) (Application Reference Number: 6.7.12) discusses the special qualities of the AONB and the potential combined effect on the AONB. The design approach for the Landscape Scheme in volume 3 of the Design and Access Statement for the A5025 Off-line Highway Improvements (Application Reference Number 8.2.3) (refer to figures G1-5a to G1-5j, Application Number Reference 6.7.48), was to minimise adverse effects on the Isle of Anglesey AONB and enhance its special qualities where possible. Whilst the AONB officer has not been specifically consulted on the AONB management plan, stakeholder consultation has been</p>

Key issue raised	Action taken
	undertaken with NRW's landscape representative on issues of LVIA.
<p>“In addition, the Environmental Statement should include consideration of the planning policy considerations in relation to the [Isle of Anglesey] AONB designation, being to conserve and enhance the natural beauty of the designated area.” [RD29]</p>	<p>The extent to which the A5025 Off-line Highway Improvements would conserve or enhance the natural beauty of the Isle of Anglesey AONB is considered as part of the LVIA within chapter G10 (Application Reference Number: 6.7.10) of this Environmental Statement.</p>
<p>“In relation to the SLA the applicant is also referred to the enclosed comments from the council’s landscape section. The Environmental Statement should include an assessment of significant effects on the SLA and in particular on landscape character and relevant Aspect Areas as defined by LANDMAP.” [RD29]</p>	<p>Effects on the Mynydd Mechell and Surrounds SLA as well as the non-designated wider landscape are considered in chapter G10 (Application Reference Number: 6.7.10). The development-level landscape character study, which identifies smaller character areas within the non-designated wider landscape has been informed by LANDMAP aspect area data.</p>
<p>“All Public Rights of Way [PRoWs] which have the potential to be affected within the vicinity of the A5025 will need to be identified and assessed. As indicated in the section on the AONB, public footpaths are an example of where there is likely to be crossover in terms of the provisions of the [Isle of Anglesey] AONB Management Plan.” [RD29]</p>	<p>Effects on views of users of PRoWs within 1km of the A5025 Off-line Highway Improvements have been assessed in chapter G10 (Application Reference Number: 6.7.10) of this Environmental Statement. The scoping process identified that the most significant effects are likely to occur within this distance.</p> <p>Effects on users of PRoWs have also been considered in chapter G4 (public access and recreation) (Application Reference Number: 6.7.4), and as one of the AONB special qualities in chapter G12 (Application Number Reference 6.7.12)</p>
<p>“The council’s landscape section indicates that there are likely to be</p>	<p>Effects on landscape elements and boundary features have been</p>

Key issue raised	Action taken
<p>significant effects on existing hedges, 'cloddiau' and trees and these details should be included within the scope of the assessment as detailed. ...there are likely to be crossover issues in relation to the [Isle of Anglesey] AONB Management Plan or any revision thereof, but also on ecological and historic grounds. It is accordingly suggested that a matrix is used in the Environmental Statement to demonstrate these matters." [RD29]</p>	<p>considered as part of the overall assessment of effects on landscape character within chapter G10 (Application Reference Number: 6.7.10) of this Environmental Statement. Chapter G10 (Application Reference Number: 6.7.10) contains a description of where hedgerows, stone walls, earth banks (cloddiau) and fences require removal for each section of the A5025 Off-line Highway Improvements within the assessment of effects on landscape character.</p> <p>The effects on ecology and cultural heritage are considered in chapters G9 (terrestrial and freshwater ecology) (Application Reference Number: 6.7.9) and G11 (Application Reference Number: 6.7.11), and as AONB special qualities in chapter G12 (Application Number Reference 6.7.12)</p>
<p>"As detailed in the comments of the council's landscape section Carreglwyd Registered Park and Garden lies approximately 300m to the west of the A5025 near Llanfaethlu and Cestyll Garden lies approximately 1km to the north-west of the A5025 near Cemaes. One of the Significant Views at Carreglwyd from the old telegraph station on a rocky ridge is described in the register as a superb view in all directions. It is likely that the view encompasses the A5025 and as such impacts of the construction and operational phases should be considered on this significant view. These designations are also considered in the Cadw response of</p>	<p>Effects on the Significant View from the telegraph station at Carreglwyd have been considered in chapter G10 (Application Reference Number: 6.7.10) of this Environmental Statement.</p>

Key issue raised	Action taken
<p>July 2015.” [RD29]</p> <p>“A visual impact assessment for the construction and operational phases will be required taking into account all likely viewpoints as defined by a visual envelope and bare earth study, followed by consideration of how built development and vegetation may reduce the impact.” [RD29]</p>	<p>A ZTV has been produced for the A5025 Off-line Highway Improvements. Key screening features have been marked on the ZTV and viewpoints selected with reference to the ZTV. This has been reflected in the figures for chapter G10 (Application Reference Number: 6.7.10) (refer to volume G figure booklet, Application Reference Number: 6.7.48).</p>
<p>“The visual impact assessment should include the provision of visualisations, to include photomontages, the number and location of which should be agreed in writing with the local planning authority.” [RD29]</p>	<p>Photomontages are presented in appendix G10-8 (A5025 photomontage views) (Application Reference Number: 6.7.40) of this Environmental Statement. Consultation meetings were held in March 2016 to discuss photomontage locations. The number and location of photomontages was confirmed in writing in a memo to the IACC in June 2016. Further photomontages were then requested by the IACC. These requests have been taken into consideration where relevant in chapter G10 (Application Reference Number: 6.7.10).</p>
<p>“A residential visual amenity assessment should also be undertaken to consider potential effects on residential properties fronting the A5025 where works are proposed. This should consider construction and operational effects.” [RD29]</p>	<p>Visual effects from individual private residential properties have been assessed for the A5025 Off-line Highway Improvements in chapter G10 (Application Reference Number: 6.7.10), in accordance with IAN 135/10 (W) [RD20] guidance. This has been carried out within a 1km study area as during the scoping process and subsequent site appraisal work, it was identified that the greatest potential for effects to occur was</p>

Key issue raised	Action taken
<p>“As stated in the Scoping report, the A5025 is within close proximity to the Anglesey Area of Outstanding Natural Beauty (AONB) along its length, and borders the AONB in some locations. We remind you of your Authority’s duty under Section 85 of the Countryside and Rights of Way Act 2000 which requires public bodies to have regard to the purposes of conserving and enhancing the natural beauty of the AONB. The statutory purposes of Areas of Outstanding Natural Beauty are conservation and enhancement of natural beauty.</p> <p>We note the proposed assessment methodology outlined in section 10.3 of the report. We advise that you liaise with your internal landscape officer for further advice on the methodology proposed, including selection of appropriate viewpoints in relation to the AONB”. [RD27]</p>	<p>within a 1km area surrounding the A5025.</p> <p>The methodology for the LVIA has been agreed with the landscape officers at the IACC and NRW. The selection of appropriate viewpoints for the visual impact assessment has been informed by discussions and feedback received from the IACC and NRW.</p>

Statutory consultation

Pre-Application Consultation Stage One

10.3.5 The aim of Pre-Application Consultation Stage One, undertaken in late 2014, was to share information available at the time with Horizon’s key consultees and stakeholders, in order to consider feedback in ongoing design development. Table B10-6 outlines how key issues raised during Pre-Application Consultation Stage One have been considered in the assessment.

Table B10-6 Key issues raised during Pre-Application Consultation Stage One

Key issue raised	Action taken
<p>Respondents found summaries of the main survey findings for each environmental topic area brief and noted that more detailed information is required to enable further, more</p>	<p>Preliminary information only was provided for Pre-Application Consultation Stage One; this Environmental Statement sets out the landscape and visual baseline</p>

Key issue raised	Action taken
detailed comments on likely effects identified and the acceptability of proposed mitigation.	conditions in further detail.

Pre-Application Consultation Stage Two

10.3.6 In September 2016, Horizon shared a Preliminary Environmental Information Report as part of Pre-Application Consultation Stage Two. This presented preliminary details of the predicted environmental effects and mitigation measures for any adverse effects identified. Table B10-7 outlines how key issues raised during Pre-Application Consultation Stage Two have been considered in the assessment.

Table B10-7 Key issues raised during Pre-Application Consultation Stage Two

Key issue raised	Action taken
The IACC commented on the study area and adequacy of information to undertake the assessment of effects of lighting (requesting that the assessment of night time effects should be made available). The IACC also commented on the quality of photomontages, uncertainty relating to the design, mitigation related to the Isle of Anglesey AONB, North Anglesey Heritage Coast and Cestyll Garden, and disagreement with some of the findings in the Preliminary Environmental Information Report.	<p>A stakeholder engagement meeting with the IACC and NRW was held to explain the proposed approach to landscape mitigation and lighting mitigation for all DCO developments.</p> <p>An assessment of night-time visual effects is included in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement, within a study area considered proportionate to the potential for significant effects.</p> <p>The preliminary photomontages have been updated and included in appendix D10-8 (photomontage views) (Application Reference Number: 6.4.65).</p> <p>The assessment presented in chapter D10 (Application Reference Number: 6.4.10) has been updated to reflect the updated Wylfa Newydd Project design.</p> <p>The illustrative landscape proposal figures in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) have been refined in line with the comments received from IACC.</p>
NRW requested further detail regarding the baseline landscape character of the Isle of Anglesey	As agreed with NRW during a meeting on 1 April 2016, the assessment of effects on the landscape character of the Isle of

Key issue raised	Action taken
<p>AONB and that it be made clear which viewpoints are located within the AONB. Landscape character, special qualities, perceptions of tranquillity, remoteness and wildness should all be included in the assessment of effects on the Isle of Anglesey AONB.</p> <p>NRW sought clarification regarding assessment of effects on the Dame Sylvia Crowe landscape design and the landscape value of this area.</p> <p>NRW commented on the design of the breakwater for the Marine Off-Loading Facility (MOLF) and considerations for further design development, emphasised the importance of use of recessive colours for buildings, suggested guidance for reducing effects of lighting and whether off-site mitigation could be appropriate, particularly in relation to the Isle of Anglesey AONB.</p>	<p>Anglesey AONB has been based upon published sources of landscape and seascape character, which have undergone a level of public scrutiny, as well as having regard to the special qualities of the AONB. The visual effects schedules appended to this Environmental Statement (see appendices D10-7, Application Reference Number: 6.4.64; E10-3, Application Reference Number: 6.5.21; G10-4, Application Reference Number: 6.7.36; and H10-3, Application Reference Number: 6.8.23) clearly state which viewpoints are located within the Isle of Anglesey AONB.</p> <p>The assessment of effects on the Dame Sylvia Crowe landscape design including the landscape value of this area has been incorporated into chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement.</p> <p>Sensitive design treatment of the MOLF breakwater is included as an additional mitigation measure in chapter D10 (Application Reference Number: 6.4.10).</p> <p>Off-site landscape mitigation for the Wylfa Newydd Power Station is not considered practicable because screening elements are likely to be most effective closest to the development, where it is possible to provide mitigation for a range of views, as opposed to a single viewpoint or limited geographical area were remote screening to be provided off-site.</p>
<p>The National Trust commented on the quality of photomontages, locations and directions of views considered, in particular in relation to Porth-y-pistyll, effects on National Trust owned land and the importance of considering colour and material palettes for the Wylfa</p>	<p>The preliminary photomontages have been updated and included in appendix D10-8 (Application Reference Number: 6.4.65) of this Environmental Statement, including a revised viewpoint from Cestyll Garden looking across Porth-y-pistyll.</p> <p>This Environmental Statement includes further detail regarding the Wylfa Newydd</p>

Key issue raised	Action taken
Newydd Power Station.	<p>Development Area, including refined photomontages in appendix D10-8 (Application Reference Number: 6.4.65). A project-level local landscape and seascape character study is presented in appendix D10-3 (Application Reference Number 6.4.60). Effects on local landscape and seascape character are assessed in greater detail in chapter D10 (Application Reference Number: 6.4.10) and appendix D10-6 (landscape effects schedule) (Application Reference Number: 6.4.63), than in the assessment which was included in the Pre-Application Consultation Stage Two Preliminary Environmental Information Report. This includes effects on land within National Trust ownership within 1km of the Wylfa Newydd Development Area.</p> <p>The broad principles for architectural treatment to mitigate landscape effects are outlined in appendix D11-8 (Application Reference Number: 6.4.79).</p>
Respondents drew attention to areas not designated as an AONB, but that are locally valued. With regard to the Wylfa Newydd Development Area, concerns regarding the visual effect of fencing in close proximity to properties was raised. Comments from respondents in relation to environmental mitigation included effects related to light pollution and on night skies, as well as planting more trees and consideration of optimising the landscape mounding to provide visual screening.	<p>Outside of the designated AONB and SLAs, an assessment has been made of the potential effects on the landscape character of the non-designated wider landscape. The assessment of landscape value reflects both the designation of these landscapes, and/or other aspects, such as scenic quality, rarity, representativeness, conservation interest, recreational value, tranquillity or cultural associations. The illustrative landscape proposal figures in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) for the Wylfa Newydd Development Area has also been further refined, including fence alignments, landscape mounding, and woodland planting.</p> <p>Mitigation measures to reduce the effects of lighting on night skies are included in</p>

Key issue raised	Action taken
	chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement.
Respondents commented on the level of information provided about the long-term plans for the buildings for Parc Cybi.	Further detail regarding long-term buildings at Parc Cybi is provided in chapter H10 (Application Reference Number: 6.8.10) of this Environmental Statement.
Respondents commented on the visual effects of the Off-Site Power Station Facilities in relation to local residents as well as tourists travelling along the A5025.	The assessment of visual effects of the Off-Site Power Station Facilities has been revised, considering the comments received from respondents, as presented in chapter E10 (Application Reference Number: 6.5.10) of this Environmental Statement.
In relation to the A5025 Highway Improvements, NRW made suggestions for landscape mitigation for section 5 at Llanfaethlu, to include reinstatement of dry stone walls along the road corridor as well as possible tree planting. NRW also recommended measures to minimise adverse night-time effects associated with lighting of key junctions and roundabouts, especially in relation to the tranquillity of the Isle of Anglesey AONB.	The design has been refined so that section 5 of the Off-line Highway Improvements no longer encroach into the Isle of Anglesey AONB and the existing stone wall boundary along the edge of the AONB would be retained. Further stone walls and planting have been proposed as part of the mitigation for section 5 to help mitigate the effects on the Isle of Anglesey AONB and integrate the road into the landscape. This information has been illustrated on the Landscape Scheme (refer to figures G1-5a to G1-5j, Application Number Reference 6.7.48), included in volume 3 of the Design and Access Statement for the A5025 Highway Off-line Improvements (Application Reference Number 8.2.3). Lighting along the A5025 Off-line Highway Improvements has only been proposed at the new roundabout at Valley and along a 105m length of road adjacent to the new roundabout.

Pre-Application Consultation Stage Three

10.3.7 Table B10-8 outlines how key issues raised during Pre-Application Consultation Stage Three have been considered in the assessment.

Table B10-8 Key issues raised during Pre-Application Consultation Stage Three

Key issue raised	Action taken
The IACC commented that colour choices for the Power Station buildings need to be carefully considered	The architectural treatment of all proposed buildings will be considered in ongoing design development. The broad principles for architectural treatment to mitigate landscape effects are outlined in appendix D11-8 (Application Reference Number: 6.4.79) of the Environmental Statement.
The IACC commented that the bund shown on the LEMP reference points 3 and 4 alongside Tregele is very narrow and would not be very high. Also, it is not shown with any tree planting on it.	The proposed bund alongside Tregele during construction would be 7m high and would substantially screen views of construction activities taking place on the laydown area behind. A balance needs to be struck between on the one hand, providing adequate screening and on the other, avoiding an overbearing structure close to residential properties. The outer face of the bund would be planted early during construction gradually increasing the degree of screening provided. Once established, planting would effectively mask the steepness of this bund.
The IACC expressed the view that the seascape, landscape and visual impact assessment of the Site Campus should be undertaken as a separate assessment from that of the Power Station.	Chapter D10 (Application Reference Number: 6.4.10) of the Environmental Statement considers the landscape and visual effects of the construction, operation and decommissioning phases of the Site Campus, including the effects on seascape character. The effects of the Site Campus are considered in conjunction with the concurrent Power Station construction activities, in order to provide an assessment of the full effects of construction.
The IACC commented that increased platform heights could	Chapter D10 (Application Reference Number: 6.4.10) of the Environmental

Key issue raised	Action taken
increase the heights of buildings and structures relative to the surrounding area which could make a material difference to the appearance and predicted effects of these buildings and structures on seascape, landscape, and visual amenity and heritage assets.	Statement provides an LVIA of proposed buildings and structures on sensitive receptors with regard to parameters, which detail maximum heights of proposed buildings and landscape mounds.
The IACC commented that effective and complete decommissioning that returns the landscape affected by the temporary Site Campus, to its existing character would be essential.	Decommissioning of the Site Campus would restore the landscape within its footprint to a similar condition to that which existed prior to construction, in keeping with existing landscape and seascape character.
The IACC requested a LEMP for the Dalar Hir Park and Ride.	A landscape masterplan for the Park and Ride with details of the landscape mitigation and access proposals is provided in volume 3 of the Design and Access Statement for the Park and Ride (Application Reference Number 8.2.3).
<p>NRW requested further information on:</p> <ul style="list-style-type: none"> the colour strategy for the Power Station; and the break water and its visual effect upon the character of Porth-y-pistyll, seascape and AONB special qualities. 	<p>The broad principles for architectural treatment to mitigate landscape effects are outlined in appendix D11-8 (Application Reference Number: 6.4.79) of the Environmental Statement and is the subject of ongoing design development.</p> <p>Effects on the AONB and local seascape character are assessed in chapter D10 (Application Reference Number: 6.4.10) and appendix D10-6 (Application Reference Number: 6.4.63).</p>
NRW commented that little reference was made specifically to the effects on the AONB special qualities.	The effects on the special qualities of the AONB, which include a range of environmental effects, are considered in the combined topic effects chapters of the Environmental Statement, including chapter D16 (Application Reference Number: 6.4.16) and G12 (Application

Key issue raised	Action taken
	Reference Number: 6.7.12).
NRW commented that in order to fully assess the magnitude of change and residual effect of the MOLF and breakwaters, the Environmental Statement should include photomontage images of the proposed breakwaters from AONB viewpoints.	Appendix D10-8 (Application Reference Number: 6.4.65) provides a series of photomontage views of the Power Station, including the MOLF and breakwaters. Representative viewpoints 26 and 27 provide visualisations from near Cerrig Brith and Porth-y-pistyll within the AONB.
The National Trust requested further detail on the landscape and visual aspects of construction, including cranes and concrete batching plant to help understand the potential impacts.	Chapter D10 (Application Reference Number: 6.4.10) of the Environmental Statement (landscape and visual) provides an assessment of construction effects including the effect of tower cranes and super heavy lift cranes. Indicative illustrations of the type of cranes likely to be used on the Wylfa Newydd Development Area are provided in Appendix D1-1 (Construction Method Statement) (Application Reference Number: 6.4.17) of this Environmental Statement.
The National Trust commented that the LEMP is a critical component of mitigating the project during construction and operation but that there was little detail.	Further detail of proposed mitigation is shown in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) (incorporating information from the former LEMP) illustrative landscape proposal figures, indicatively showing the main sequence of development. The proposed landscape mounding and planting is shown in a series of photomontages, included in appendix D10-8 (Application Reference Number: 6.4.65) of the Environmental Statement.
The National Trust commented that the environmental impacts of bringing forward and then removing	Chapter D10 (Application Reference Number: 6.4.10) of the Environmental Statement provides an assessment

Key issue raised	Action taken
the temporary causeway, used to construct the MOLF western breakwater, remained unaddressed.	of landscape and visual effects of the temporary causeway and sets out the proposed mitigation measures.
North Wales Wildlife Trust commented that there was little information on the LEMP and that cross sections should be provided to help interpret the proposals.	Further detail of proposed mitigation is shown in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) (incorporating information from the former LEMP) illustrative landscape proposal figures, indicatively showing the main sequence of development. Cross sections are also provided in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16). The proposed landscape mounding and planting is shown in a series of photomontages, included in appendix D10-8 (Application Reference Number: 6.4.65) of the Environmental Statement.
The Woodland Trust commented that the Welsh Assembly has recognised that areas of ancient woodland are declining and becoming increasingly fragmented and emphasises the importance of conserving ancient woodland and its value as a biodiversity resource through the publication of Planning Policy Wales.	It is proposed that one of the ancient woodland areas within the Wylfa Newydd Development Area be retained (adjacent to Tre'r Gof Site of Special Scientific Interest). Retention of the other two ancient woodland areas is not practical given their relatively central location on the Wylfa Newydd Development Area. The effects on ancient woodland are considered in the terrestrial and freshwater ecology chapter D9 (Application Reference Number: 6.4.9) of the Environmental Statement.

Consultation on Additional Land

10.3.8 In February 2018, Horizon undertook consultation on additional land that had not been consulted on previously. The additional land was required to:

- accommodate proposals to create or enhance wetland sites across Anglesey as Ecological Compensation Sites;
- create two new ecological mitigation areas, and minor changes to the connection to the national grid at the Wylfa Newydd Development Area; and
- update the order limits for the A5025 Off-Line Highway Improvements, and minor refinements to the boundaries of the Off-Site Power Station Facilities and Logistics Centre.

10.3.9 The feedback from the consultation has been reviewed. The Tre'r Gof SSSI Compensation Proposal (Appendix D9-24, Application Document Reference: 6.4.9) discusses opportunities for landscape bunds and tree planting. The inclusion and design of such peripheral features, as well as creation/management of other habitats around the existing/proposed fen would be determined as part of detailed design development (as secured by DCO Requirement) in consultation with the Tre'r Gof SSSI Compensation Technical Advisory Group and in accordance with the design and management principles set out in the Landscape and Habitat Management Strategy (Application Document Reference: 8.16).

10.3.10 Appendix D1-2 (Application Document Reference: 6.4.1) includes an assessment of landscape and visual effects at the Ecological Compensation Sites.

Non-statutory consultation

EIA Progress Report

10.3.11 An EIA Progress Report was provided to the IACC and NRW in 2016 with updated information on the design development and associated environmental assessment. Table B10-9 outlines how key issues raised in feedback from these stakeholders have been considered in the assessment.

Table B10-9 Key issues raised in response to the EIA Progress Report

Key issue raised	Action taken
NRW sought clarity regarding landscape receptors to be included in the assessment and commented on the project-level local landscape and seascape character study, including the need for concise descriptions of areas. They also made comments on the criteria and assessment of value and susceptibility and overall sensitivity, suggesting that reference should be	The project-level local landscape and seascape character study for the Power Station is presented in appendix D10-3 (Application Reference Number 6.4.60) along with a statement regarding the value of each area, which includes reference to designations as well as the value of LANDMAP visual and sensory aspect areas [RD9]. The susceptibility of each area is

Key issue raised	Action taken
made to the LANDMAP overall evaluations in relation to determining value of LCAs.	considered separately under the section on assessment of effects in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement. The criteria that have been used to determine value, susceptibility and overall sensitivity for landscape receptors are presented in table B10-14.
NRW commented on the LEMP, including suggested inclusion of woodland planting, a statement on reinstatement of field boundaries, the use of native, indigenous plant and grass species, and reinstatement of the Wales Coast Path. Clarity regarding the visual appearance of the Wylfa Newydd Development Area and mitigation design during the different assessment stages in views from the Isle of Anglesey AONB was requested.	The Landscape and Habitat Management Strategy (Application Reference Number: 8.16) (incorporating information from the former LEMP) has been refined to respond to comments from stakeholders, providing an indication of the condition of the Wylfa Newydd Development Area during the different assessment stages. Photomontages are included in appendix D10-8 (Application Reference Number: 6.4.65), illustrating the effect of mitigation during the first year and 15 years into operation of the Wylfa Newydd Power Station. This includes selected viewpoints from within the Isle of Anglesey AONB. Proposals for reinstatement of field boundaries and use of appropriate species for landscape mitigation are set out in chapter D10 (Application Reference Number: 6.4.10).
NRW requested an assessment of night-time effects on visitors within the Isle of Anglesey AONB.	An assessment of night-time visual effects is included in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement. This includes an assessment of effects on viewpoints within the AONB.

Draft Environmental Statement

10.3.12 During September 2017, draft Environmental Statement chapters were provided to statutory and key non-statutory stakeholders, including chapter D10 (Application Reference Number: 6.4.10). Table B10-10 outlines key issues raised by these stakeholders and how these have been addressed within the Environmental Statement.

Table B10-10 Key issues raised in response to the Draft Environmental Statement

Key issue raised	Action taken
<p>NRW commented that they consider the LEMP to be “<i>an essential component, demonstrating the full range and appropriateness of landscape and seascapes integration proposals.</i>” NRW requested information on the breakwater and descriptions of the integrating colour scheme, design intent for the proposed Power Station, and the restoration proposals for the site cleared of the Site Campus.</p>	<p>The LEMP has been replaced by the Landscape and Habitat Management Strategy (Application Reference Number: 8.16). Design principles, such as material, colour and finishes of Power Station buildings and structures, as well as the breakwaters and landscape restoration proposals following removal of the Site Campus is set out in volume 2 of the Design and Access Statement (Application Reference Number: 8.2.2).</p>
<p>NRW welcomed “<i>the proposal to develop a colour scheme to help improve landscape integration</i>”, considering that this “<i>would make a positive difference to the development</i>”. It was also noted that the colour scheme “<i>has been factored into the visual impact assessment as mitigation to reduce visual effects on visual receptors at operation winter year [1] and summer year 15</i>”. However, NRW expressed the opinion that in some cases “<i>the development would remain a more visible feature of the landscape</i>” than had been assessed in the draft Environmental Statement.</p>	<p>Since the September 2017 draft Environmental Statement, the visual impact assessment has been updated to take account of design changes and the project parameters, noting the comments made by NRW.</p>
<p>NRW requested certainty that materials used for the breakwater and the proposed colour scheme for the Power Station provide effective mitigation, citing the varied and bespoke nature of the Existing Power Station as an example.</p>	<p>Additional mitigation measures are set out in volume 2 of the Design and Access Statement (Application Reference Number: 8.2.2) and Wylfa Newydd Code of Operational Practice (CoOP) (Application Reference Number: 8.13). Compliance with these</p>

Key issue raised	Action taken
<p>NRW commented that “<i>information on night time lighting and measures to minimise effects on night time tranquillity are required.</i>” They also advised that in their opinion “<i>night time lighting within the Institution of Lighting Professionals Environmental - Zone E2 Rural can be quite broad in its actual night time effect and perception of development within a rural context... [and] therefore recommend a design approach to minimising lighting effects.</i>”</p>	<p>documents will be secured through a DCO requirement.</p> <p>Good practice mitigation listed in chapter D10 (Application Reference Number: 6.4.10) makes provision for control of light spill. Additional mitigation includes the requirement for lighting to be designed to reduce light spill onto sensitive receptors to below thresholds where significant effects are predicted where practicable. These measures are set out in the Main Power Station Site sub-CoCP (Application Reference Number: 8.7) and Wylfa Newydd CoOP (Application Reference Number: 8.13).</p>

Topic-specific stakeholder engagement

10.3.13 In addition to the three formal stages of consultation outlined above, topic-specific consultation has been undertaken with relevant stakeholders. Table B10-11 summarises the details of the consultation that has taken place with respect to the LVIA.

10.3.14 Table B10-12 summarises the details of the consultation that has taken place with respect to the LVIA for the A5025 Off-line Highway Improvements separately.

Table B10-11 **Summary of topic specific consultation**

Date	Stakeholder	Title and format	Issues arising	Action taken
Wylfa Newydd Development Area				
22 January 2015	NRW and the IACC	Wylfa Newydd: Landscape and Seascapes Character Assessment and Assessment of Visual Effects on Residential Receptors Meeting	<p>Discussion of proposed outline methodology for landscape and visual baseline studies and assessment, including:</p> <ul style="list-style-type: none"> • definition and extent of study area; • preparation of a local landscape and seascapes character study, to supplement existing published sources; • selection of representative viewpoints to use as a basis for the visual impact assessment and location of viewpoints for photomontage preparation; • night-time visual impact assessment; and • assessment of views from residential properties. 	<p>Further to the meeting:</p> <ul style="list-style-type: none"> • in order to inform the definition of the study area, ZTVs have been produced for different assessment stages, including Site Preparation and Clearance, Main Construction and operation year 1 and year 15; • the methodology for the project-level local landscape and seascapes character study has been refined based upon comments received from NRW and the IACC following the meeting, as set out in appendix D10-3 (Application Reference Number 6.4.60) of this ES; • offshore viewpoints have been included in appendices D10-4 (representative viewpoints) (Application Reference Number: 6.4.61) and D10-5 (illustrative viewpoints) (Application Reference Number: 6.4.62), much of the viewpoint photography has been updated and the presentation of viewpoint

Date	Stakeholder	Title and format	Issues arising	Action taken
				<p>photography has been refined in response to comments;</p> <ul style="list-style-type: none"> an assessment of night-time visual effects is included in chapter D10 (Application Reference Number: 6.4.10); and an assessment of effects on residential views is included in chapter G10 (Application Reference Number: 6.7.10), while chapters D10 (Application Reference Number: 6.4.10), E10 (Application Reference Number: 6.5.10), F10 (Application Reference Number: 6.6.10) and H10 (Application Reference Number: 6.8.10) include an assessment of effects on the visual amenity of communities.
1 April 2016	NRW and the IACC	Landscape and Visual Impact Assessment Methodology Meeting	Meeting to agree the proposed assessment methodology for the DCO LVIA and selection of viewpoints for the visual impact assessment.	<p>Further to the meeting:</p> <ul style="list-style-type: none"> the methodology presented in this chapter has been updated in response to comments made during the meeting; and as suggested by IACC, the assessment in chapter D10 (Application Reference Number: 6.4.10) of this Environmental Statement of effects on local

Date	Stakeholder	Title and format	Issues arising	Action taken
				landscape character has been based on character areas identified in the project-level landscape and seascape character study, whilst wider assessment of character for landscape designations has been based on the assessment of published sources.
21 June 2016	NRW, the IACC, and the National Trust.	LEMP Meeting	Meeting to provide an update on development of the LEMP (information from which is now incorporated in the Landscape and Habitat Management Strategy) (Application Reference Number: 8.16) for Pre-Application Consultation Stage Two, including key design principles, proposed planting and how the proposals would appear.	Feedback provided during the meeting has been taken into consideration in further development of the illustrative landscape proposal figures in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) (incorporating information from the former LEMP) since Pre-Application Consultation Stage Two.
16 July 2016	NRW and the IACC	LEMP Meeting	Presentation and discussion of the sequencing of main construction, including excavation and landscape mounding and the final site restoration for operation of the Wylfa Newydd Power Station.	Feedback provided during the meeting has been taken into consideration in further development of the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) (incorporating information from the former LEMP) since Pre-Application Consultation Stage Two.
21	The	Update Meeting	Presentation and discussion on the	Feedback provided during the

Date	Stakeholder	Title and format	Issues arising	Action taken
September 2016	National Trust		draft LEMP (information from which is now incorporated in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16)) phasing plans and on EIA work undertaken to date, including LVIA.	meeting has been taken into consideration in further development of the illustrative landscape proposal figures in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) (incorporating information from the former LEMP) since Pre-Application Consultation Stage Two and LVIA included in chapter D10 (Application Reference Number: 6.4.10).
Off-Site Power Station Facilities				
July 2016	IACC and NRW	Letter including photomontage viewpoint plans to agree locations.	IACC and NRW responded to the letter by requesting further information on the design.	Follow up site meeting took place in August 2016 (refer below) to confirm locations of photomontage viewpoints. Pre-Application Consultation Stage Three provides an update on the design.
24 August 2016	IACC and NRW	Site visit and meeting	Site visit to discuss photomontage/ viewpoint plans. Methodology of assessment briefly discussed.	Minor amendments made to viewpoints to respond to comments and included in this Environmental Statement.
Park and Ride				
July 2016	IACC and NRW	Letter including photomontage viewpoint plans to agree locations	IACC and NRW responded to the letter by requesting further information on the design.	Follow up site meeting took place in August 2016 (see below) to confirm locations.

Date	Stakeholder	Title and format	Issues arising	Action taken
24 August 2016	IACC and NRW	Site visit and meeting	Discussion of the photomontage/viewpoints to consider views for travellers along the A5/A55 corridor and Holyhead Road. The photomontage viewpoint was requested to be located at the new Park and Ride access point. Methodology of assessment briefly discussed.	New photomontage location agreed at the new Park and Ride access and included in this Environmental Statement in appendix F10-5 (photomontage viewpoints) (Application Reference Number: 6.6.31). Confirmation of agreed approach to viewpoint selection and methodology.
Logistics Centre				
No topic specific consultation has yet been undertaken for the Logistics Centre.	-	-	-	-

Table B10-12 Summary of A5025 topic specific consultation

Date	Stakeholder	Title and format	Issues arising	Action taken
22 January 2015	NRW and the IACC	Landscape and Seascape Character Assessment and Assessment of Visual Effects on Residential	Discussion of proposed outline A5025 methodology for landscape and visual baseline studies and assessment, including: <ul style="list-style-type: none"> definition of study areas; production of a detailed landscape 	Further to the meeting: <ul style="list-style-type: none"> an overarching study area of 3km was agreed along with a detailed study area of 1km, both of which are shown on the chapter G10 (Application Reference Number: 6.7.10)

Date	Stakeholder	Title and format	Issues arising	Action taken
		Receptors Meeting	<p>character study;</p> <ul style="list-style-type: none"> viewpoints for the assessment; night-time views; and seascape assessment. 	<p>figures of this Environmental Statement (refer to volume G figure booklet, Application Reference Number: 6.7.48);</p> <ul style="list-style-type: none"> greater information on the methodology for the detailed landscape assessment has been provided in appendix G10-1 (landscape baseline) (Application Reference Number: 6.7.33), as requested; consultation on viewpoints was carried out in February 2015 as requested; assessment of night-time views has been included in chapter G10 (Application Reference Number: 6.7.10), as agreed; and further clarification on why seascape character had been scoped out was provided in the Wylfa Newydd Project: A5025 Improvements EIA Scoping Report, as requested and this was subsequently accepted in the Scoping Opinion for A5025 highway improvements between Valley and Cemaes [RD29].
January	NRW and A5025	EIA	Greater clarity was requested on how	Greater clarity on the assessment of

Date	Stakeholder	Title and format	Issues arising	Action taken
2015	the IACC	Proposed Outline Methodology for Assessment of Landscape and Visual Effects Methodology sent out	to define value, particularly in designated and non-designated landscapes. Criteria were requested for significance of effect.	value and sensitivity has been provided within the methodology section of this chapter. Significance of effect criteria have been provided within the methodology section of this chapter for the A5025 Off-line Highway Improvements.
February 2015	NRW	Viewpoint location plans sent out for comment (60PO8008/LVE/DM/ 001 to 004)	A request was made to relocate viewpoint 5 (along Gorad Road near the Isle of Anglesey AONB) to more readily capture views from the AONB.	The viewpoint along Gorad Road has been relocated, as reflected in the chapter G10 (Application Reference Number: 6.7.10) figures of this Environmental Statement (refer to volume G figure booklet, Application Reference Number: 6.7.48).
February 2015	The IACC	Viewpoint location plans sent out for comment (60PO8008/LVE/DM/ 001 to 004)	Viewpoints were requested at Llynnon Mill, Mynydd Mechell SLA, Mynydd y Garn, along the Wales Coast Path, on PRoWs connecting villages to the Wales Coast Path and within the Isle of Anglesey AONB, at Scheduled Monuments with footpath links and at Valley cemetery.	Requested viewpoints have been included in the assessment in chapter G10 (Application Reference Number: 6.7.10) of this Environmental Statement.
January 2016 and 24 March 2016	The IACC	Photomontage location plans sent out for comment (60PO8033/LVE/DM/ 001 to 004)	A site meeting was requested by the IACC. Eight photomontage locations were confirmed for public views during the site meeting.	The confirmed photomontage locations have been included in appendix G10-8 (Application Reference Number: 6.7.40) of this Environmental statement, with the

Date	Stakeholder	Title and format	Issues arising	Action taken
		with subsequent site meeting		exception of one minor change at Valley due to a change in road alignment.
29 March 2016	NRW and the IACC	Landscape and visual meeting to discuss matters arising in the IACC's Scoping Opinion, and confirmation of photomontage locations	<p>Discussion of proposed LVIA methodology for the A5025 Off-line Highway Improvements, including:</p> <ul style="list-style-type: none"> • residential visual assessment; • community views; • boundary feature and vegetation loss; • provision of a landscape strategy; • recording where visual receptors scoped out; and • residential photomontage locations. 	<p>Further to the meeting:</p> <ul style="list-style-type: none"> • residential properties have been considered as part of the visual assessment in chapter G10 (Application Reference Number: 6.7.10) of this Environmental Statement, as agreed, as well as community views; • loss of boundary features and vegetation has been qualitatively assessed in chapter G10 (Application Reference Number: 6.7.10), whilst quantification is provided in the tree survey in appendix G10-7 (tree reports and Arboricultural impact assessment (x4)) (Application Reference Number: 6.7.39) and chapter G9 (Application Reference Number: 6.7.9); • a design approach and landscape strategy document is appended to volume G, in appendix G10-9 (Application Reference Number: 6.7.41); • the visual effects schedules in

Date	Stakeholder	Title and format	Issues arising	Action taken
				<p>appendix G10-4 (Application Reference Number: 6.7.36) provide information on visual receptors that have been scoped out; and</p> <ul style="list-style-type: none"> residential photomontage locations have been identified and confirmed in a memo (see below).
June 2016	The IACC	Memo confirming photomontage locations	Residential photomontage locations were confirmed. Suggestion of additional locations at Parc Llynnon and from heritage assets.	These requests have been taken into consideration where relevant in chapter G10 (Application Reference Number: 6.7.10).
June 2017	NRW and the IACC	Landscape mitigation meeting	Discussion of the embedded mitigation proposed for the A5025 Off-line Highway Improvements. No changes were requested from NRW or the IACC during the meeting.	No action required.

[This page is intentionally blank]

10.4 Topic-specific methodologies and assessment criteria

Introduction

10.4.1 The overarching approach to the EIA, including the approach to the assessment of cumulative effects, is provided in chapter B1 (introduction to the assessment process) (Application Reference Number: 6.2.1). This section outlines the specific methodology used to assess the landscape and visual effects of the Wylfa Newydd Project. It outlines the methods and criteria used to:

- define the study area and identify topic receptors;
- establish the environmental baseline for topic receptors; and
- determine the value/sensitivity of receptors, the magnitude of change and significance of effect.

10.4.2 The methodology used has been agreed through consultations with both IACC and NRW, and is in accordance with GLVIA3 [RD1] and other key guidance set out in table B10-3 above, which notes the relevance of Interim Advice Note 135/10 to the LVIA of the A5025 Off-line Highway Improvements.

Assessment of parameters

10.4.3 As outlined in chapter B1 (Application Reference Number: 6.2.1), the approach adopted for the design of the WNDA Development, Off-Site Power Station Facilities and Associated Development is to set parameters, where necessary, for the extent of the development and key aspects of that development. The final design and construction methodology would be limited to these parameters and limits of deviation. As these parameters and limits of deviation vary between the various developments in the Wylfa Newydd Project they are considered on a site specific basis in chapter 10 within volumes D (Application Reference Number: 6.4.10), E (Application Reference Number: 6.5.10), F (Application Reference Number: 6.6.10), G (Application Reference Number: 6.7.10) and H (Application Reference Number: 6.8.10).

Identification of study areas

10.4.4 The study area for definition of the baseline landscape and visual conditions has been determined by the extent to which each development is likely to be visible from the surrounding landscape at all assessment stages. The rationale for the definition of each development study area is set out in chapters D10 (Application Reference Number: 6.4.10), E10 (Application Reference Number: 6.5.10), F10 (Application Reference Number: 6.6.10), G10 (Application Reference Number: 6.7.10) and H10 (Application Reference Number: 6.8.10). This extent has been determined with the aid of ZTV mapping, in order to indicate the maximum extent to which there is the potential for landscape and visual effects to occur.

- 10.4.5 Geographical Information System (ArcGIS 10.2) computer modelling based on a combined ground model comprising Ordnance Survey digital terrain model data and Light Detection And Ranging topographical survey data has been used to determine the ZTV for each development. It is important to note that all ZTVs are theoretical and illustrate the worst-case scenario in that they are based upon a 'bare earth' ground model. Physical features which might potentially provide screening have not been included in the computer modelling, such as existing hedgerows or buildings, unless otherwise stated. The ZTVs are therefore an indication only of the areas within which visual effects may be expected to occur.
- 10.4.6 The methodology for preparation of the ZTV mapping involved the definition of assessment points for each development, such as the maximum height of a proposed building, structure or landscape mounding above ordnance datum, in order to represent the maximum extent and height of the main visible elements, to simulate the worst-case extent of visibility. The basis of these assessment points and the limit of each ZTV is set out in relation to each development in chapters D10 (Application Reference Number: 6.4.10), E10 (Application Reference Number: 6.5.10), F10 (Application Reference Number: 6.6.10), G10 (Application Reference Number: 6.7.10) and H10 (Application Reference Number: 6.8.10).
- 10.4.7 The ZTVs used digital terrain modelling and Geographical Information System base mapping to display the areas from which the assessment points would be theoretically visible. The ZTVs for all the assessment points were then combined to give an overall ZTV, as illustrated on the ZTV figures within the figure booklets for volumes D (Application Reference Number: 6.4.101), E (Application Reference Number: 6.5.27), F (Application Reference Number: 6.6.38), G (Application Reference Number: 6.7.48) and H (Application Reference Number: 6.8.29).
- 10.4.8 GLVIA3 [RD1] advocates a proportionate approach to LVIA, with emphasis placed on the need to focus on the potential for significant effects. The likelihood of significant landscape and visual effects diminishes with increasing distance from a proposed development and this has been taken into consideration when defining each study area.
- 10.4.9 The ZTVs do not extend beyond UK borders and transboundary effects are not considered in the assessments presented in this Environmental Statement because there is no possibility of significant transboundary landscape or visual effects on receptors in other countries.

Identification of receptors

- 10.4.10 The key receptors on which to base the LVIA were identified following baseline studies and review of the potential for effects likely to arise from the nature of the Wylfa Newydd Project.
- 10.4.11 For a landscape or visual effect to occur, there must be a link between the cause of the effect and the receptor. This would either result from a direct physical effect on the landscape, or intervisibility between the receptor and the construction, operation or decommissioning activities that would result in a direct visual effect, or an indirect effect on landscape character.

Intervisibility has been established by ZTV modelling and by site appraisal. Landscape or visual receptors within the study area with no theoretical intervisibility with construction, operation or decommissioning activities have not been included as potential receptors.

10.4.12 Key landscape and visual receptors have been identified as set out in table B10-13, below.

Identification of baseline conditions

10.4.13 For the purposes of this LVIA, the baseline year has been taken as 2015, when much of the site appraisal work was undertaken. However, some further or more detailed landscape and visual surveys have been carried out more recently in 2016 and 2017 to provide supplementary information or to update survey information, such as baseline viewpoint photography, where required. Some original survey work undertaken in 2015 has been retained where it remains valid. This is noted in table B10-13 below. For example, a number of photographs were re-taken from agreed locations in March and June 2016, and March 2017.

10.4.14 The collection of landscape and visual baseline information has included a desk study of published sources of information on the landscape, seascape and potential visual assessment viewpoints backed up by site appraisal. Table B10-13 summarises the main receptor groupings and their data source.

Table B10-13 Topic baseline characterisation

Receptor	Data collection/source (including date of survey where relevant)
Landscape designations (AONB and SLA)	Anglesey and Gwynedd Joint Local Development Plan 2011 - 2026 - Written Statement [RD13].
Landscape elements (landform, vegetation and other features)	<ul style="list-style-type: none">1:25,000 and 1:10,000 scale Ordnance Survey mapping and digital height data;aerial photography;geology mapping data (DigMapGB-50 [RD31]);arboricultural survey of Wylfa Newydd Development Area and for A5025 Off-line Highway Improvements; andsite appraisals and photography undertaken in 2014, 2015, 2016 and 2017.
Landscape character (national, county and local development-level character areas)	<ul style="list-style-type: none">National Landscape Character, NLCA01: Anglesey Coast [RD32] and National Landscape Character, NLCA02: Central Anglesey [RD33];Review of Special Landscape Areas in Gwynedd and Anglesey [RD16];The Isle of Anglesey: Anglesey Landscape Strategy Update 2011 [RD34];LANDMAP [RD5 to RD9], Level 3 Assessments –

Receptor	Data collection/source (including date of survey where relevant)
	<p>these categorise aspect layers including the visual and sensory layer, which provides the primary landscape character description within LANDMAP; and</p> <ul style="list-style-type: none"> site-based local landscape character study undertaken in 2015 and 2016.
Seascape character (national, county and local development-level character areas)	<ul style="list-style-type: none"> National Seascape Assessment for Wales, NRW Evidence Report No: 80 [RD35]; Marine Character Areas MCA 6 North Anglesey Coastal Waters, Marine Character Areas MCA 5 North-West Anglesey Open Waters and Marine Character Areas MCA 7 Holyhead Bay and The Skerries [RD36 to RD38]; Welsh Seascapes and their Sensitivity to Offshore Developments [RD39]; Anglesey and Snowdonia Seascapes Character Assessment [RD15]; and site-based local seascape character study undertaken in 2015 and 2016.
People's views (Wales Coast Path, Copper Trail/National Cycle Network Route 566, footpaths (PRoWs), open access land, A5025 and local road network)	<ul style="list-style-type: none"> 1:25,000 scale Ordnance Survey mapping; IACC Definitive Map [RD40]; and identification of representative and illustrative views, and photography undertaken between 2014 and 2017.
Community views	<p>A high-level assessment of views from the main local communities likely to be affected was undertaken from publicly accessible locations between 2015 and 2016.</p>

10.4.15 The desk study also considered relevant information from other environmental disciplines including:

- open access land and PRoWs, where such features may affect the value of views;
- biodiversity designations and features, such as Sites of Special Scientific Interest and ancient woodland, where such features may affect the value of the landscape or views; and
- Registered Parks and Gardens of special historic interest in Wales, Conservation Areas, Listed Buildings and Scheduled Monuments and their setting, where such features may affect the value of the landscape or views.

10.4.16 Reference has also been made to the Isle of Anglesey, Gwynedd and Snowdonia National Park Landscape Sensitivity and Capacity Assessment, Final Report [RD23] for information about likely man-made influences which could affect the evolution of the baseline environment within the study area. This study provides a strategic-level, evidence-based assessment of the relative sensitivity of the Anglesey landscape to accommodate renewable energy developments, electricity and telecommunications transmission infrastructure and static caravan/chalet parks. It is therefore considered to be of limited relevance to the LVIA for the Wylfa Newydd Project.

10.4.17 Following the collation of published sources of baseline data and desk study, a number of site surveys by chartered landscape architects were undertaken between 2009 and 2017, in order to provide additional baseline data to inform the LVIA as follows:

- visual appraisal of the study areas, including a review of the ZTV mapping and identification of a range of different types of viewpoint;
- landscape appraisal of study areas;
- assessment of local landscape and seascape character; and
- assessment of people's views from publicly accessible locations considering the effects on views during winter and summer (when vegetation is in full leaf) where relevant.

10.4.18 Site visits have also been undertaken in order to gain a better understanding of the landscape context and views, including site walkover surveys, visits to local footpaths and sections of the Wales Coast Path, National Cycle Route Network and driving the local road network.

10.4.19 The site visits have informed the project-level studies of local landscape and seascape character, to supplement published sources of landscape and seascape character assessment.

10.4.20 The published LANDMAP, Visual and Sensory dataset [RD9], Level 3 aspect areas and the Anglesey Seascape Character Areas [RD15] were used as the starting point for the identification and classification of local landscape and seascape character areas. This was supplemented by reference to the other LANDMAP datasets [RD5 to RD8], namely aspect layers for: geological landscape, landscape habitats, historic landscape and cultural landscape, in conjunction with site appraisal work to provide the basis for understanding local landscape and seascape character and the subsequent assessment of effects on character.

10.4.21 In order to assess the likely significant visual effects for the key receptor groups, a representative range of viewpoints has been selected in accordance with guidance set out in paragraph 6.19 of GLVIA3 [RD1]. The identified viewpoints have been used to establish the nature of the existing views and visual amenity experienced by different groups of people (i.e. receptors) as a basis on which to assess the likely visual effects of the Wylfa Newydd Project. For landscape effects, the viewpoints have been used in combination with more general observations to establish the nature of the landscape in the area, against which to assess likely effects on landscape character.

10.4.22 The ZTV mapping of the Wylfa Newydd Project has been used to inform the selection of a range of representative viewpoints. Because the ZTV is theoretical, the extent of actual visibility has been assessed in the field from publicly accessible locations. The aim was not to identify every possible view available, but to identify a representative range of viewpoints that typify the views experienced by people living, working in or visiting the area. The range of viewpoints selected to inform the assessment of visual effects is considered proportionate to the size and scale of the Wylfa Newydd Project.

10.4.23 The following types of viewpoints have been identified:

- Representative viewpoints for specific users, for example users of a particular footpath or vehicle travellers (chosen to form the basis of the assessment of visual effect). Representative views may include specific viewpoints, for example a key view from a feature, such as a particular visitor attraction or Scheduled Monument.
- Illustrative viewpoints (chosen to demonstrate a particular effect or a specific issue), for example the relationship of the Wylfa Newydd Project to a neighbouring settlement.

10.4.24 Where appropriate, representative viewpoints have included locations within or on the edge of main settlements, in order to provide an indication of the likely visual effects on the local communities.

10.4.25 Photographs from representative viewpoints have been taken in winter and early spring before any significant leafing out, to represent maximum visibility without leaf cover, in accordance with the Photography and Photomontage in Landscape and Visual Impact Assessment (Landscape Institute Advice Note 01/11) [RD18]. Photographs were taken between March 2014 and 2017. In addition, photographs of a number of representative viewpoints have also been taken in summer, to represent views with vegetation in full leaf, since the visual effects of vegetation cleared as part of the Wylfa Newydd Project would be most noticeable when compared with summer views when vegetation has more visual presence.

Photomontages

10.4.26 In order to inform the assessment of the likely magnitude of landscape and visual changes, a series of photomontages have been prepared to illustrate the nature and scale of the proposed developments, in the context of the existing landscape in representative views. The visualisations have been prepared in accordance with the Photography and Photomontage in Landscape and Visual Impact Assessment (Landscape Institute Advice Note 01/11) [RD18] and Visual representation of development proposals, Technical Guidance Note 02/17 [RD41], to illustrate indicative before-and-after views of the developments, from a selection of representative publicly accessible viewpoints. The number of photomontages prepared is considered to provide a proportionate and representative range of illustrations for each development. These photomontages have provided an additional tool in the assessment of landscape and visual effects. A before-and-after image has been prepared for each photomontage. These are included in appendices D10-8 (Application Reference Number: 6.4.65), E10-

5 (photomontage viewpoints) (Application Reference Number: 6.5.23), F10-5 (Application Reference Number: 6.6.31), G10-8 (Application Reference Number: 6.7.40) and H10-5 (photomontage views) (Application Reference Number: 6.8.25) of this Environmental Statement. The methodology used in their preparation is set out in each of the above appendices

Assessment of effects

10.4.27 An overview of the EIA methodology adopted for assessing potential environmental effects is set out in chapter B1 (Application Reference Number 6.2.1).

10.4.28 The overarching guidance in GLVIA3 [RD1] is not prescriptive on the criteria to be used for assessing landscape and visual effects within the context of an EIA. The criteria set out below for assessing sensitivity and magnitude of effect have therefore been developed based on professional judgement by competent specialists with experience gained from the assessment of other major infrastructure projects in the UK.

10.4.29 The nature of landscape and visual effects can be beneficial or adverse unless receptors would experience no change. Beneficial effects are those that enhance and/or reinforce characteristics that are valued. Adverse effects are those that remove and/or undermine characteristics that are valued.

Sensitivity of receptors

10.4.30 Landscape and visual sensitivity is established by assessing the value attached to a receptor and its susceptibility to the particular form of change likely to result from the individual development.

10.4.31 GLVIA3 [RD1] defines landscape value as, “*The relative value that is attached to different landscapes by society*”. A review of existing designations is the starting point in understanding the value of landscape receptors and views experienced by visual receptors. Other areas of landscape, or individual elements or features of the landscape contributing to its character, or views may not be recognised by formal designation, but may nevertheless have value. Data reviewed to help build up a picture of the sensitivity of the landscape and inform this assessment included published sources of landscape and seascape character.

10.4.32 For the purposes of this assessment, susceptibility to change has been defined, in keeping with GLVIA3 [RD1], as the ability of the landscape or visual receptor to accommodate proposed development without undue, adverse consequences. The assessment of susceptibility has been made in relation to the specific characteristics of each of the developments of the Wylfa Newydd Project and the ability of a particular landscape or view to accommodate the type of change proposed. Judgements on susceptibility have therefore taken the nature of the proposals into account. For example, because existing vegetation within the Wylfa Newydd Development Area is relatively sparse and low-level, removal of existing field boundaries would not tend to be particularly noticeable in more distant views.

10.4.33 The susceptibility and overall sensitivity of communities presented in this assessment is based upon the typical views likely to be experienced by the community in general, from publicly accessible locations, as opposed to individual residents within the community.

10.4.34 Table B10-14 and table B10-15 summarise the key criteria for value and susceptibility to change used to inform the assessment of sensitivity. The application of these criteria is not a formulaic process and the tables only indicate general categories of sensitivity. In particular, a receptor may be considered to be of high value, but it does not necessarily follow that the same receptor is automatically of high susceptibility to the nature of the proposed change and therefore of high sensitivity. For example, an AONB, though of high value, may be able to accommodate appropriate forms of development without undue effects and may therefore not necessarily be considered to be of high sensitivity to all changes. Conversely, landscapes considered to be of lower landscape value may be highly susceptible to the nature of the proposed change. Judgements are therefore made about each receptor, with the criteria below serving as a guide and balanced accordingly. A receptor of high value and low susceptibility (or vice versa) may for instance be considered to be of overall medium sensitivity.

10.4.35 Sensitivity has been assessed on a four-point scale of high, medium, low or negligible.

10.4.36 The criteria used to assess the sensitivity of landscape receptors are set out in table B10-14.

Table B10-14 **Criteria for determining sensitivity of landscape receptors**

Landscape sensitivity	Criteria
High	<p>Value: areas of landscape identified as being of national importance or containing distinctive elements or features that are rare or could not be replaced, for example AONBs, gardens and landscapes included on the Register of Parks and Gardens of Special Historic Interest in Wales [RD42] or the Register of Landscapes of Outstanding Historic Interest in Wales [RD43]; and/or</p> <p>Susceptibility: the landscape is highly susceptible to the nature of the proposed development because the relevant characteristics or elements of the landscape have no or very limited ability to accommodate the development without undue effects, for example, because the proposals would result in the loss of a characteristic or characteristics that form an important component of the landscape.</p>

Landscape sensitivity	Criteria
Medium	<p>Value: areas of landscape identified as having importance at the local authority level or undesignated landscapes considered to have value to communities for their scenic quality, rarity, representativeness, conservation interest, recreational value, tranquillity or cultural associations; and/or</p> <p>Susceptibility: the landscape is moderately susceptible to the nature of the proposed development because the relevant characteristics or elements of the landscape have some ability to accommodate the development without undue effects.</p>
Low	<p>Value: undesignated landscapes, considered to have low value to communities and containing few features that contribute to scenic quality, rarity, representativeness, conservation interest, recreational value, tranquillity or cultural associations; and/or</p> <p>Susceptibility: the landscape has low susceptibility to the nature of the proposed development because the relevant characteristics or elements of the landscape are generally able to accommodate the development without undue effects.</p>
Negligible	<p>Value: undesignated landscapes, considered to have minimal value to communities due to many discordant or detracting elements and features; and/or</p> <p>Susceptibility: the landscape is generally tolerant to the nature of the proposed development because the relevant characteristics or elements of the landscape are generally able to accommodate the development without undue effects.</p>

10.4.37 Table B10-15 sets out the criteria used as a guide to assess the sensitivity of visual receptors.

Table B10-15 Criteria for determining the sensitivity of visual receptors

Visual sensitivity	Criteria
High	<p>Value: views that are associated with nationally designated landscapes or important heritage assets, promoted in sources such as maps and tourist literature, linked with important and popular visitor attractions where the view forms a recognised part of the visitor experience, or which have important cultural associations; and/or</p> <p>Susceptibility: receptors for whom the nature of potentially affected views form an important part of their experience or visual amenity, including people engaged in types of outdoor recreation where their attention is likely to be focused on particular potentially affected views; visitors to heritage assets or other attractions where potentially affected views of the surroundings are an important part of the experience; and communities where potentially affected views contribute to the</p>

Visual sensitivity	Criteria
	landscape setting enjoyed by residents and travellers on scenic routes.
Medium	<p>Value: views that are associated with locally designated landscapes or areas of equivalent landscape quality, promoted in local sources, linked with locally important visitor attractions where the view forms a recognised part of the visitor experience; and/or</p> <p>Susceptibility: receptors for whom the nature of potentially affected views contributes to their experience, including some travellers on roads where attention is generally less likely to be focused on views and visual amenity, although such views can be appreciated.</p>
Low	<p>Value: views that, although they may have value to local people, have no formal planning status, are not associated with designated or otherwise high-quality landscapes or with popular visitor attractions and have no more widely recognised cultural associations; and/or</p> <p>Susceptibility: receptors for whom the nature of their potentially affected view is secondary to their activity or occupation, including people engaged in outdoor sport or recreation which does not involve appreciation of views; people at their place of work, where the setting is not important to the quality of working life; and travellers where the potentially affected view is incidental to the journey.</p>
Negligible	<p>Value: views with very little value to local people and with no formal planning status, that are not associated with visitor attractions and do not have any known cultural associations; and/or</p> <p>Susceptibility: receptors for whom the nature of their potentially affected view is of little importance.</p>

Magnitude of change

10.4.38 The magnitude of landscape and visual change has been established by an assessment of the nature (whether beneficial or adverse), size and scale of the change likely to result from the Wylfa Newydd Project, in conjunction with the geographical extent of those changes. Duration and reversibility are considered in conjunction with the magnitude of change as closely related but separate dimensions. The overall magnitude of each change is judged on individual merit rather than by a formulaic process, but is guided by the criteria set out in table B10-16 and table B10-17 below.

10.4.39 The size and scale of change in the landscape is mainly a reflection of the extent or proportion of landscape elements lost or added and/or the degree to which aesthetic or perceptual aspects are altered, both of which may result in erosion or enhancement of landscape character.

10.4.40 Geographical extent is assessed by determining the area over which the change would influence the landscape. This could be very localised, within the immediate setting of each development, or affect the wider landscape character and a large proportion of a character area.

10.4.41 The criteria used as guidance to assess the magnitude of landscape change, using professional judgement, are set out in table B10-16. The size and scale of landscape change is considered in relation to the geographical extent of that change to arrive at an overall assessment of the magnitude of change. A large size and scale of change and a small geographical extent, or vice versa, may therefore be considered to be a medium magnitude of change.

Table B10-16 Criteria for determining the magnitude of change for landscape

Magnitude of landscape change	Description
Large	<p>Size and scale: large level of change in landscape character and key characteristics. Major loss of, or change to, existing elements of the landscape and/or the introduction of major new and uncharacteristic elements; and/or</p> <p>Geographical extent: the change would affect a large part of a landscape or character area and/or a large proportion of a characteristic landscape element.</p>
Medium	<p>Size and scale: moderate level of change in landscape character and key characteristics. Moderate loss of, or change to, existing elements of the landscape and/or the introduction of moderate new and uncharacteristic elements; and/or</p> <p>Geographical extent: the change would affect a moderate part of a designated landscape or character area, and/or a notable proportion of a characteristic landscape element.</p>
Small	<p>Size and scale: minor level of change in landscape character and key characteristics. Minor loss of, or change to, existing elements of the landscape and/or the introduction of minor new and uncharacteristic elements or minor change to aesthetic attributes; and/or</p> <p>Geographical extent: the change would affect a small part of a designated landscape or character area, including the immediate vicinity of the development area and/or a small proportion of a characteristic landscape element.</p>

Magnitude of landscape change	Description
Negligible	<p>Size and scale: barely discernible level of change in landscape character with minimal loss of, or change to, existing elements of the landscape and/or barely discernible change from the introduction of any new and uncharacteristic elements; and/or</p> <p>Geographical extent: the change would affect a negligible part of a designated landscape or character area, including the immediate vicinity of the development area and/or a small proportion of a characteristic landscape element.</p>

10.4.42 The criteria used to assess the size and scale of visual change have been based upon the amount of change likely to occur as a result of the individual development. The size and/or scale of change in views and visual amenity at representative (or other selected) viewpoints takes into consideration the following:

- the scale of the change in the view with respect to the loss or addition of features in the view, changes in its composition, including the proportion of the view occupied by change and distance of view;
- the degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of factors such as form, scale and mass, line, height, colour and texture;
- the nature of the view of the Wylfa Newydd Project, for example whether views would be full, partial or glimpses or sequential views while passing through the landscape; and
- the angle of view in relation to the main activity of the viewer, for example whether direct or oblique.

10.4.43 The geographical extent of visual change varies according to the type of viewer. For example, road users might be able to view the Wylfa Newydd Project from most of a particular route (high extent) or there may be only a small section of the route where users may be able to view the development (low extent). A worst-case assessment has been made for each key visual receptor. However, in practice, the level of visual change would vary along each route or within adjacent settlements, in some cases ranging from no change or negligible, to a large magnitude of change.

10.4.44 The criteria used as guidance to assess the magnitude of visual change are summarised in table B10-17. The size and scale of visual change is considered in relation to the geographical extent of that change to arrive at an overall assessment of the magnitude of change. A large size and scale of change and a small geographical extent, or vice versa, may therefore be considered to be a medium magnitude of change.

Table B10-17 **Criteria for determining the magnitude of change for visual amenity**

Magnitude of visual change	Criteria
Large	<p>Size and scale: complete or very substantial change in the view, resulting from the loss of important features or the addition of major new ones, to the extent that this would substantially alter the composition of the view and visual amenity; and/or</p> <p>Geographical extent: the proposal is seen by a group of viewers in many locations across the study area, or from the majority of a linear route and/or by large numbers of viewers, or the view is available from all or most parts of a specific location.</p>
Medium	<p>Size and scale: clearly noticeable change in the view, resulting from the loss of features or the addition of new ones, to the extent that this would alter to a moderate degree the composition of the view and visual amenity; and/or</p> <p>Geographical extent: the proposal is seen by a group of viewers from a moderate number of locations across the study area or from a moderate part of a linear route and/or by a moderate number of viewers, or the view is available from a moderate proportion of a specific location.</p>
Small	<p>Size and scale: perceptible change in the view, resulting from the loss of features or the addition of new ones, to the extent that this would, to a limited extent, alter the composition of the view and visual amenity; and/or</p> <p>Geographical extent: the proposal is seen by a group of viewers at a small number of locations across the study area, from only limited sections of a linear route and/or by a small number of viewers, or the view is available from only a small proportion of a specific location.</p>
Negligible	<p>Size and scale: barely perceptible change in the view, resulting from the loss of features or the addition of new ones, to the extent that this would not discernibly alter the composition of the view and the visual amenity; and/or</p> <p>Geographical extent: the proposal is either barely discernible in the study area or is seen by a viewer group at a very limited number of locations or from a very limited section of a linear route, and/or by only a very small number of viewers, or the view is available from hardly any part of a specific location.</p>

10.4.45 As explained above and in accordance with GLVIA3 [RD1], consideration is also given to the duration and reversibility of landscape and visual effects in the assessment of the magnitude of effects. The duration of change is categorised in table B10-18, based on guidance in GLVIA3 [RD1], in terms

of whether changes are likely to either be permanent and/or irreversible, or temporary and/or reversible.

Table B10-18 Duration of change for landscape and visual

Duration of change	Description
Permanent/irreversible	Change that would last for 25 years or more is deemed permanent or irreversible.
Long-term reversible	Change that is theoretically reversible, but would last for between 10 years and 25 years.
Medium-term reversible	Change that is theoretically reversible, but would last from five years up to 10 years.
Short-term reversible	Change that is reversible and would last up to five years is deemed short-term reversible, including some construction effects.

Assessment of significance

10.4.46 In accordance with chapter B1 (Application Reference Number: 6.2.1), the significance of effect is determined by taking into account the effect of embedded mitigation and good practice mitigation measures. These measures are integral to the scheme design or would otherwise inevitably be implemented.

10.4.47 If the first stage in the assessment identifies that there are potential significant effects, the possible application of additional mitigation measures is identified to reduce the residual effects.

10.4.48 Any effects assessed as likely to remain significant following implementation of embedded, good practice and additional mitigation are referred to as 'residual effects'.

10.4.49 The level of significance of landscape and visual effects has been determined in terms of the relationship between the sensitivity of receptors and the magnitude of landscape and visual change, guided by the matrix shown in figure B1-2 of chapter B1 (Application Reference Number: 6.2.1). The significance of effects has been assessed on a scale ranging through 'major', 'moderate', 'minor' to 'negligible'. Minor or negligible effects are considered not significant for EIA purposes. The assessment of significance is not formulaic and professional judgements have been made to determine the significance level of landscape and visual effects identified in this assessment, based on the following criteria to indicate whether the effect is significant or not. GLVIA3 [RD1] advises that:

"Professional judgement is a very important part of LVIA. While there is some scope for quantitative measurement of some relatively objective matters... much of the assessment must rely on qualitative judgements...In all cases there is a need for the judgements that are made to be reasonable and based on clear and transparent methods so that the reasoning applied at different stages can be traced and examined by others... Ideally, and especially for complex projects, more than one person should be involved in

the assessment to provide checks and balances, especially in identifying the significant effects likely to influence decisions.”

10.4.50 An effect may be considered to be significant if:

- it leads to an exceedance of defined guidelines or widely recognised levels of acceptable change;
- it is likely that the consenting authority will reasonably consider applying a planning condition, requirement or legal agreement to the consent to require specific mitigation to reduce or overcome the effect;
- it threatens or enhances the viability or integrity of a receptor or receptor group of concern; or
- it is likely to be material to the ultimate decision about whether or not the consent application should be approved.

Assessment stages

10.4.51 The assessment stages considered in the LVAs are as follows.

- Site Preparation and Clearance: considers the works required to remove and clear parts of the Wylfa Newydd Development Area of vegetation, topsoil, existing services, utilities and other features and structures. Assessments for each landscape and visual receptor have been made on a nominal day where effects are most significant for the individual receptor (Wylfa Newydd Development Area only).
- Main Construction: considers construction activities, temporary buildings and structures during construction. Assessments for each landscape and visual receptor have been made on a day where effects are most significant for the individual receptor (All developments).
- Operation opening year: considers the operation of the scheme on a winter's day in the first year of operation before planting mitigation has begun to take effect (All developments).
- Operation future year: considers the effects of planting mitigation on a summer's day when considered to be effective (Wylfa Newydd Development Area, MEEG/AECC/ESL and A5025 Off-line Highway Improvements after 15 years; and the Park and Ride and the Logistics Centre after five years (recognising that the Park and Ride and Logistics Centre would only be used during the period of construction for the Power Station).
- Decommissioning: considers the effects of removing the Power Station and Off-Site Power Station Facilities at the end of their operational lifespan and reinstatement to the agreed condition and the effects of removing the Park and Ride facility at Dalar Hir and Logistics Centre at Parc Cybi and reinstatement to the agreed condition at the end of Main Construction.

Design Manual for Roads and Bridges assessment methodology for the A5025 Off-line Highway Improvements

10.4.52 The methodology for the LVIA of the A5025 Off-line Highway Improvements closely aligns with the overarching LVIA methodology for the Wylfa Newydd Project, described above in this chapter. However, there are some differences in approach for the A5025 Off-line Highway Improvements, appropriate to the linear nature of the development. The following sections highlight the main differences.

Identification of study area

10.4.53 An initial ZTV illustrated that theoretical visibility would be focused within land up to 3km distance from the A5025 Off-line Highway Improvements. Visibility may extend beyond this 3km threshold; however, it is considered unlikely that any significant landscape or visual effects would occur beyond this distance due to the nature of the proposals. This 3km offset has therefore been adopted as the overarching study area within which baseline information was acquired on landscape elements, published sources of landscape character and visual receptors.

10.4.54 During the scoping process and subsequent site appraisal work, it was identified that the greatest potential for effects to occur was within a 1km area surrounding the A5025. This would be where changes to the road corridor would be most noticeable. The detailed landscape character study, which was carried out to identify LLCAAs, has therefore been focused within a 1km study area. This 1km study area was also used to collect information on residential properties to inform the visual assessment.

Identification of receptors

10.4.55 Identification of receptors is as described in the overarching LVIA methodology for the Wylfa Newydd Project. The identification of receptors has also had regard to consultation with the IACC.

10.4.56 While the overarching LVIA methodology for the Wylfa Newydd Project set out in this chapter does not address views from private residential receptors, views from individual or grouped private residential receptors have been considered in the LVIA for the A5025 Off-line Highway Improvements in accordance with IAN 135/10 (W) [RD20].

Identification of baseline conditions

10.4.57 Identification of baseline conditions is as described in the overarching LVIA methodology for the Wylfa Newydd Project set out in this chapter, except for the items listed in table B10-19 below.

Table B10-19 A5025 baseline sources

Receptor	Data collection/source (including date of survey where relevant)
Landscape elements (landform, vegetation and	Arboricultural survey for the A5205 Highway Improvements corridor.

Receptor	Data collection/source (including date of survey where relevant)
other features)	Site appraisals and photography were undertaken between 2015 and 2017.
Landscape character (national, county and local development-level character areas)	Site-based detailed landscape character study was undertaken in 2015 for the A5025 Off-line Highway Improvements corridor.
Seascape character (national, county and local development-level character areas)	Scoped out (the IACC confirmed the scoping out of this topic in their Scoping Opinion).
People's views (Wales Coast Path, Copper Trail/ National Cycle Network Route 566, PRoWs, open access land, A5025, local road network)	<p>Identification of representative and illustrative views and photography was undertaken between 2015 and 2017.</p> <p>The following information was collated for residential properties to inform the visual assessment:</p> <ul style="list-style-type: none"> • property reference number and location; • residential property name or number; • number of properties at that location, where grouped; • distance from the property to the nearest part of the A5025 Off-line Highway Improvements; • nature of view from the property (direct or oblique); • elevation of the property facing the A5025 Off-line Highway Improvements and the number and position of facing windows (where possible); • extent to which the garden of the property would have views towards A5025 Off-line Highway Improvements (where possible); • intervening features, such as landform or vegetation, which would screen views of the A5025 Off-line Highway Improvements; and • description of the existing view(s) towards the A5025 Off-line Highway Improvements.
Community views	Views were considered between 2015 and 2017.

Assessment of effects

10.4.58 The effects of lighting on night-time views have been assessed as part of the visual impact assessment for the A5025 in appendix G10-4 (Application Reference Number: 6.7.36) and chapter G10 (Application Reference Number: 6.7.10), in accordance with DMRB guidance. The study area for night-time visual effects is the same as for the visual assessment

Sensitivity of receptors

10.4.59 The process for the assessment of sensitivity is broadly as the overarching Wylfa Newydd Project methodology. However, the criteria differ as they are based on IAN 135/10 (W) [RD20]. This is the primary guidance document for the assessment of landscape and visual effects relating to highway schemes in Wales. The criteria have been refined to respond to comments from stakeholders and are listed in table B10-20 and table B10-21.

Table B10-20 A5025 landscape sensitivity criteria

Sensitivity level	Description
High	<p>Landscapes which by nature of their character would be unable to accommodate change of the type proposed. Typically, these would be:</p> <ul style="list-style-type: none">• of high quality with distinctive elements and features making a positive contribution to character and sense of place;• likely to be designated, but the aspects which underpin such value may also be present outside designated areas, especially at the local scale;• areas of special recognised value through use, perception or historic and cultural associations; and/or• likely to contain features and elements that are rare and could not be replaced.
Moderate	<p>Landscapes which by nature of their character would be able to partly accommodate change of the type proposed. Typically, these would be:</p> <ul style="list-style-type: none">• comprised of commonplace elements and features creating generally unremarkable character but with some sense of place;• locally designated, or their value may be expressed through non-statutory local publications;• containing some features of value through use, perception or historic and cultural associations; and/or• likely to contain some features and elements that could not be replaced.

Sensitivity level	Description
Low	<p>Landscapes which by nature of their character would be able to accommodate change of the type proposed. Typically, these would be:</p> <ul style="list-style-type: none"> • comprised of some features and elements that are discordant, derelict or in decline, resulting in indistinct character with little or no sense of place; • not designated; • containing few, if any, features of value through use, perception or historic and cultural associations; and/or • likely to contain few, if any, features and elements that could not be replaced.

Table B10-21 A5025 visual sensitivity criteria

Sensitivity level	Description
High	<ul style="list-style-type: none"> • Residential properties. • PRoWs or other recreational trails. • Users of recreational facilities where the purpose of that recreation is enjoyment of the countryside (e.g. Country Parks, National Trust or other access land). • Highly valued views (e.g. from heritage assets or views featured in art and literature).
Moderate	<ul style="list-style-type: none"> • Outdoor workers. • Users of lower speed passenger railways. • Users of scenic roads, railways or waterways or users of designated tourist routes. • Schools and other institutional buildings, and their outdoor areas.
Low	<ul style="list-style-type: none"> • Indoor workers. • Users of main roads or passengers in public transport on main arterial routes. • Users of higher speed passenger or freight railways. • Users of recreational facilities where the purpose of the recreation is not related to the view.

Magnitude of change

10.4.60 The process for the assessment of magnitude of change is broadly in line with the overarching LVIA methodology for the Wylfa Newydd Project set out in this chapter. However, the criteria to some extent differ as they are based on IAN 135/10 (W) [RD20] with refinements to respond to comments from stakeholders. The criteria are listed in table B10-22 and table B10-23.

Table B10-22 A5025 magnitude of landscape impact criteria

Magnitude of landscape impact level	Description
Major (adverse/beneficial)	<p>Total loss or large scale damage to existing character or distinctive elements over a widespread area. Addition of uncharacteristic, conspicuous elements.</p> <p>Large scale improvement of existing character or distinctive elements, by the restoration or enhancement of elements or removal of uncharacteristic elements, over a widespread area.</p>
Moderate (adverse/beneficial)	<p>Total loss or large scale damage to existing character or distinctive elements over a small area or partial loss or noticeable damage over a widespread area. Addition of uncharacteristic, noticeable elements.</p> <p>Large scale improvement of existing character or distinctive elements over a small area, or partial or noticeable improvement over a widespread area.</p>
Minor (adverse/beneficial)	<p>Partial loss or noticeable damage to existing character or distinctive elements over a small area or slight loss or damage over a widespread area. Addition of uncharacteristic elements.</p> <p>Partial or noticeable improvement of existing character or distinctive elements over a small area, or slight improvement over a widespread area.</p>
Negligible (adverse/beneficial)	<p>Barely noticeable loss or damage to existing character or distinctive elements.</p> <p>Barely noticeable improvement to existing character or distinctive elements.</p>
No change	No noticeable loss, damage or alteration to character or elements.

Table B10-23 **A5025 magnitude of visual impact criteria**

Magnitude of visual impact level	Description
Major (adverse/beneficial)	<p>Where the proposed scheme or elements of the scheme would adversely dominate the view and fundamentally change its character and components over all or most of a view. Views are likely to be open and in the direction of the proposed scheme.</p> <p>Where the proposed scheme or elements of the scheme would improve the view, and introduce beneficial changes in character and components over all or most of a view. Views are likely to be open and in the direction of the proposed scheme.</p>
Moderate (adverse/beneficial)	<p>Where the proposed scheme or elements of the scheme would be noticeable in the view, adversely affecting its character and altering some of its components over all or most of a view, or more dominant changes in part of a view. Views may range from being open to more filtered and in the direction of the proposed scheme to at an angle.</p> <p>Noticeable improvements in all or most of the view, or more dominant improvements in part of a view. Views may range from being open to more filtered and in the direction of the proposed scheme to at an angle.</p>
Minor (adverse/beneficial)	<p>Where the proposed scheme or elements of the scheme would be perceptible in the view but not alter the overall balance of elements, or more noticeable changes in part of a view. Views are likely to be more filtered or screened and may range from being in the direction of the proposed scheme to at an angle.</p> <p>Perceptible improvements in the overall view, or more noticeable improvements in part of a view. Views are likely to be more filtered or screened and may range from being in the direction of the proposed scheme to at an angle.</p>
Negligible (adverse/beneficial)	<p>Where only a small part of the project would be discernible (adverse or beneficial), or it is at such a distance that it would form a barely noticeable (adverse or beneficial) element in the view. Views are likely to be more filtered or screened and may range from being in the direction of the proposed scheme to at an angle.</p>
No change	<p>No part of the project, or work or activity associated with it, is discernible.</p>

Assessment of significance

10.4.61 The process for the determination of significance is in line with the Wylfa Newydd Project methodology. However, the criteria used for the A5025 Off-line Highway Improvements LVIA differ as they are based on IAN 135/10 (W) [RD20], with refinements to respond to comments from stakeholders. These criteria are listed in table B10-24 and table B10-25. In addition, a different matrix to the one provided in chapter B1 (Application Reference Number: 6.2.1) has been used to inform the assessment process. This is provided in table B10-26. The matrix is, however, only a guide and professional judgement is used to determine the significance of effect. Slight or neutral significance of effect levels are considered not significant for EIA purposes.

Table B10-24 A5025 significance of landscape effect criteria

Significance of landscape effect level	Description
Very large (adverse/beneficial)	<p>The proposed scheme would be at variance with the character (including quality and value) of the landscape, cause the integrity of characteristic features and elements to be lost, or cause a sense of place to be lost.</p> <p>The proposed scheme would greatly enhance the character (including quality and value) of the landscape, create an iconic high quality feature and/or series of elements, or enable a sense of place to be created or greatly enhanced.</p>
Large (adverse/beneficial)	<p>The proposed scheme would be at considerable variance with the character (including quality and value) of the landscape, degrade or diminish the integrity of a range of characteristic features or elements or damage a sense of place.</p> <p>The proposed scheme would enhance the character (including quality and value) of the landscape, create an iconic high quality feature and/or series of elements or enable a sense of place to be created or enhanced.</p>
Moderate (adverse/beneficial)	<p>The proposed scheme would conflict with character (including quality and value) of the landscape, have an adverse effect on characteristic features or elements or diminish a sense of place.</p> <p>The proposed scheme would improve the character (including quality and value) of the landscape, enable the restoration or characteristic features and elements partially lost or diminished by inappropriate management or development or enable some sense of place.</p>

Significance of landscape effect level	Description
Slight (adverse/beneficial)	<p>The proposed scheme would not quite fit the character (including quality and value) of the landscape, be at variance with characteristic features and elements or detract from a sense of place.</p> <p>The proposed scheme would complement the character (including quality and value) of the landscape, maintain or enhance characteristic features and elements and enable some sense of place to be restored.</p>
Neutral	<p>The proposed scheme would maintain the character of the landscape, blend in with characteristic features and elements and enable a sense of place to be retained.</p>

Table B10-25 A5025 significance of visual effect criteria

Significance of visual effect level	Description
Very large (adverse/beneficial)	<p>The proposed scheme would cause the loss of views from a highly sensitive receptor, and would constitute a dominant discordant feature in the view.</p> <p>The proposed scheme would create an iconic new feature that would greatly enhance the view.</p>
Large (adverse/beneficial)	<p>The proposed scheme would cause major deterioration to a view or loss of a view from a highly sensitive receptor, and would constitute a major discordant element in the view.</p> <p>The proposed scheme would lead to major improvement in a view from a highly sensitive receptor.</p>
Moderate (adverse/beneficial)	<p>The proposed scheme would cause obvious deterioration to a view from a moderately sensitive receptor, or perceptible damage to a view from a more sensitive receptor.</p> <p>The proposed scheme would cause obvious improvement to a view from a moderately sensitive receptor, or perceptible improvement to a view from a more sensitive receptor.</p>
Slight (adverse/beneficial)	<p>The proposed scheme would cause limited deterioration to a view from a receptor of medium sensitivity or cause greater deterioration to a view from a receptor of low sensitivity.</p> <p>The proposed scheme would cause limited improvement to a view from a receptor of medium sensitivity, or would cause greater improvement to a view from a receptor of low sensitivity.</p>
Neutral	<p>No perceptible change in the view.</p>

Table B10-26 A5025 significance of effect matrix

		Magnitude of impact				
		No change	Negligible	Minor	Moderate	Major
Sensitivity	High	Neutral	Slight	Slight/moderate	Moderate/large	Large/very large
	Moderate	Neutral	Neutral/slight	Slight	Moderate	Moderate/large
	Low	Neutral	Neutral/slight	Neutral/slight	Slight	Slight/moderate

Night-time visual effects assessment methodology for the Power Station

10.4.62 The following section provides a summary of the methodology used in the assessment of night-time visual effects for the Power Station.

10.4.63 The assessment of night-time visual effects has been undertaken with reference to PLG 04 Guidance on Undertaking Environmental Lighting Impact Assessments (PLG-04) [RD44] and GLVIA3 [RD1].

10.4.64 The criteria used in the assessment of sensitivity, magnitude of change and significance of effect for the assessment of night-time visual effects are set out below. These have been developed, taking into account guidance within PLG-04 [RD44] and GLVIA3 [RD1].

Sensitivity of receptors

10.4.65 Sensitivity has been assessed on a four-point scale of high, medium, low or negligible. Table B10-27 sets out the criteria used as a guide to assess the sensitivity of visual receptors.

Table B10-27 Criteria for determining sensitivity of night-time visual receptors

Visual sensitivity	Criteria
High	Receptors likely to view the scene at night over a prolonged period of time. Receptors where the existing dark scene is an important feature of the view.
Medium	Receptors likely to view the scene at night over a moderate period of time such as those travelling on slower speed roads. Receptors where the night-time scene contains some light sources and the darkness of views is less important.
Low	Receptors likely to view the scene at night over a short period of time such as those travelling on faster speed roads. Receptors where the night-time scene contains many light sources and the darkness of views is not an important feature of the view.

Visual sensitivity	Criteria
Negligible	Receptors likely to view the scene at night fleetingly such as those travelling on faster speed roads at a distance from the proposed development. Receptors where existing light sources are dominant in the night-time scene.

Magnitude of change

10.4.66 The magnitude of change has been assessed on a five-point scale of large, medium, small, negligible, or no change. The criteria used to assess the magnitude of visual change are summarised in table B10-28.

Table B10-28 Criteria for determining the magnitude of night-time visual effects

Magnitude of visual change	Criteria
Large (adverse/beneficial)	Substantial increase in visibility of light. Substantial improvement in night environment and/ or reductions in light.
Medium (adverse/beneficial)	Noticeable increase in visibility of light. Noticeable improvement in night environment and/ or reductions in light.
Small (adverse/beneficial)	Slight increase in visibility of light. Slight improvement in night environment and/or reductions in light.
Negligible (adverse/beneficial)	Barely perceptible change in lighting would be discernible (adverse or beneficial).
No change	No lighting discernible.

Assessment of significance

10.4.67 The methodology for assessment of the significance of night-time visual effects follows the same approach as that set out above for visual effects of the Power Station.

Limitations

10.4.68 Much of the information used to inform modelling for assessment purposes is necessarily of a relatively schematic nature at this stage in design but is considered adequate for the purposes of this assessment having been based on worst case assumptions.

10.4.69 In the absence of detailed lighting design and technical lighting models to map the relative levels of existing and proposed lighting for the Power Station, the assessment of night-time visual effects in chapter D10 (Application Reference Number: 6.4.10) is based upon the lighting

information available at the time of assessment and professional judgment by suitably experienced professional landscape architects.

10.4.70 The methodology for this assessment has been prepared with reference to the key guidance set out in table B10-3 and in consultation with key stakeholders, including the IACC and NRW. There are no limitations to the assessment undertaken within the scope of the methodology set out above.

10.5 References

Table B10-29 Schedule of references

ID	Reference
RD1	Landscape Institute and Institute of Environmental Management and Assessment. 2013. <i>Guidelines for Landscape and Visual Impact Assessment</i> . Third Edition. Oxon: Routledge.
RD2	Department of Energy and Climate Change. 2011. <i>Overarching National Policy Statement for Energy (EN-1)</i> . London: The Stationery Office.
RD3	Department of Energy and Climate Change. 2011. <i>National Policy Statement for Nuclear Power Generation (EN-6)</i> . London: The Stationery Office.
RD4	Welsh Government. 2016. <i>Planning Policy Wales</i> . Edition 9. [Online]. [Accessed: May 2017]. Available from: http://gov.wales/docs/desh/publications/161117planning-policy-wales-edition-9-en.pdf .
RD5	Natural Resources Wales (NRW). 2011. <i>LANDMAP. Cultural Landscape dataset</i> . [Online]. [Accessed: 14 February 2017]. Available from: http://landmap-maps.naturalresources.wales/ .
RD6	Natural Resources Wales (NRW). 2013. <i>LANDMAP. Geological Landscape dataset</i> . [Online]. [Accessed: 14 February 2017]. Available from: http://landmap-maps.naturalresources.wales/ .
RD7	Natural Resources Wales (NRW). 2013. <i>LANDMAP. Historic Landscape dataset</i> . [Online]. [Accessed: 14 February 2017]. Available from: http://landmap-maps.naturalresources.wales/ .
RD8	Natural Resources Wales (NRW). 2013. <i>LANDMAP. Landscape Habitats dataset</i> . [Online]. [Accessed: 14 February 2017]. Available from: http://landmap-maps.naturalresources.wales/ .
RD9	Natural Resources Wales (NRW). 2013. <i>LANDMAP. Visual and Sensory dataset</i> . [Online]. [Accessed: 14 February 2017]. Available from: http://landmap-maps.naturalresources.wales/ .
RD10	Welsh Government. 2016. <i>Technical Advice Note 12: Design</i> . [Online]. [Accessed: April 2016]. Available from: http://gov.wales/docs/desh/publications/160316-technical-advice-note-12-en.pdf .
RD11	Welsh Office. 1998. <i>Technical Advice Note 14: Coastal Planning</i> . [Online]. [Accessed: April 2016]. Available from: http://gov.wales/docs/desh/publications/110805tan14en.pdf .
RD12	Isle of Anglesey County Council (IACC). 2014. <i>New Nuclear Build at Wylfa: Supplementary Planning Guidance</i> . [Online]. [Accessed: November 2016]. Available from: http://www.anglesey.gov.uk/Journals/2014/08/11/q/k/h/Wylfa-NNB-

ID	Reference
	SPG-Adopted-July-2014.pdf.
RD13	Isle of Anglesey County Council and Gwynedd Council. 2017. <i>Anglesey and Gwynedd Joint Local Development Plan 2011 - 2026 - Written Statement (2017)</i> . [Online]. [Accessed: 2017]. Available from: http://www.anglesey.gov.uk/planning-and-waste/planning-policy/joint-local-development-plan-anglesey-and-gwynedd/ .
RD14	Isle of Anglesey County Council (IACC) and Natural Resources Wales (NRW). 2015. <i>The Isle of Anglesey Area of Outstanding Natural Beauty (AONB) Management Plan Review 2015 – 2020</i> . [Online]. [Accessed: April 2016]. Available from: http://www.anglesey.gov.uk/Journals/w/x/m/Anglesey-AONB-Management-Plan-2015_20.pdf .
RD15	Fiona Fyfe Associates with Countryside and SEACAMS (University of Bangor). 2013. <i>Anglesey and Snowdonia Seascapes Character Assessment</i> . Natural Resources Wales (NRW), Snowdonia National Park, the Isle of Anglesey Area of Outstanding Natural Beauty and Isle of Anglesey County Council (IACC). Available from: NRW Library Maes y Ffynnon, Bangor (barcode 45891).
RD16	Land Use Consultants. 2012. <i>Review of Special Landscape Areas in Gwynedd and Anglesey</i> . [Online]. [Accessed: November 2015]. Available from: https://www.gwynedd.gov.uk/en/Council/Documents---Council/Strategies-and-policies/Environment-and-planning/Planning-policy/Supporting-documents/Review-of-Anglesey-and-Gwynedd-Special-Landscape-Areas-Executive-Summary.pdf .
RD17	Isle of Anglesey County Council (IACC). 2008. <i>Supplementary Planning Guidance, Design Guide For The Urban & Rural Environment</i> . [Online]. [Accessed: September 2016]. Available from: https://www.anglesey.gov.uk/supplementary-planning-guidance-design-in-the-urban-and-rural-built-environment/102464.article .
RD18	Landscape Institute. 2011. <i>Photography and Photomontage in Landscape and Visual Impact Assessment (Landscape Institute Advice Note 01/11)</i> [Online]. [Accessed: November 2016]. Available from: https://www.landscapeinstitute.org/PDF/Contribute/LIPhotographyAdviceNote01-11.pdf .
RD19	Isle of Anglesey County Council (IACC). 2014. Approach and Methodology for Environmental and Cumulative Impact Assessment, Guidance for Developers, Planning Officers and Consultants. Isle of Anglesey County Council (IACC).
RD20	Welsh Government and Managing Agents. 2014. <i>Interim Advice</i>

ID	Reference
	<i>Note 135/10 (Wales), Landscape and Visual Effects Assessment (IAN 135/10 (W)). [Online]. [Accessed: September 2016]. Available from: http://gov.wales/topics/transport/roads/highway-standards/publishedians/ian135-10-landscape-visual-effects/?lang=en.</i>
RD21	The Planning Inspectorate. April 2016. Scoping Opinion for Wylfa Newydd Generating Station.
RD22	Isle of Anglesey County Council (IACC). 2016. The IACC Response to Scoping Request: Horizon Nuclear Power Wylfa Newydd.
RD23	Gillespies LLP with Gwynedd Council, Isle of Anglesey Council (IACC) and Snowdonia National Park Authority. 2014. <i>Isle of Anglesey, Gwynedd and Snowdonia National Park Landscape Sensitivity and Capacity Assessment, Final Report</i> . (Document No.DC.020). [Online]. [Accessed: 21 February 2017]. Available from: https://www.gwynedd.llyw.cymru/en/Council/Documents---Council/Strategies-and-policies/Environment-and-planning/Planning-policy/Supporting-documents/Landscape-Sensitivity-and-Capacity-Assessment-(DC.020).pdf .
RD24	Welsh Assembly Government. 2005. Technical Advice Note 8: Planning for Renewable Energy.
RD25	Scottish Natural Heritage. 2012. Assessing the Cumulative Impact of Onshore Wind Energy Developments.
RD26	Natural Resources Wales (NRW). 2016. RE: SCOPING CONSULTATION – Application by Horizon Nuclear Power Wylfa Limited for an Order Granting Development Consent for the Wylfa Newydd Project.
RD27	Natural Resources Wales (NRW). 2017. RE: SCOPING CONSULTATION – Application by Horizon Nuclear Power Wylfa Limited for an Order Granting Development Consent for the Wylfa Newydd Project.
RD28	The Planning Inspectorate. 2017. Scoping Opinion for Wylfa Newydd Project.
RD29	Isle of Anglesey County Council (IACC). 2015. Scoping Opinion for A5025 Highway Improvements Between Valley and Cemaes.
RD30	Highways Agency, The Scottish Executive Development Department, The National Assembly for Wales and The Department For Regional Development. 2001. <i>Design Manual for Roads and Bridges Volume 10</i> . [Online]. [Accessed: May 2017]. Available from: http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol10/section0.htm .
RD31	British Geological Society. 2015. <i>DigMapGB-50</i> .

ID	Reference
RD32	Natural Resources Wales (NRW). 2014. <i>National Landscape Character, NLCA01: Anglesey Coast</i> . Available by request from NRW, Maes y Ffynnon, Ffordd Penrhos, Bangor, Gwynedd, LL57 2DW, contact: John.briggs@cyfoethnaturiol.cymru.
RD33	Natural Resources Wales (NRW). 2014. <i>National Landscape Character, NLCA02: Central Anglesey</i> . Available by request from NRW, Maes y Ffynnon, Ffordd Penrhos, Bangor, Gwynedd, LL57 2DW, contact: John.briggs@cyfoethnaturiol.cymru.
RD34	Isle of Anglesey County Council (IACC) and TACP Consultants. 2011. <i>The Isle of Anglesey: Anglesey Landscape Strategy Update 2011</i> . (Document No. DC.011). [Online]. [Accessed: 20 February 2016]. Available from: https://www.gwynedd.llyw.cymru/en/Council/Documents---Council/Strategies-and-policies/Environment-and-planning/Planning-policy/Supporting-documents/Anglesey-Landscape-Strategy---Update-2011-(DC.011).pdf .
RD35	Land Use Consultants. 2015. <i>National Seascape Assessment for Wales. NRW Evidence Report No: 80</i> . Natural Resources Wales. [Online]. [Accessed: April 2016]. Available from: https://www.naturalresources.wales/media/675207/mca-00-technical-report-summary-method-appendix.pdf .
RD36	Land Use Consultants. 2015. <i>Marine Character Areas MCA 06 North Anglesey Coastal Waters</i> . Natural Resources Wales. [Online]. [Accessed: 21 February 2017]. Available from: https://www.naturalresources.wales/media/674484/mca-06-north-anglesey-coastal-waters_final.pdf .
RD37	Land Use Consultants. 2015. <i>Marine Character Areas MCA 05 North-West Anglesey Open Waters</i> . Natural Resources Wales. [Online]. [Accessed: 21 February 2017]. Available from: https://www.naturalresources.wales/media/674483/mca-05-north-west-anglesey-open-waters_final.pdf .
RD38	Land Use Consultants. 2015. <i>Marine Character Areas MCA 07 Holyhead Bay and The Skerries</i> . Natural Resources Wales. [Online]. [Accessed: 21 February 2017]. Available from: https://naturalresources.wales/media/674485/mca-07-holyhead-bay-and-the-skerries_final.pdf .
RD39	Briggs, J. and White, S. 2009. <i>Welsh Seascapes and their Sensitivity to Offshore Developments</i> . Countryside Council for Wales. Hard copy available from: NRW Library Maes y Ffynnon, Bangor (barcode 47154).
RD40	Isle of Anglesey County Council (IACC). 2016. <i>IACC Definitive Map</i> .
RD41	Landscape Institute. 2017. <i>Visual representation of development</i>

ID	Reference
	<i>proposals, Technical Guidance Note 02/17. [Online]. [Accessed: 18 May 2017]. Available from: https://www.landscapeinstitute.org/wp-content/uploads/2016/01/02-17-Visual-Representation.pdf</i>
RD42	Cadw/International Council on Monuments and Sites (ICOMOS). 2002. <i>Register of Parks and Gardens of Special Historic Interest in Wales</i> . Cardiff: Cadw.
RD43	Countryside Council for Wales, Cadw/International Council on Monuments and Sites (ICOMOS). 2001. <i>Register of Landscapes of Outstanding Historic Interest in Wales</i> . Cardiff: Cadw.
RD44	Institute of Lighting Professionals. 2013. PLG 04 Guidance on Undertaking Environmental Lighting Impact Assessments

[This page is intentionally blank]