



Wylfa Newydd Project

8.1 Planning Statement

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

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Contents

Executive Summary	1
Introduction.....	1
The Wylfa Newydd Project	1
Background to the Wylfa Newydd Project	3
Need for nuclear power	3
Planning framework.....	4
Planning analysis	5
Conclusions.....	6
Crynodeb Gweithredol (Welsh language).....	7
Cyflwyniad.....	7
Prosiect Wylfa Newydd	7
Cefndir Prosiect Wylfa Newydd.....	8
Yr angen am bŵer niwclear.....	9
Y fframwaith cynllunio	10
Dadansoddiad cynllunio	10
Casgliadau	12
1 Introduction.....	13
1.1 Introduction to the Wylfa Newydd DCO Project.....	13
1.2 Purpose of the Planning Statement.....	13
1.3 Legislative and policy context.....	14
Government support for new nuclear power generation.....	14
Government support for the location of new nuclear power generation ..	15
1.4 The Wylfa Newydd Project	16
The Enabling Works	16
The Wylfa Newydd DCO Project	16
Associated Development.....	17
Licensable Marine Activities	18
1.5 Report Structure	18
2 Location and site description	20
2.1 Introduction.....	20
2.2 The Wylfa Newydd Development Area.....	22
2.3 Off-Site Power Station Facilities	23
2.4 The Associated Development sites	23
The Site Campus.....	24
Park and Ride (Dalar Hir)	24
Logistics Centre (Parc Cybi).....	24
A5025 Off-line Highway Improvements	25
Tre'r Gof SSSI Compensation sites.....	25

3	Background to NPS nomination and other relevant applications	26
3.1	Introduction.....	26
3.2	Site nomination.....	27
	<i>Policy context</i>	<i>27</i>
	<i>Appraisal of Sustainability</i>	<i>27</i>
	<i>Strategic Siting Assessment.....</i>	<i>29</i>
	<i>Consultation on Siting</i>	<i>33</i>
	<i>Relevant changes in circumstances</i>	<i>34</i>
3.3	Other relevant applications.....	35
	<i>Preliminary works applications</i>	<i>35</i>
	<i>Marine licences</i>	<i>36</i>
4	Development of the Wylfa Newydd Project	37
4.1	Introduction.....	37
4.2	Horizon's Project Vision and Objectives	37
	<i>Project Vision</i>	<i>37</i>
	<i>Project Objectives</i>	<i>37</i>
	<i>Design evolution and need for flexibility</i>	<i>39</i>
4.3	Summary of Proposals	40
	<i>Power Station, other on-site development and Marine Works.....</i>	<i>40</i>
	<i>Off-Site Power Station Facilities</i>	<i>42</i>
	<i>Associated Development.....</i>	<i>43</i>
	<i>Outline programme for construction</i>	<i>45</i>
	<i>Consultation</i>	<i>46</i>
5	Need for the Wylfa Newydd Project and the planning framework.....	49
5.1	Introduction.....	49
5.2	Need for nuclear power	49
5.3	Legislative context.....	50
	<i>The DCO Application.....</i>	<i>50</i>
5.4	Planning policy overview	52
	<i>National Policy Statements.....</i>	<i>52</i>
	<i>Relevance of Welsh national and local policy.....</i>	<i>58</i>
	<i>Welsh national planning policy</i>	<i>59</i>
	<i>Local planning policy</i>	<i>60</i>
	<i>Marine policy</i>	<i>61</i>
5.5	Summary	62
6	Planning analysis	63
6.1	Introduction.....	63
6.2	Benefits of the Wylfa Newydd Project	63
	<i>Urgent need for nuclear power</i>	<i>64</i>
	<i>Economic benefits and job creation.....</i>	<i>64</i>
	<i>Infrastructure improvements.....</i>	<i>65</i>

	<i>Tourism</i>	66
	<i>Other long term or wider benefits</i>	66
	<i>Summary.....</i>	69
6.3	<i>Assessment principles.....</i>	69
	<i>Financial viability and Technical feasibility</i>	69
	<i>Environmental Statement</i>	70
	<i>Habitats and Species Regulations.....</i>	71
	<i>Alternatives.....</i>	72
	<i>Good Design</i>	73
	<i>Consideration of CHP.....</i>	74
	<i>Climate change adaptation.....</i>	76
	<i>Grid connection</i>	77
	<i>Pollution control and other environmental regulatory regimes.....</i>	78
	<i>Safety and hazardous substances</i>	78
	<i>Health.....</i>	79
	<i>Common law and statutory nuisance</i>	83
	<i>Security</i>	83
6.4	<i>Generic and nuclear impacts.....</i>	84
	<i>Air quality and emissions.....</i>	85
	<i>Biodiversity and geological conservation.....</i>	89
	<i>Civil and military aviation and defence interests.....</i>	97
	<i>Coastal change and marine environment.....</i>	97
	<i>Dust, odour, artificial light, smoke, steam and insect infestation</i>	101
	<i>Flood risk.....</i>	103
	<i>Historic environment.....</i>	108
	<i>Landscape and visual impacts</i>	113
	<i>Land use including open space, green infrastructure and green belt</i>	122
	<i>Noise and vibration.....</i>	128
	<i>Socio-economics.....</i>	132
	<i>Traffic and transport</i>	136
	<i>Waste management</i>	141
	<i>Water quality and resources.....</i>	144
	<i>Welsh language impact</i>	148
6.5	<i>Flags for local consideration.....</i>	153
	<i>Proximity to civil aircraft movements</i>	153
	<i>Access to transmission networks</i>	153
	<i>Impact on significant infrastructure and resources</i>	153
	<i>Size of site to accommodate construction and decommissioning.....</i>	154
6.6	<i>Conclusions.....</i>	155
7	<i>Requirements and securing mitigation</i>	157
7.1	<i>Introduction.....</i>	157

7.2	Control documents	157
7.3	Commitments in other documents.....	160
7.4	Planning obligations	160
	<i>Relationship with SPC application.....</i>	<i>160</i>
	<i>Proposed Heads of Terms for the DCO planning obligation.....</i>	<i>161</i>
7.5	Summary	174
8	Planning balance	176
	<i>Potential benefits.....</i>	<i>176</i>
	<i>Potential adverse impacts</i>	<i>177</i>
	<i>Summary.....</i>	<i>178</i>
9	Conclusion.....	179
10	References	180

List of Appendices

Appendix A	Wylfa Newydd Power Station Planning Statement
Appendix B	Off-site Power Station Facilities Planning Statement
Appendix C	Site Campus Planning Statement
Appendix D	Park and Ride Planning Statement
Appendix E	Logistics Centre Planning Statement
Appendix F	Off-line Highway Improvement Works Planning Statement
Appendix G	Needs case for new nuclear power

List of Figures

Figure 2-1 Site locations	21

Executive Summary

Introduction

Horizon Nuclear Power Wylfa Ltd (Horizon) is applying to the Secretary of State (SoS) for a Development Consent Order (DCO) under the Planning Act 2008, to construct, operate and maintain a new nuclear power station on land west of Cemaes on Anglesey.

The Wylfa Newydd Power Station would have a nominal gross electrical capacity of up to 3.1GWe (3,100MWe) power generated by two nuclear reactor units enough to power 5.5 million homes, and involves substantial investment in north Wales and would create significant employment opportunities.

The purpose of this Planning Statement is to act as the primary reference document for the assessment of the Wylfa Newydd DCO Project against the relevant planning policy and legislative framework.

The Wylfa Newydd Project

The Wylfa Newydd Project comprises Enabling Works (which include Site Preparation and Clearance works and On-line Highways Improvements that are being applied for under separate planning applications), Licensable Marine Activities (to be consented under a Marine Licence) and the Wylfa Newydd DCO Project which is to be consented through the DCO.

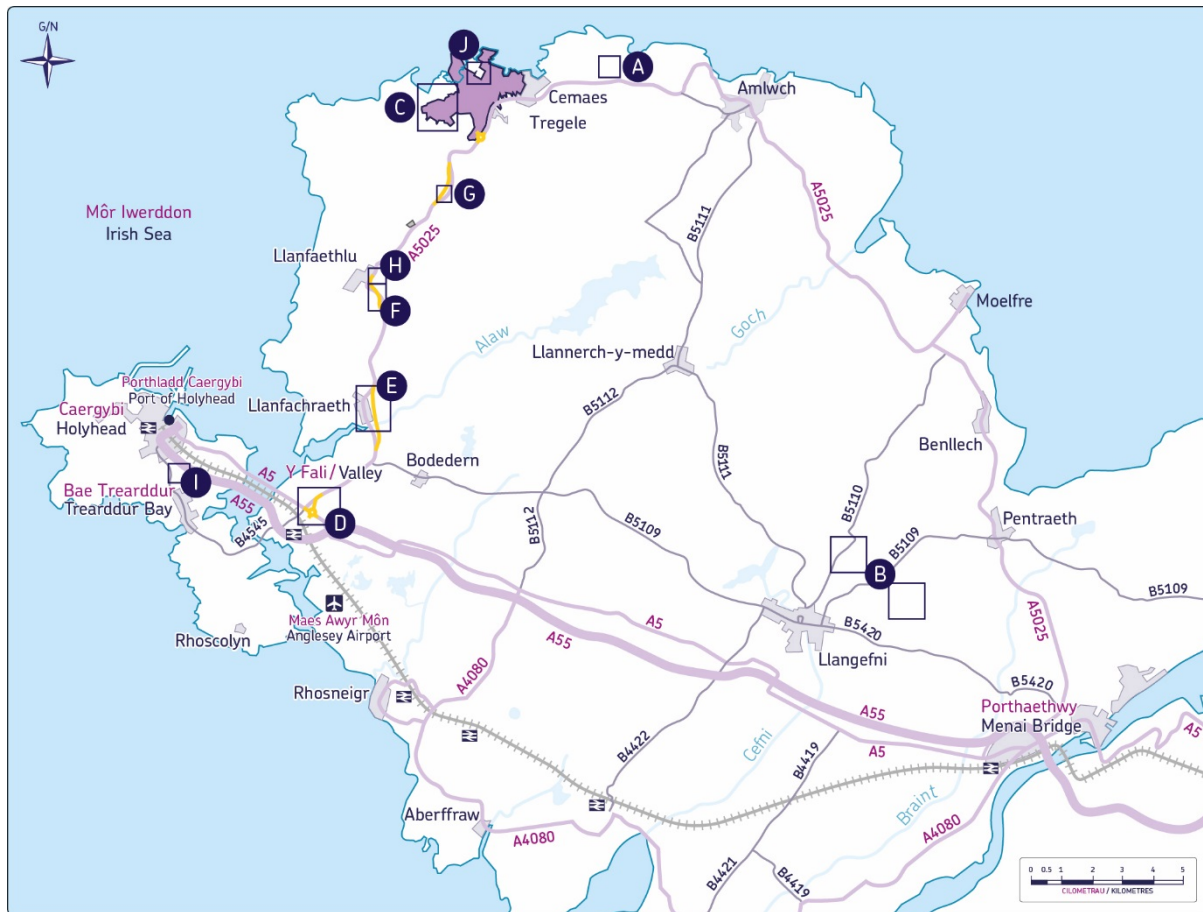
The Wylfa Newydd DCO Project includes:

- The Power Station (including two UK Advanced Boiling Water Reactors) and other on-site development;
- Marine Works (included in the DCO application as well as the Marine Licence);
- Off-site Power Station Facilities;
- Associated Development (including a Site Campus for temporary accommodation of construction workers, temporary Park and Ride facility at Dalar Hir, temporary Logistics Centre at Parc Cybi, A5025 Off-line Highway Improvements and Ecological Compensation Sites);
- The Site Preparation and Clearance works (included in the DCO application as well as a separate planning application).

The Power Station construction programme is anticipated to commence in the first year following the grant of a development consent order. The Main Construction phase is anticipated to take approximately seven years, and it is anticipated that the first reactor would be deployed around 2027.

The locations of these components of the Wylfa Newydd DCO Project are shown below.

Figure 1 Site Locations



ALLWEDD / KEY

Ardâl Datblygu Wylfa Newydd
Wylfa Newydd Development Area

Ardaloedd mewn bylchau – meysydd ymgynghori
Boxed areas – areas of consultation

Newidiadau sy'n cael eu cynnig i'r briffordd
Proposed Off-Line highway improvements

Ffyrdd "A" / "A" roads

Aneddiadau / Settlements

Rheilffyrdd / Railway lines

Afonydd/llynnoedd / Rivers/lakes

Gorsafoedd Rheilffyrdd / Railway stations

A Cynefin corsïog presennol i'w wella
Existing fen habitat to be enhanced

B Cynefinoedd corsïog i'w creu neu eu gwella
Fen habitat to be created or enhanced

C Ardaloedd lliniaru ecolegol Wylfa Newydd
Wylfa Newydd ecological mitigation areas

ARDALOEDD FFIN NEWIDIADAU I BRIFFORDD YR A5025 A5025 OFF-LINE HIGHWAY BOUNDARY AREAS

D Adran 1 - Y Fali / Section 1 - Valley

E Adran 3 - Llanfachraeth / Section 3 - Llanfachraeth

F Adran 5 - Llanfaethlu / Section 5 - Llanfaethlu

G Adran 7 - Cefn Coch / Section 7 - Cefn Coch

H Cyfleusterau Oddi ar Safle'r Orsaf Bŵer
Off-site Power Station Facilities

I Canolfan Logisteg - Parc Cybi
Logistics Centre - Parc Cybi

J Cysylltiad â'r Grid Cenedlaethol
National Grid connection

Background to the Wylfa Newydd Project

The Existing Power Station at Wylfa accommodates two 490MW nuclear reactors which were built from 1963. These were closed in 2012 and 2015.

There is strong legislative and policy support for new nuclear power in the UK and specifically at Wylfa. In 2008 Meeting the Energy Challenge - A White Paper on Nuclear Power announced that nuclear should have a role to play in the generation of electricity, alongside other low carbon technologies.

This was followed by the publication in 2011 of the Overarching National Policy Statement for Energy (EN-1) and National Policy Statement for Nuclear Power Generation (EN-6).

NPS EN-6 included Wylfa as a potentially suitable site for the deployment of new nuclear before the end of 2025, subject to certain matters that require further consideration through the DCO application. The UK Government (in including it in the NPS EN-6) concluded that none of these factors were sufficient to prevent the site from being considered potentially suitable.

In October 2017, the Clean Growth Strategy confirmed the Government's continued support for growing low carbon sources of electricity, specifically including a continued commitment to nuclear energy.

The UK Government is currently consulting on siting criteria and the process for a new NPS applicable to nuclear power plants deployed after 2025 and capable of deployment by the end of 2035. The consultation document ("the Consultation on Siting and Process) published on 7 December 2017 states that subject to the outcome of the consultation the Government proposes to carry forward the sites listed in EN-6 (including Wylfa Newydd) into the new NPS.

The Statement on Energy Infrastructure (the 'ministerial statement'), issued on the same date as the consultation document, makes it clear that the Government continues to give it's strong in principle support to project proposals at those sites listed in NPS EN-6, including at Wylfa.

Need for nuclear power

The principle of the need for new nuclear power stations, and that this need is urgent, is firmly established in NPS EN-1 and NPS EN-6 (July 2011). NPS EN-1 sets out that the Government believe there is an urgent need for new electricity NSIPs to meet energy security and carbon reduction objectives, the need to replace closing electricity generating capacity, to support an increased supply from renewables and future increases in electricity demand. NPS EN-6 specifically sets out the Government's policy on the urgent need for nuclear power.

Further work carried out by Oxera since this time has established that this need remains urgent and, if anything, the need for new nuclear is now even stronger than before, as a result of an expected increase in electricity demand, retirement of electricity generating plant capacity, the lack of proven alternatives to nuclear power generation, and the constraints imposed by emission reduction obligations.

The Consultation on Siting and Process states that “the need for new nuclear power remains significant... it is important that there is a strong pipeline of new nuclear power to contribute to the UK’s energy mix and security of supply in the future”.

Planning framework

The Planning Act 2008 (“the Act”) is the primary legislation that establishes the legal framework for applying for, examining and determining DCO applications for Nationally Significant Infrastructure Projects (NSIPs).

The ministerial statement makes it clear that the Government considers that nuclear power stations yet to apply for development consent and due for deployment beyond 2025 should be considered under section 105 of the Act, rather than section 104 - under which an application would have to be determined against any relevant NPS (subject to limited exceptions).

Section 105 (2) of the Act provides that the Secretary of State (SoS) must have regard to (a) any local impact report (b) any matters prescribed in relation to development of the description to which the application relates and (c) and other matters that the SoS thinks are both important and relevant to the SoS’s decision. The policies included in the Overarching NPS for Energy (EN-1) and EN-6 are both important and relevant matters in the context of decisions under section 105 of the Act.

NPS EN-1 and EN-6 set out the assessment principles and identify ‘Generic Impacts’, ‘Nuclear Impacts’ and ‘Flags for Local Consideration’. While these are not exhaustive, they provide the primary basis for identifying the matters that should be taken into consideration in determining the DCO application.

Whilst the NPSs continue to represent the primary basis for decision making for the DCO, other national and local planning policy may also be “*important and relevant*” within the Planning Act 2008 regime and thus may have a role to play in informing the decision maker on a DCO application.

The overarching context for an analysis against policy is the urgent need for nuclear power and the advice in paragraph 4.1.2 of NPS EN-1 that the decision maker is to “*start with a presumption in favour of granting consent to applications for energy NSIPs*”. This presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused, and subject to the provisions of the Act. In considering the proposed development the decision maker should weigh the adverse impacts against its benefits (paragraph 4.1.3).

The required judgement is, therefore, whether there are any adverse effects or combination of adverse effects, specific and relevant policies in the relevant NPSs, or provisions of the Act (including other important and relevant considerations which would include consideration of national and local planning policy) that would override the benefits and the policy presumption in favour of granting development consent.

Planning analysis

Potential benefits of the Wylfa Newydd Project

The contribution that the Wylfa Newydd Project will make to meeting urgent the need for low carbon, secure and reliable energy is substantial and should be given considerable weight.

The employment generation during the construction and operational periods would be significant with major beneficial effects on the local labour market. The economic benefits for local residents will deliver associated beneficial effects on health and well-being and Welsh language and culture.

The investment made within the local economy as a result of the Wylfa Newydd Project would be significant. The estimated investment of between £200 million and £400 million within north Wales over the construction period represents a significant benefit to the local economy in Wales.

The estimated annual average direct, indirect and induced increase in income of around £20 million on Anglesey would represent a beneficial effect on the local economy on Anglesey.

The Wylfa Newydd Project will also deliver other long term and wider benefits, including improvements to infrastructure, funds relating to tourism and housing, improvements to recreational access and the remediation of land.

Potential adverse impacts

Horizon would take all reasonable steps to limit the adverse effects of the Wylfa Newydd DCO Project as far as possible. Mitigation and good practice measures are proposed in order to avoid, reduce or compensate for adverse impacts where possible.

The way in which the Wylfa Newydd DCO Project is brought forward and mitigation is delivered is controlled through:

- Identifying maximum and minimum dimensions within which certain works can be located and constructed.
- Requiring construction and operation to be undertaken in accordance with control documents which set out commitments identified in the Environmental Statement and other assessments.
- Other controls secured through the development consent – for example time limits for commencement of the Wylfa Newydd DCO Project or ecological mitigation.
- Planning obligations, which require Horizon to provide either a financial contribution towards the provision of mitigation or to secure the provision of certain services or works.

Even with mitigation in place the Wylfa Newydd DCO Project is, however, likely to result in some residual adverse effects.

This Planning Statement provides an assessment of these potential adverse effects for each of the components of the Wylfa Newydd DCO Project, following the

assessment principles and generic and nuclear considerations in NPS EN-1 and NPS EN-6, and national and local policy where relevant. It demonstrates that these works do not cause any potential adverse effects that, considered individually, cumulatively or as a whole, would warrant the decision maker to refuse the application and, moreover, that each aspect of the proposals is acceptable in planning terms when considered against the relevant national and local policies.

Planning balance

The Wylfa Newydd DCO Project would deliver significant benefits, including both the contribution it would make towards satisfying the urgent need identified in paragraph 3.5.1 of NPS EN-1, which should be given “substantial weight”, and other substantial benefits arising in terms of job creation, upskilling the local workforce and to the local economy, that weigh significantly in its favour. It is considered that these benefits would outweigh the residual adverse impacts identified following mitigation and, together with the policy presumption in favour of granting consent in accordance with paragraph 4.1.2 of NPS EN-1, demonstrate a clear and compelling case in favour of the Order being made.

Conclusions

This Planning Statement considers relevant national and local planning policies within the overarching context of NPS EN-1 and NPS EN-6. It demonstrates that, when assessed against these relevant policies and material considerations, the Wylfa Newydd DCO Project benefits from strong policy support and is acceptable in land use planning terms.

Whilst the Wylfa Newydd DCO Project will, in common with any national infrastructure project, result in some adverse effects to the environment and local community these (considered individually or collectively) do not outweigh the important benefits. These benefits would be delivered for the UK as a whole, including a vital role in the provision of safe and secure low carbon electricity, as well as significant local benefits including jobs creation, investment in the local economy and provision of skills for the local workforce. Together these benefits have the potential to create a significant lasting positive legacy for Anglesey, north Wales and the UK.

Crynodeb Gweithredol (Welsh language)

Cyflwyniad

Mae Horizon Nuclear Power Wylfa Ltd (Horizon) yn cyflwyno cais i'r Ysgrifennydd Gwladol am Orchymyn Cydsyniad Datblygu (DCO) o dan Ddeddf Cynllunio 2008, i adeiladu, i weithredu ac i gynnal a chadw gorsaf bŵer niwclear newydd ar dir i'r gorllewin o Gemaes ar Ynys Môn.

Bydd gan Orsaf Bŵer Wylfa Newydd gapasiti trydan gros nominal o hyd at 3.1GWe (3,100MWe) o bŵer a gynhyrchir gan ddwy uned adweithydd niwclear, a fydd yn ddigon i bweru 5.5 miliwn o gartrefi. Byddai'r prosiect yn cynnwys buddsoddiad helaeth yng ngogledd Cymru, ac yn creu cyfleoedd cyflogaeth sylweddol.

Diben y Datganiad Cynllunio hwn ydy bod yn brif ddogfen cyfeirio ar gyfer asesu Prosiect DCO Wylfa Newydd yn erbyn y polisi cynllunio a'r fframwaith deddfwriaethol perthnasol.

Prosiect Wylfa Newydd

Mae Prosiect Wylfa Newydd yn cynnwys Gwaith Galluogi (sy'n cynnwys gwaith Paratoi a Chlirio'r Safle a Gwelliannau i Briffordd sy'n destun dau gais cynllunio ar wahân), Gweithgareddau Morol mae angen eu Trwyddedu (a fyddai'n cael cydsyniad o dan Drwydded Forol) a Phrosiect DCO Wylfa Newydd, a fyddai'n cael cydsyniad drwy'r DCO.

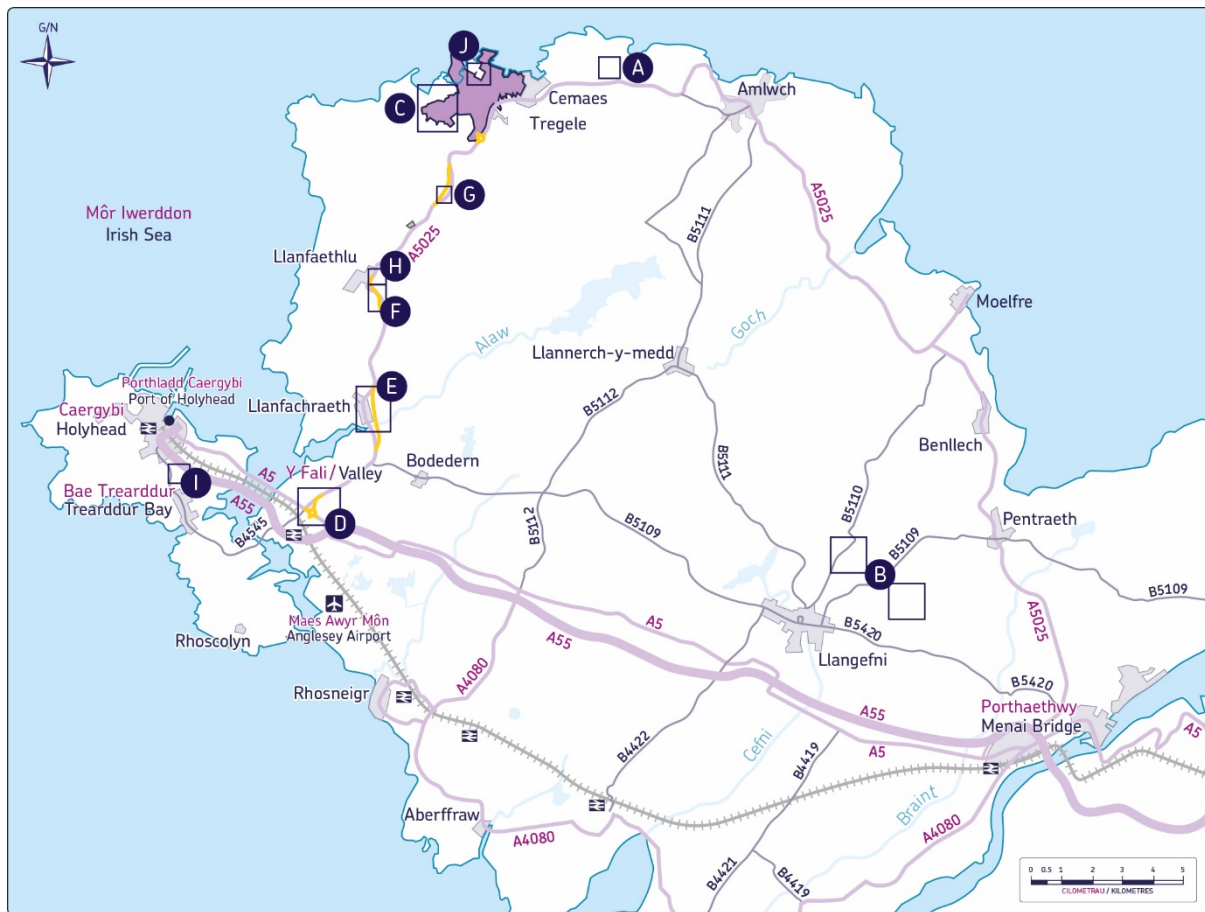
Mae Prosiect DCO Wylfa Newydd yn cynnwys:

- Yr Orsaf Bŵer (gan gynnwys dau Adweithydd Dŵr Berwedig Uwch y DU) a datblygiadau eraill ar y safle;
- Gwaith Morol (wedi'i gynnwys yn y cais am DCO yn ogystal â'r Drwydded Forol);
- Cyfleusterau Oddi ar Safle'r Orsaf Bŵer;
- Datblygiadau Cysylltiedig (gan gynnwys Campws y Safle ar gyfer darparu llety dros dro i weithwyr adeiladu, cyfleuster Parcio a Theithio dros dro yn Dalar Hir, Canolfan Logisteg dros dro ym Mharc Cybi, Newidiadau i Briffordd yr A5025 a Safleoedd Gwneud lawn Ecolegol);
- Gwaith Paratoi a Chlirio'r Safle (wedi'u cynnwys yn y cais am DCO, yn ogystal â chais cynllunio ar wahân).

Disgwylir y bydd rhaglen adeiladu'r Orsaf Bŵer yn dechrau yn ystod y flwyddyn gyntaf ar ôl cael gorchymyn cydsyniad datblygu. Disgwylir i'r prif gam adeiladu gymryd tua saith mlynedd, ac mae disgwyl y byddai'r adweithydd cyntaf ar waith tua 2027.

Mae lleoliadau cydrannau Prosiect DCO Wylfa Newydd i'w gweld isod.

Ffigur 1 – Lleoliadau Safleoedd



ALLWEDD / KEY

Ardal Datblygu Wylfa Newydd
Wylfa Newydd Development Area

Ardaloedd mewn bylchau – meysydd ymgynghori
Boxed areas – areas of consultation

Newidiadau sy'n cael eu cynnig i'r briffordd
Proposed Off-Line highway improvements

Ffyrdd "A" / "A" roads

Aneddiadau / Settlements

Rheilffyrdd / Railway lines

Afonydd/lynnoedd / Rivers/lakes

Gorsafodd Rheilffyrdd / Railway stations

A Cynefin corsiog presennol i'w wella
Existing fen habitat to be enhanced

B Cynefinoedd corsiog i'w creu neu eu gwella
Fen habitat to be created or enhanced

C Ardaloedd lliniaru ecolegol Wylfa Newydd
Wylfa Newydd ecological mitigation areas

ARDALOEDD FFIN NEWIDIADAU I BRIFFORDD YR A5025
A5025 OFF-LINE HIGHWAY BOUNDARY AREAS

D Adran 1 - Y Fali / Section 1 - Valley

E Adran 3 - Llanfarchraeth / Section 3 - Llanfarchraeth

F Adran 5 - Llanfaethlu / Section 5 - Llanfaethlu

G Adran 7 - Cefn Coch / Section 7 - Cefn Coch

H Cyfleusterau Oddi ar Safle'r Orsaf Bŵer
Off-site Power Station Facilities

I Canolfan Logisteg - Parc Cybi
Logistics Centre - Parc Cybi

J Cysylltiad â'r Grid Cenedlaethol
National Grid connection

Mae'r Orsaf Bŵer Bresennol yn Wylfa yn gartref i ddau adweithydd niwclear 490MW a gafodd eu hadeiladu o 1963 ymlaen. Cafodd y rhain eu cau yn 2012 ac yn 2015.

Mae cefnogaeth polisi a deddfwriaethol gref am bŵer niwclear newydd yn y DU ac yn benodol yn Wylfa. Yn 2008 cyhoeddodd Diwallu'r Sialens Ynni - Papur Gwyn ar Bŵer Niwclear y dylai fod gan ynni niwclear ran i'w chwarae o ran cynhyrchu trydan, ynghyd â thechnolegau carbon isel eraill.

Cafodd hyn ei ddilyn gyda chyhoeddi'r Datganiad Polisi Cenedlaethol Cyffredinol ar Ynni (En-1) a'r Datganiad Polisi Cenedlaethol ar Ynni Niwclear (EN-6) yn 2011.

Roedd NPS EN-6 yn cynnwys Wylfa fel safle a allai fod yn addas ar gyfer cynhyrchu ynni niwclear newydd cyn diwedd 2025, yn amodol ar rai materion yr oedd angen eu hystyried ymhellach drwy'r cais am DCO. Daeth Llywodraeth y DU i'r casgliad (drwy ei gynnwys yn NPS EN-6) nad oedd yr un o'r ffactorau hyn yn ddigon i beidio ag ystyried y safle fel safle addas posibl.

Ym mis Hydref 2017, roedd y Strategaeth Twf Glân wedi cadarnhau cefnogaeth barhaus y Llywodraeth i dyfu ffynonellau carbon isel o drydan, yn benodol gan gynnwys ymrwymiad parhaus i ynni niwclear.

Ar hyn o bryd mae Llywodraeth y DU yn ymgynghori ar feini prawf canfod lleoliad a'r broses ar gyfer NPS newydd sy'n berthnasol i orsafoedd pŵer niwclear a fydd yn cael eu rhoi ar waith ar ôl 2025 ac y byddai modd eu rhoi ar waith tan ddiwedd 2035. Mae'r ddogfen ymgynghori ("yr Ymgynghoriad ar Ganfod Lleoliad a'r Broses) a gyhoeddwyd ar 7 Rhagfyr 2017 yn datgan yn amodol ar ganlyniad yr ymgynghoriad bod y Llywodraeth yn bwriadu parhau â'r safleoedd a restrwyd yn EN-6 (gan gynnwys Wylfa Newydd) yn yr NPS newydd.

Mae'r Datganiad ar Seilwaith Ynni (y 'datganiad gweinidogol') a gyhoeddwyd ar yr un dyddiad â'r ddogfen ymgynghori yn datgan yn glir bod y Llywodraeth yn parhau i roi cefnogaeth gref mewn egwyddor i brosiectau yn y safleoedd hynny sydd wedi'u rhestru yn NPS EN-6 gan gynnwys Wylfa.

Yr angen am bŵer niwclear

Caiff yr egwyddor o'r angen am orsafoedd pŵer niwclear newydd, a bod yr angen hwn yn un brys, ei sefydlu'n gadarn yn NPS EN-1 ac yn NPS EN-6 (Gorffennaf 2011). Mae NPS EN-1 yn nodi bod y Llywodraeth yn credu bod taer angen Prosiectau Seilwaith o Arwyddocâd Cenedlaethol newydd yng nghyswllt trydan er mwyn cyflawni amcanion o ran diogelwch ynni a lleihau carbon, diwallu'r angen i gymryd lle capasiti cynhyrchu trydan sy'n dod i ben, a chefnogi cyflenwad uwch o ynni adnewyddadwy, ac ateb y galw uwch am drydan yn y dyfodol. Mae NPS EN-6 yn nodi'n benodol polisi'r Llywodraeth ynghylch yr angen dybryd am bŵer niwclear.

Mae rhagor o waith sydd wedi cael ei wneud gan Oxera ers hynny wedi canfod bod yr angen hwn yn dal yn frys ac, mewn gwirionedd, bod yr angen am ynni niwclear newydd rŵan hyd yn oed yn gryfach nag o'r blaen, oherwydd cynnydd disgwyledig yn y galw am drydan, ymddeol capasiti gorsafoedd cynhyrchu trydan, diffyg dewisiadau amgen ar wahân i gynhyrchu pŵer niwclear, a'r cyfyngiadau sy'n cael eu gosod gan ddyletswyddau i leihau allyriadau.

Mae'r Ymgynghoriad ar Ganfod Lleoliad a'r Broses yn nodi bod *“yr angen am bŵer niwclear newydd yn dal yn sylweddol [...] mae'n bwysig bod ffynhonnell gadarn o bŵer niwclear newydd i gyfrannu at gymysgedd ynni'r DU ac at ddiogelwch y cyflenwad yn y dyfodol.”*

Y fframwaith cynllunio

Deddf Cynllunio 2008 (“y Ddeddf”) ydy'r brif ddeddfwriaeth sy'n gosod y fframwaith cyfreithiol dros wneud cais am DCO am Brosiectau Seilwaith o Arwyddocâd Cenedlaethol ac archwilio'r ceisiadau a phenderfynu arnynt.

Mae'r datganiad gweinidogol yn ei gwneud yn glir bod y Llywodraeth yn credu y dylid ystyried gorsafoedd pŵer niwclear sydd heb wneud cais am gydsyniad datblygu eto, ac sy'n bwriadu gweithredu heibio 2025, o dan adran 105 y Ddeddf, yn hytrach nag adran 104 - lle byddai'n rhaid pennu cais yn erbyn unrhyw Ddatganiad Polisi Cenedlaethol (NPS) perthnasol (yn amodol ar eithriadau cyfyngedig).

Mae adran 105 (2) y Ddeddf yn nodi bod yn rhaid i'r Ysgrifennydd Gwladol ystyried (a) unrhyw adroddiad ar yr effaith leol; (b) unrhyw faterion rhagnodedig o ran datblygu'r disgrifiad sy'n berthnasol i'r cais; ac (c) unrhyw faterion eraill y mae'r Ysgrifennydd Gwladol yn credu eu bod yn bwysig ac yn berthnasol i'w benderfyniad. Mae'r polisïau yn y Datganiad Polisi Cenedlaethol Cyffredinol ar ynni (EN-1) ac EN-6 yn faterion pwysig a pherthnasol yng nghyd-destun penderfyniadau o dan adran 105 y Ddeddf.

Mae NPS EN-1 ac EN-6 yn nodi'r egwyddorion asesu ac yn nodi 'Effeithiau Generig', 'Effeithiau Niwclear' a 'Fflagiau ar gyfer Ystyriaeth Leol'. Er nad ydy'r rhain yn cynnwys popeth, maen nhw'n rhoi'r brif sail dros ddod o hyd i'r materion y dylid eu hystyried wrth benderfynu ar y cais am DCO.

Er bod y Datganiadau Cynllunio Cenedlaethol yn dal i gynrychioli'r brif sail ar gyfer penderfynu ar y DCO, mae polisïau cynllunio lleol a chenedlaethol eraill yn gallu bod yn *“bwysig ac yn berthnasol”* hefyd yn nhrefn Deddf Cynllunio 2008 ac felly efallai fod ganddyn nhw ran i'w chwarae o ran rhoi gwybodaeth i'r sawl sy'n penderfynu ar gais am DCO.

Y cyd-destun trosfwaol ar gyfer dadansoddi yn erbyn polisi ydy'r angen dybryd am bŵer niwclear a chynghor paragraff 4.1.2 NPS EN-1 bod y sawl sy'n penderfynu i *“ddechrau gyda rhagdybiaeth o blaid rhoi cydsyniad i geisiadau am brosiectau seilwaith ynni o arwyddocâd cenedlaethol”*. Mae'r rhagdybiaeth hon yn berthnasol oni bai fod polisïau mwy penodol a pherthnasol a amlinellir yn y Datganiadau Polisi Cenedlaethol perthnasol yn nodi'n glir y dylid gwrthod cydsyniad, ac mae'n amodol ar ddarpariaethau'r Ddeddf. Wrth ystyried y datblygiad arfaethedig, dylai'r sawl sy'n penderfynu ystyried yr effeithiau niweidiol yn erbyn y manteision (paragraff 4.1.13).

Y dyfarniad y mae'n rhaid ei wneud felly ydy a oes unrhyw effeithiau niweidiol neu gyfuniad o effeithiau niweidiol, polisïau penodol a pherthnasol yn y Datganiadau Polisi Cenedlaethol perthnasol, neu ddarpariaethau'r Ddeddf (gan gynnwys ystyriaethau pwysig a pherthnasol eraill a fyddai'n cynnwys ystyried polisïau cynllunio cenedlaethol a lleol) a fyddai'n drech na'r manteision a'r rhagdybiaeth o blaid rhoi cydsyniad datblygu.

Dadansoddiad cynllunio

Manteision posibl Prosiect Wylfa Newydd

Mae'r cyfraniad y bydd Prosiect Wylfa Newydd yn ei wneud i ddiwallu'r angen dybryd am ynni carbon isel diogel a dibynadwy yn sylweddol, a dylid rhoi cryn bwys i hyn.

Byddai'r cyfleoedd cyflogaeth a fyddai'n cael eu creu yn ystod y cyfnodau adeiladu a gweithredu yn sylweddol gydag effeithiau manteisiol mawr ar y farchnad lafur leol. Bydd y manteision economaidd ar gyfer trigolion lleol yn cael effeithiau manteisiol cysylltiedig ar iechedd a lles ac ar y Gymraeg a'i diwylliant.

Byddai'r buddsoddiad yn yr economi leol o ganlyniad i Brosiect Wylfa Newydd yn sylweddol. Mae'r buddsoddiad a amcangyfrifir sef rhwng £200 miliwn a £400 miliwn yng ngogledd Cymru dros y cyfnod adeiladu yn fantais sylweddol i'r economi leol yng Nghymru.

Byddai'r cynnydd uniongyrchol, anuniongyrchol ac ysgogedig blyneddol cyfartalog mewn incwm a amcangyfrifir o oddeutu £20 miliwn ar Ynys Môn yn effaith fanteisiol ar economi leol Ynys Môn.

Bydd Prosiect Wylfa Newydd hefyd yn cyflawni manteision ehangach a thymor hir eraill, gan gynnwys gwella seilwaith, cronfeydd sy'n ymwneud â thwristiaeth a thai, gwelliannau i fynediad hamdden ac adfer tir.

Effeithiau niweidiol posibl

Byddai Horizon yn cymryd pob cam rhesymol i gyfyngu ar effeithiau niweidiol Prosiect DCO Wylfa Newydd cymaint ag y bo modd. Caiff mesurau lliniaru a mesurau ymarfer da eu cynnig er mwyn osgoi, lleihau neu wneud iawn am unrhyw effeithiau niweidiol pan fo'n bosibl.

Caiff y ffordd y cyflwynir Prosiect DCO Wylfa Newydd a'r ffordd y caiff mesurau lliniaru eu gweithredu eu rheoli drwy:

- Nodi'r dimensiynau mwyaf a lleiaf lle mae modd lleoli ac adeiladu gwaith penodol.
- Mynnu bod y gwaith adeiladu a gweithredu'n cael ei wneud yn unol â dogfennau rheoli sy'n nodi ymrwymadau a nodwyd yn y Datganiad Amgylcheddol ac asesiadau eraill.
- Rheolaethau eraill a fydd wedi'u sicrhau drwy'r cydsyniad datblygu – er enghraifft cyfyngiadau amser ar gyfer dechrau Prosiect DCO Wylfa Newydd neu fesurau lliniaru ecolegol.
- Dyletswyddau cynllunio, sy'n mynnu bod Horizon naill ai'n darparu cyfraniad ariannol at ddarparu mesurau lliniaru neu sicrhau bod gwasanaethau neu waith penodol yn cael eu darparu.

Fodd bynnag, hyd yn oed gyda'r mesurau lliniaru mae Prosiect DCO Wylfa Newydd yn debygol o arwain at rai effeithiau niweidiol gweddilliol.

Mae'r Datganiad Cynllunio hwn yn darparu asesiad o'r effeithiau niweidiol posibl hyn ar gyfer holl gydrannau Prosiect DCO Wylfa Newydd, gan ddilyn yr egwyddorion asesu

a'r ystyriaethau generig a niwclear yn NPS EN-1 ac NPS EN-6, a pholisïau cenedlaethol a lleol pan fo hynny'n berthnasol. Mae'n dangos nad ydy'r gwaith hwn yn achosi unrhyw effeithiau niweidiol posibl sydd, o'u hystyried yn unigol, yn gronnus neu at ei gilydd, yn gyfiawnhad dros wrthod y cais, ac ar ben hynny, bod pob agwedd ar y cynigion yn dderbyniol mewn termau cynllunio wrth eu hystyried yn erbyn y polisiau cenedlaethol a lleol perthnasol.

Cydbwysedd cynllunio

Byddai Prosiect DCO Wylfa Newydd yn arwain at fanteision sylweddol, gan gynnwys y cyfraniad y byddai'n ei wneud at ddiwallu'r angen dybryd a nodir ym mharagraff 3.5.1 NPS EN-1, a ddylai gael "pwysau sylweddol", a manteision sylweddol eraill a fyddai'n codi o ran creu swyddi, gwella sgiliau'r gweithlu lleol a manteision i'r economi leol, sydd yn sylweddol o'i blaid. Ystyrir y byddai'r manteision hyn yn drech na'r effeithiau niweidiol a nodwyd ac, ynghyd â'r rhagdybiaeth o blaid rhoi cydsyniad yn unol â pharagraff 4.1.2 NPS EN-1, maen nhw'n dangos achos cryf a chlr o blaid gwneud y Gorchymyn.

Casgliadau

Mae'r Datganiad Cynllunio hwn yn ystyried y polisiau cynllunio lleol a chenedlaethol perthnasol yng nghyd-destun trosfwaol NPS EN-1 ac NPS EN-6. Mae'n dangos, wrth asesu yn erbyn y polisiau perthnasol a'r ystyriaethau pwysig hyn bod Prosiect DCO Wylfa Newydd yn elwa o gefnogaeth polisi gref a'i fod yn dderbyniol o ran cynllunio defnydd tir.

Er y bydd Prosiect Wylfa Newydd, yn yr un modd ag unrhyw brosiect seilwaith cenedlaethol, yn arwain at rai effeithiau niweidiol i'r amgylchedd ac i'r gymuned leol, nid ydy'r rhain (o'u hystyried yn unigol neu at ei gilydd) yn drech na'r manteision pwysig. Byddai'r manteision hyn yn berthnasol i'r DU gyfan, gan gynnwys chwarae rhan hollbwysig yn darparu trydan carbon isel diogel a dibynadwy, yn ogystal â manteision lleol sylweddol gan gynnwys creu swyddi, buddsoddi yn yr economi leol a darparu sgiliau i'r gweithlu lleol. Gyda'i gilydd, mae gan y manteision hyn y potensial i sicrhau etifeddiaeth gadarnhaol hirdymor sylweddol i Ynys Môn, gogledd Cymru a'r DU.

1 Introduction

1.1 Introduction to the Wylfa Newydd DCO Project

- 1.1.1 This document is the Planning Statement (Application Reference Number: 8.1) for the Wylfa Newydd DCO Project.
- 1.1.2 Horizon Nuclear Power Wylfa Ltd (Horizon) is applying to the Secretary of State (SoS) for a Development Consent Order (DCO) under the Planning Act 2008 [RD1], to construct, operate and maintain a new nuclear power station on land west of Cemaes on Anglesey.
- 1.1.3 The Wylfa Newydd Power Station would have a nominal gross electrical capacity of up to 3.1GWe (3,100MWe) power generated by two nuclear reactor units enough to power 5.5 million homes. It will involve substantial investment in the local area and the wider north Wales region and create significant short, medium and long term employment opportunities and economic benefits for Anglesey and North Wales. It is anticipated that the first reactor would be deployed around 2027.
- 1.1.4 The Wylfa Newydd DCO Project includes:
- The Power Station (including two UK Advanced Boiling Water Reactors) and other on-site development;
 - Marine Works;
 - Off-site Power Station Facilities;
 - Associated Development (including a Site Campus for temporary accommodation of construction workers, temporary Park and Ride facility at Dalar Hir, temporary Logistics Centre at Parc Cybi, A5025 Off-line Highway Improvements and Ecological Compensation Sites);
 - Site Preparation and Clearance (SPC) works.
- 1.1.5 In addition to the Wylfa Newydd DCO Project, which is to be consented through the DCO, the Wylfa Newydd Project comprises the Enabling Works and Marine Licensable Activities. The Enabling Works are subject to separate planning applications, and comprise the A5025 On-line Highways Improvements and the SPC (which are also included in the DCO). The Marine Licensable Activities comprise the Marine Works and the Deep Disposal, are to be consented under a Marine Licence. The Marine Works would be consented under both the DCO and the Marine Licence.
- ## 1.2 Purpose of the Planning Statement
- 1.2.1 The purpose of this Planning Statement is to act as the primary reference document for the assessment of the Wylfa Newydd DCO Project, against the relevant planning policy and legislative framework. This draws on the assessments and conclusions contained within the suite of application submission documents, alongside which this Planning Statement should be

read. The Guide to the Application (Application Reference Number: 1.3) provides a guide to the documents prepared in support of the DCO application.

1.3 Legislative and policy context

- 1.3.1 The Planning Act 2008 [RD1] is the primary legislation that establishes the legal framework for applying for, examining and determining DCO applications for Nationally Significant Infrastructure Projects (NSIPs).
- 1.3.2 Wylfa is identified in the UK Government's National Policy Statement (NPS) for Nuclear Power Generation (EN-6) [RD5] as a potentially suitable site for the deployment of a nuclear power station before the end of 2025.
- 1.3.3 The Statement on Energy Infrastructure on 7 December 2017 (the 'ministerial statement') [RD3] states that EN-6, only "has effect" for the purposes of section 104 of the Planning Act 2008 (where by the decision maker would legally have to have regard to the relevant NPS) for development which forms parts of a project able to demonstrate expected deployment by the end of 2025.
- 1.3.4 The ministerial statement makes it clear that, in the absence of a post-2025 nuclear NPS, nuclear power station projects yet to apply for development consent and due for deployment beyond 2025 should be considered under section 105 of the Planning Act 2008 [RD1] (until a new nuclear NPS is adopted).
- 1.3.5 Section 105 (2) of the Planning Act 2008 [RD1] provides that the SoS must have regard to (a) any local impact report (b) any matters prescribed in relation to development of the description to which the application relates and (c) other matters that the SoS thinks are both important and relevant to the SoS's decision.
- 1.3.6 The policies included in the overarching NPS for Energy (EN-1) [RD4] and NPS EN-6 [RD5] are important and relevant matters in the context of decisions under section 105 of the Planning Act 2008 [RD1], as explained below.

Government support for new nuclear power generation

- 1.3.7 The 'ministerial statement' clarifies that the Government continues to support new nuclear power generation and states that "*new nuclear power stations have an important role to play*", "*nuclear is vital to our energy mix*" and that the Government "*believes that it is important that there is a strong pipeline of new nuclear power to contribute to the UK's future energy system*".
- 1.3.8 The ministerial statement notes that NPS EN-1 "made it clear that nuclear power is a low-carbon, proven technology which can play an important role increasing the resilience and diversity of the UK's energy system". It states that the assessment of need for nuclear energy generation carried out to support NPS EN-1 remains valuable and continues to be relevant.

- 1.3.9 The “Consultation on the Siting Criteria and Process for a new NPS for Nuclear Power with Single Reactor Capacity over 1 Gigawatt beyond 2025” (“the Consultation on Siting and Process”) [RD6], released at the same time as the ministerial statement, notes that since NPS EN-1, which identifies an urgent need for nuclear power, more recent projections have stated that by 2035 overall demand for energy will have increased, and one of the key policies in the Clean Growth Strategy (2017) [RD7] is to deliver new nuclear power.
- 1.3.10 The Consultation on Siting and Process also provides that the Government is of the view that the need for new nuclear power remains significant and that new nuclear is important in making the transition to a low carbon economy, as underlined by the 2015 United Nations Framework Convention on Climate Change. It also provides that the Government considers that decarbonisation of the power sector could be achieved at lowest cost if nuclear remains a key part of the UK's energy system.
- 1.3.11 In short, there remains a compelling need for nuclear power. This is covered in further detail in chapter 5 of this Planning Statement.

Government support for the location of new nuclear power generation

- 1.3.12 The ministerial statement provides that whilst the current nuclear NPS EN-6, only “has effect” for the purposes of section 104 of the Planning Act 2008 (for development which forms part of a project able to demonstrate expected deployment by the end of 2025), the Government continues to give its strong in principle support to project proposals at those sites listed in EN-6, including Wylfa Newydd.
- 1.3.13 The Government’s specific continued support for Wylfa Newydd is further clarified at paragraph 1.22 in the Consultation on Siting and Process [RD6] which states that *“sites listed in EN-6 on which a new nuclear power station is anticipated to deploy after 2025 will continue to be considered appropriate sites and retain strong Government support during the designation of the new NPS”*.
- 1.3.14 The ministerial statement states at paragraph 1.23 that:
“Government is confident that both EN-1 and EN-6 incorporate information, assessments and statements which will continue to be important and relevant for projects which will deploy after 2025 including statements concerning the need for nuclear power – as well as environmental and other assessments that continue to be relevant for those projects. As such, in deciding whether or not to grant development consent for such a project, the Secretary of State would be required, under 105(2)(c) of the Act, to have regard to the content of EN-1 and EN-6, unless they have been suspended or revoked. In respect of matters where there is no material change in circumstances it is likely that significant weight would be given to the policy in EN-1 and EN-6”.
- 1.3.15 There have been no relevant changes in circumstances which would suggest that anything less than significant weight should be given to policy in NPS EN-

1 and NPS EN-6 and, if anything, the need for new nuclear power is now even greater than before. The policies contained in NPS EN-1 and NPS EN-6 are therefore both important and relevant to the SoS's decision and form the primary policy basis for a decision made on this application for development consent for the Wylfa Newydd DCO Project.

- 1.3.16 Paragraph 4.1.5 of NPS EN-1 confirms that other matters which the decision maker may consider both “*important and relevant*” include the development plan. It goes on to state that in the event of a conflict between any other documents and an NPS, the NPS prevails for purposes of decision making given the national significance of the infrastructure. This still remains the case as NPS EN-1 and NPS EN-6 continue to be given significant weight.
- 1.3.17 The energy NPSs have already taken into account the relevant national planning policy at the time of publication, including Planning Policy Wales (PPW) [RD8], though newer Welsh policies may also be relevant.
- 1.3.18 This Planning Statement considers relevant national and local planning policies within the overarching context of NPS EN-1 and NPS EN-6. It demonstrates, when assessed against these relevant policies and material considerations that the Wylfa Newydd DCO Project benefits from strong policy support and is acceptable in land use planning terms.
- 1.3.19 Whilst the Wylfa Newydd Project will, in common with any national infrastructure project, result in some adverse effects to the environment and local community these do not outweigh the important benefits to the UK as a whole, including a vital role in the provision of safe and secure low carbon electricity supplies for which there is a nationally recognised and urgent need.

1.4 The Wylfa Newydd Project

The Enabling Works

- 1.4.2 The Enabling Works comprise the Site Preparation and Clearance Proposals (SPC Proposals) and the A5025 On-line Highway Improvements.
- 1.4.3 Horizon has submitted applications for planning permission for the Enabling Works under the TCPA [RD2] to the Isle of Anglesey County Council (IACC).
- 1.4.4 In order to maintain flexibility in the consenting process for the Wylfa Newydd DCO Project, the SPC Proposals have also been included in the DCO application. The A5025 On-line Highway Improvements are not part of the DCO application.

The Wylfa Newydd DCO Project

- 1.4.5 The Wylfa Newydd DCO Project comprises those parts of the Wylfa Newydd Project which are to be consented by a DCO, namely:

The Nationally Significant Infrastructure Project (NSIP)

- Power Station: the proposed new nuclear power station at Wylfa, including two UK Advanced Boiling Water Reactors, the Cooling Water

System, supporting facilities, buildings, plant and structures, radioactive waste and spent fuel storage buildings and the Grid Connection;

- other on-site development: including landscape works and planting, drainage, surface water management systems, public access works including temporary and permanent closures and diversions of public rights of way, new Power Station Access Road and internal site roads, car parking, construction works and activities including construction compounds and temporary parking areas, laydown areas, working areas and temporary works and structures, temporary construction viewing area, diversion of utilities, perimeter and construction fencing, and electricity connections;
- Marine Works comprising:
 - Permanent Marine Works: the Cooling Water System, the Marine Off-loading Facility, breakwater structures, shore protection works, surface water drainage outfalls, waste water effluent outfall (and associated drainage of surface water and waste water effluent to the sea), fish recovery and return system, fish deterrent system, navigation aids and Dredging;
 - Temporary Marine Works: temporary cofferdams, a temporary access ramp, temporary navigation aids, temporary outfalls and a temporary barge berth;
- Off-site Power Station Facilities: comprising the Alternative Emergency Control Centre (AECC), Environmental Survey Laboratory (ESL) and a Mobile Emergency Equipment Garage (MEEG);

Associated Development

- the Site Campus within the Wylfa Newydd Development Area;
- temporary Park and Ride facility at Dalar Hir for construction workers (Park and Ride);
- temporary Logistics Centre at Parc Cybi (Logistics Centre);
- the A5025 Off-line Highway Improvements;
- wetland habitat creation and enhancement works as compensation for any potential impacts on the Tre'r Gof Site of Special Scientific Interest (SSSI) at the following sites:
 - Tŷ Du;
 - Cors Gwawr;
 - Cae Canol-dydd

1.4.6 Whilst the DCO itself cannot give approval for post-operational uses this Planning Statement has also identified how each component of the Project will be managed and used following its operational stage.

- 1.4.7 Following the construction period, the land within the Wylfa Newydd Development Area (WNTA) outside the Power Station Site will be restored in accordance with the Landscape and Habitat Management Strategy (LHMS) (Application Reference Number: 8.16). For the purposes of the DCO application, consent is sought to restore the Associated Development sites to their existing use, prior to the DCO, which in most cases is agricultural or greenfield. However, it is recognised that in some cases it may be appropriate for the land and buildings to be retained to deliver a legacy use and Horizon will therefore continue discussions with Isle of Anglesey County Council (IACC) on the most appropriate post-operational use for each site and submit TCPA [RD2] applications if necessary.
- 1.4.8 The Power Station will be operational for approximately 60 years after which it will be decommissioned. The buildings will be removed from the site and all spent fuel and radioactive waste managed. The end state of the site will be agreed with the regulators.

Licensable Marine Activities

- 1.4.9 The Licensable Marine Activities comprise the Marine Works and the Deep Disposal (i.e. the disposal of material from dredging at the Disposal Site at Holyhead North). The Licensable Marine Activities will be consented under a Marine Licence, however the Marine Works would also be consented under the DCO. This Planning Statement only addresses the Marine Works.

1.5 Report Structure

- 1.5.1 This Planning Statement provides an overarching analysis of the Wylfa Newydd DCO Project, with more specific details on each of the components in the appendices. It is structured as follows:
- Chapter 2 – provides a site description for each of the component parts of the Wylfa Newydd DCO Project;
 - Chapter 3 – provides background to the nomination of Wylfa in NPS EN-6 and relevant planning history;
 - Chapter 4 – sets out Horizon’s vision for the Wylfa Newydd Project and how that vision has informed the approach taken to development;
 - Chapter 5 – sets out the need for the Wylfa Newydd Project and a description of the planning framework against which it will be assessed;
 - Chapter 6 – provides the planning analysis of the Wylfa Newydd DCO Project against the relevant NPSs and other relevant national and local planning policy;
 - Chapter 7 – outlines how the mitigation identified in the Environmental Statement (ES) and other assessments will be secured and provided;
 - Chapter 8 – considers the ‘planning balance’ having regard to the policy presumption in favour of granting consent for applications for energy NSIPs; and

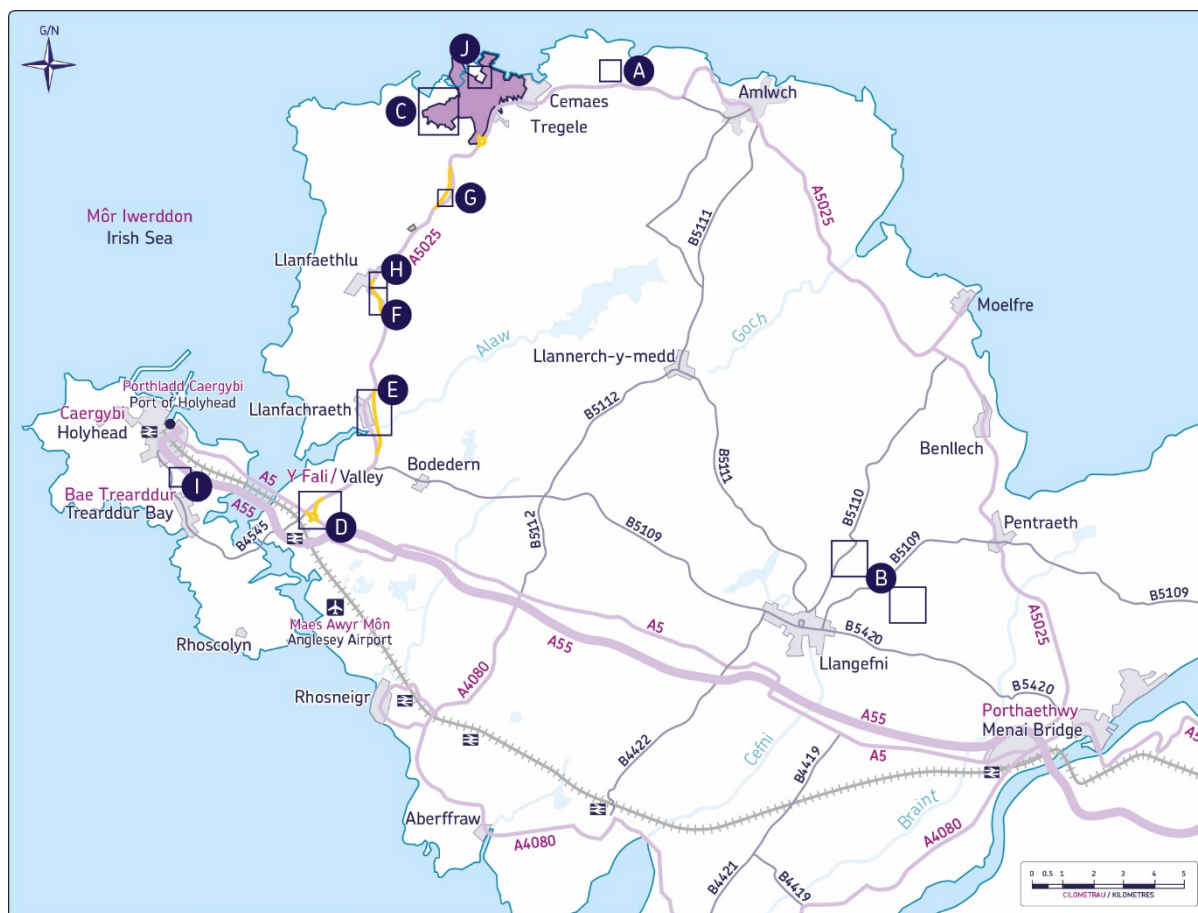
- Chapter 9 – provides the conclusions to the Planning Statement.
- 1.5.2 The appendices to this Planning Statement specifically address each component part of the Wylfa Newydd DCO Project in turn. Appendix A addresses the elements of the Wylfa Newydd DCO Project that are located within the Wylfa Newydd Development Area (excluding the Site Campus). Appendix B addresses the Off-site Power Station Facilities and appendices C-F cover the Associated Development sites.
- 1.5.3 Appendix G provides analysis prepared by Oxera in relation to the urgent need for new nuclear power, over and above that considered in NPS EN-1 and EN-6.
- 1.5.4 A more detailed site analysis and description of the proposed development is provided in the ES (Application Reference Number: 6.1.1 to 6.11) and Design and Access Statement (DAS) (Application Reference Number: 8.2.1, 8.2.2 and 8.2.3). Full details of the consultation process are provided in the Consultation Report (Application Reference Number: 5.1).

2 Location and site description

2.1 Introduction

- 2.1.1 This chapter provides a brief overview of the sites that would accommodate the various components of the Wylfa Newydd DCO Project.
- 2.1.2 The WNDA is located on the north coast of Anglesey at Wylfa Head, next to the Existing Power Station and overlooking Cemaes Bay.
- 2.1.3 The Off-Site Power Station Facilities will be located at Llanfaethlu to the south-east of the WNDA site along the A5025.
- 2.1.4 The majority of the Associated Development is located Off-Site, with the exception of the Site Campus which is located within the WNDA.
- 2.1.5 The temporary Park and Ride facility will be located at Dalar Hir to the south with the temporary Logistics Centre at Parc Cybi to the south-east of Holyhead. The A5025 Off-line Highway Improvements will be located on various sections along the A5025 between Valley and the WNDA. The Ecological Compensation Sites are located at Tŷ Du, Cors Gwawr and Cae Canol-dydd.
- 2.1.6 Figure 2-1 shows the locations of the development sites which comprise the Wylfa Newydd DCO Project.

Figure 2-1 Site locations



ALLWEDD / KEY

Ardal Datblygu Wylfa Newydd
Wylfa Newydd Development Area

Ardaloedd mewn bylchau – meysydd ymgynghori
Boxed areas – areas of consultation

Newidiadau sy'n cael eu cynnig i'r briffordd
Proposed Off-Line highway improvements

Ffyrdd "A" / "A" roads

Aneddiadau / Settlements

Rheilffyrdd / Railway lines

Afonydd/llynnoedd / Rivers/lakes

Gorsafoedd Rheilffyrdd / Railway stations

A Cynefin corsiog presennol i'w wella
Existing fen habitat to be enhanced

B Cynefinoedd corsiog i'w creu neu eu gwella
Fen habitat to be created or enhanced

C Ardaloedd lliniaru ecolegol Wylfa Newydd
Wylfa Newydd ecological mitigation areas

ARDALOEDD FFIN NEWIDIADAU I BRIFFORDD YR A5025 A5025 OFF-LINE HIGHWAY BOUNDARY AREAS

D Adran 1 - Y Fali / Section 1 - Valley

E Adran 3 - Llanfachraeth / Section 3 - Llanfachraeth

F Adran 5 - Llanfaethlu / Section 5 - Llanfaethlu

G Adran 7 - Cefn Coch / Section 7 - Cefn Coch

H Cyfleusterau Oddi ar Safle'r Orsaf Bŵer
Off-site Power Station Facilities

I Canolfan Logisteg - Parc Cybi
Logistics Centre - Parc Cybi

J Cysylltiad â'r Grid Cenedlaethol
National Grid connection

2.1.7 The following terms are used when describing the geographical areas related to the Project:

- Power Station Site – the indicative areas of land and sea within which the majority of the permanent Power Station, Marine Works and other on-site development would be situated.
- WNDA – the indicative areas of land and sea including the Power Station Site and the surrounding areas that would be used for the construction and operation of the Power Station, the Marine Works, the Site Campus and other on-site development.
- Wylfa NPS Site – the Power Station would be located on a site identified by the government through NPS EN-6, referred to as the Wylfa NPS Site. The Wylfa NPS Site is slightly smaller than the WNDA.
- Off-Site - area of land needed for the Wylfa Newydd Project that are outside the WNDA.

2.2 The Wylfa Newydd Development Area

- 2.2.1** The WNDA is bounded to the north by the Existing Power Station and a stretch of coastline including Wylfa Head. It extends into the marine environment at Porth-y-pistyll. To the east, it is separated from the village of Cemaes by agricultural land. The A5025 road defines part of the south-east boundary. To the south and west, the site abuts agricultural land with a small number of residential dwellings and farmsteads. To the west, the site is bounded by the coastal hinterland and Cestyll Garden, beyond which lies Cemlyn Bay.
- 2.2.2** The Existing Power Station occupies land to the north of the WNDA. The site is now owned by the Nuclear Decommissioning Authority, which is decommissioning the site.
- 2.2.3** The landscape in this area is characterised by small rounded hills (known as drumlins). Land within and surrounding the WNDA is predominantly in agricultural use, for grazing by sheep or cattle. This land is contained by hedgerows and dry stone walls ('Cloddiau'), and crossed by a network of roads, rural lanes, watercourses and overhead electricity infrastructure.
- 2.2.4** Settlement patterns around the WNDA are characterised by small clusters of residential dwellings and more isolated farmsteads. Larger settlements in the immediate vicinity of the WNDA include the villages of Cemaes, 2km to the east, and Tregele, 1km to the south-east.
- 2.2.5** A number of PROWs, including the Wales Coast Path and the Copper Trail, cross the WNDA. The Wales Coast Path is a long-distance trail that follows the entire coastline of Wales. Some sections of the route divert inland where access is restricted, as is the case where the path runs inland of the Existing Power Station. The Copper Trail is part of the National Cycle Network (Route 566).

- 2.2.6 Land to the north and west of the WNDA is within the Anglesey Area of Outstanding Natural Beauty (AONB) and the North Anglesey Heritage Coast.
- 2.2.7 There are a number of sites subject to ecological conservation designations (both statutory and non-statutory) of international, national and local importance within and in the vicinity of the WNDA. Notable sites are:
- Tre'r Gof and Cae Gwyn SSSIs;
 - Cemlyn Bay SSSI which forms part of the Ynys Feurig, Cemlyn Bay and The Skerries Special Protection Area (SPA);
 - Cemlyn Bay Special Area of Conservation (SAC);
 - North Anglesey Marine SAC; and
 - Anglesey Terns SPA.
- 2.2.8 Further detail on these designated sites is provided in the ES (Application Reference Number: 6.1.1 to 6.11).
- 2.2.9 The Wylfa site was nominated in 2009 for consideration under the Strategic Siting Assessment (SSA) process carried out by the Government in relation to NPS EN-6 [RD5] (see chapter 3 for details). The location of the site was a contributory factor in its selection as a potential suitable site for a nuclear power station.
- 2.2.10 The SPC Proposals, which are applied for under a separate TCPA application, are also included within the DCO submission. The works are contained within the WNDA and represent the first stage of the construction process, before the Main Construction activities.
- 2.2.11 Appendix A of this Planning Statement, volume D chapter 2 of the ES (Application Reference Number: 6.4.2) and volume 2 of the DAS (Application Reference Number: 8.2.2) provides further detail on the Power Station Site and wider WNDA.

2.3 Off-Site Power Station Facilities

- 2.3.1 The Off-Site Power Station Facilities site is located around 450m north-east of the village of Llanfaethlu. The land is currently occupied by an existing business as a garage and bus parking.
- 2.3.2 The site is bounded by the existing A5025 road to the west, residential and storage buildings to the north, and farmland and a small sewage works to the south and east. Across the A5025, within 100m west of the proposed site, a new primary school was opened in September 2017.
- 2.3.3 Appendix B of this Planning Statement, chapter E1 of the ES (Application Reference Number: 6.5.1), and volume 3 of the DAS (Application Reference Number: 8.2.3) provides further detail on the Off-Site Power Station Facilities.

2.4 The Associated Development sites

- 2.4.1 The majority of the Associated Development sites, with the exception of the Site Campus (which is located within the WNDA), are located Off-Site. The full descriptions of these sites are provided at chapters D1, E1, F1, G1 and H1 of the ES (Application Reference Numbers: 6.4.1, 6.5.1, 6.6.1, 6.7.1 and 6.8.1) and the design rationale explained in detail in volume 3 the DAS (Application Reference Number: 8.2.3).

The Site Campus

- 2.4.2 The Site Campus site is located within the WNDA, on land to the east of the Existing Power Station. It is predominantly an area of coastal grassland with large rock outcrops throughout the site.
- 2.4.3 The site is covered in detail in appendix C of this Planning Statement.

Park and Ride (Dalar Hir)

- 2.4.4 The proposed temporary Park and Ride facility would be located near Dalar Hir, north of Llanfihangel, approximately 3km east of Valley, close to Junction 4 of the A55.
- 2.4.5 The site is agricultural land defined to the south by the A5 and to the west by a road leading to Bodedern. Land to the immediate east and north is in agricultural use. The Cartio Mon go-karting track lies approximately 200m to the east of the site and a vehicle check point operated by the Driver and Vehicle Standards Agency is located approximately 100m west of the site.
- 2.4.6 The site is covered in detail in appendix D of this Planning Statement.

Logistics Centre (Parc Cybi)

- 2.4.7 The proposed temporary Logistics Centre would be located in the north-west of the wider Parc Cybi employment area, approximately 2km south of the centre of Holyhead.
- 2.4.8 The site is bounded by the A55 to the north, an existing B-road to the south and open countryside to the east and west. It is located within a wider employment area on the edge of Holyhead (as allocated in the Joint Local Development Plan (JLDP)). The area is being supported by the Welsh Government as an Enterprise Zone and has been set aside for strategic employment land by the IACC.
- 2.4.9 The proposed development would be located within the Anglesey AONB. The site has previously been supported as a suitable location for business and industrial uses. An outline planning consent for the wider Parc Cybi site was granted in March 2005 for the development of a mixed-use scheme (reference:19C842A/EIA) comprising:
- employment uses;
 - a hotel;
 - office uses;
 - leisure uses; and

- industrial units.

2.4.10 In December 2009, a full planning application for the construction and operation of an office complex and industrial/warehousing facilities on two separate plots at Parc Cybi was submitted to the IACC. This included the proposed site for the Logistics Centre. Consent was granted in 2010 on the site of the proposed Logistics Centre for the construction of four units in warehouse and office use (ref: 19/C842J/ECON).

2.4.11 An access road to the Logistics Centre site has already been constructed and one of the plots associated with the above 2005 planning permission (ref: 19C842A/EIA) has been built out.

2.4.12 The site is covered in detail in appendix E of this Planning Statement.

A5025 Off-line Highway Improvements

2.4.13 There are four sections of A5025 Off-line Highway Improvements proposed along the A5025 between Valley and the Power Station Access Road. These sections are proposed at Valley, Llanfachraeth, Llanfaethlu and Cefn Coch.

2.4.14 The site is covered in detail in appendix F of this Planning Statement.

Tre'r Gof SSSI Compensation sites

2.4.15 The Wylfa Newydd DCO Project includes approximately 49.5ha of land that form the compensation proposals to offset potential significant effects to rich fen habitat at the Tre'r Gof SSSI which is located within the WNDA.

2.4.16 The compensation proposal comprises three sites at Cae Canol-dydd, Cors Gwawr and Tŷ du. These sites provide approximately 13.8ha of land that is suitable for rich-fen habitat creation and approximately 20ha for the enhancement of existing but unmanaged or degraded fen and mire habitat.

2.4.17 These sites are covered in detail in the SSSI Compensation Strategy at appendices D9-23 and D9-24 of the ES (Application Reference Numbers 6.4.56 and 6.4.57).

3 Background to NPS nomination and other relevant applications

3.1 Introduction

- 3.1.1 The Existing Power Station at Wylfa accommodates two 490MW nuclear reactors which were built from 1963 (by British Nuclear Design and Construction) and became operational in 1971 (operated by Magnox).
- 3.1.2 In 2006, the Nuclear Decommissioning Authority announced that the station would be shut down in 2010. This was extended and Wylfa 2 shut in 2012, and Wylfa 1 closed in 2015. The site is now in the defueling phase, following which the site will be decommissioned.
- 3.1.3 In 2007, Meeting the Energy Challenge - A White Paper on Energy (2007) (the Energy White Paper 2007) [RD9] stated that it was in the public interest to allow private sector investment in new nuclear power stations. This was followed by the announcement in Meeting the Energy Challenge - A White Paper on Nuclear Power in January 2008 (the White Paper on Nuclear Power 2008) [RD10] that nuclear should have a role to play in the generation of electricity, alongside other low carbon technologies.
- 3.1.4 NPS EN-1 [RD4] and NPS EN-6 [RD5] were published in July 2011. NPS EN-6 included Wylfa as potentially suitable for the deployment of new nuclear power stations in England and Wales before the end of 2025, after consideration through the SSA process.
- 3.1.5 Horizon commenced public consultation for the Wylfa Newydd Project in 2014.
- 3.1.6 In 2017, Horizon finalised its Engineering Procurement and Construction Joint Venture with Hitachi Nuclear Energy Europe, Bechtel Management Company and JGC Corporation (UK), known as Menter Newydd.
- 3.1.7 In March 2017, an application for a Nuclear Site Licence was applied for to the Office for Nuclear Regulation (ONR).
- 3.1.8 In October 2017, the Clean Growth Strategy [RD7] confirmed the Government's continued support for growing low carbon sources of electricity. It specifically referred to the Government's continued commitment to nuclear, through "delivering new nuclear capacity through the final investment decision on Hinkley Point C, and will progress discussions with developers to secure a competitive price for future projects in the pipeline".
- 3.1.9 The 'Consultation on Siting and Process' (December 2017) [RD6] begins the process of designating a new NPS applicable to nuclear plants deployed after 2025 and capable of deployment by the end of 2035 (i.e. NPS EN-7). It states that subject to the outcome of the consultation and provided sites meet the final criteria, Government proposes to carry forward the sites listed in EN-6 (including Wylfa Newydd) into the new NPS.
- 3.1.10 The 'ministerial statement' [RD3] issued on the same date as the consultation document, states that the Government considers that the draft NPS, when

published, would also be considered as relevant to a decision under section 105 of the Planning Act 2008 [RD1].

- 3.1.11 The ‘ministerial statement’, makes it clear that the Government continues to give it’s strong in principle support to project proposals at those sites listed in EN-6, including Wylfa. It is clear that the SoS would be required to have regard to the content of NPS EN-1 [RD4] and NPS EN-6 [RD5] (unless they are suspended or revoked) and that EN-1 and EN-6 remain both important and relevant matters which would likely carry significant weight. They therefore continue to represent the primary policy basis for a decision made by the SoS on this application for development consent for the Wylfa Newydd DCO Project.

3.2 Site nomination

Policy context

- 3.2.1 The Energy White Paper 2007 and White Paper on Nuclear Power 2008 established that nuclear power should have a role to play in the country’s future energy mix, alongside other low carbon sources.
- 3.2.2 The foreword from the then Energy Minister, John Hutton, stated that “...I believe that the evidence in support of nuclear power is compelling and that we should positively embrace the opportunity of delivering this important part of our energy policy” [RD9].
- 3.2.3 The Energy White Paper outlined the Government’s intended actions to reduce regulatory and planning risks associated with investing in new nuclear power stations. It referred to the fundamental reforms promoted in the then Planning Bill of the planning system in relation to NSIPs. These included the proposals to establish the (then) Infrastructure Planning Commission to determine major infrastructure proposals within the context of the new NPSs.
- 3.2.4 The site at Wylfa was nominated for consideration under the Government’s SSA process in 2009. An Appraisal of Sustainability of the revised draft Nuclear NPS was undertaken at a strategic level in 2010.
- 3.2.5 The Appraisal of Sustainability considered the effects of the proposed policy at a national level and the sites to be assessed (including Wylfa) for their suitability for the deployment of new nuclear power stations by 2025.
- 3.2.6 The designation of NPS EN-6 [RD5], listing potentially suitable sites for nuclear development, followed in 2011.

Appraisal of Sustainability

- 3.2.7 The Appraisal of Sustainability provided a strategic level assessment of the effects of the proposed NPS at a national level and the sites to be assessed through the process.
- 3.2.8 The Appraisal of Sustainability Site Report for Wylfa [RD11] provided the following Summary of Findings:

“The Appraisal of Sustainability process has included recommendations to inform the development of the Nuclear National Policy Statement. This site report for Wylfa has helped to inform the decision-making for the Strategic Siting Assessment. It has included advice as to the strategic significant effects arising from the construction of a new nuclear power station at Wylfa, and suggestions for how adverse effects may be mitigated, including proposed mitigation measures which could be considered as part of project level Environmental Impact Assessment.

A number of the strategic effects identified for Wylfa will be similar across all the sites, including positive effects for employment and well-being. However a number of potential strategic effects have been identified that are of particular note for the nominated site at Wylfa. These are discussed below:

There are potential negative effects on at least four national and internationally protected nature conservation sites. These effects are significant, but mitigation opportunities could be available following further study at the project level.

The site is predominantly located on higher ground with hard bedrock. The risks from coastal flooding, sea level rise and erosion are therefore considered to be low. However, further assessment is required to determine the need for additional defences over the lifetime of a new power station.

Coastal water conditions at the site are considered generally favourable for the dispersion of the heated water that would be released after cooling.

The development of a new nuclear power station will have a negative visual impact on the local and sub-regional landscape, particularly the Anglesey Area of Outstanding Natural Beauty (part of which lies within the nominated site boundary) and North Anglesey Heritage Coast. Currently the exact placing of a new nuclear power station is unknown as a large site has been nominated, but some adverse impact which may not be fully mitigated is anticipated.

There is also potential for positive effects associated with long term employment and enhanced prosperity for communities at the local level.

Wylfa is not close to any other nominated site and therefore does not form part of a cluster. This means that regional or sub-regional cumulative impacts are not considered relevant for this site.

There remains some uncertainty relating to the significance of some effects and the most appropriate mitigation. It is expected that the mitigation measures will be refined iteratively as part of the development of the proposals for the nominated site, and will be assessed further in the project level Environmental Impact Assessment”.

Strategic Siting Assessment

- 3.2.9 The SSA was designed to identify sites in England and Wales that are potentially suitable for the deployment of new nuclear power stations by the end of 2025 and informed the identification of the sites in NPS EN-6 [RD5] as the only potentially suitable sites.
- 3.2.10 Annex C of NPS EN-6 [RD5] provides site assessments for each of the eight potentially suitable sites, including the Wylfa site at section C.9.
- 3.2.11 This includes analysis and conclusions drawn by the UK Government against the SSA criteria and reflects advice received from specialists and the Nuclear Regulators, as well as key points made by the public on the site assessments.
- 3.2.12 Paragraph 4.2.4 of NPS EN-6 [RD5] states that the decision maker should have regard to the relevant site assessment in addition to the impacts and general siting considerations set out in Part 3 of NPS EN-6 and Part 5 of NPS EN-1. The sites identified in NPS EN-6 are sites which the UK Government has identified, based on the SSA, as potentially suitable for the deployment of a new nuclear power station.
- 3.2.13 Table 3.1 sets out the criteria considered for Wylfa and a summary of the assessment results (summarised by Horizon from the site assessment at section C.9 of Annex C of NPS EN-6 [RD5]).

Table 3-1 Strategic Siting Assessment

SSA criteria	Summary of assessment
Deployment by the end of 2025	Passes. Noting that <i>“the Government is satisfied from the information provided by the nominators and an independent assessment that, at the point of publication, the Wylfa site is credible for deployment by the end of 2025, regardless of whether the site is deployed by that date”</i> (paragraph C.9.6). ¹
Demographics	Passes. The Office for Nuclear Regulation has advised that the site does not exceed the semi-urban criterion (C.9.7). The site passes the demographics criterion (C.9.11).

¹ Note that this is a summary of Annex C only. Horizon now anticipate that the first reactor at Wylfa would be deployed after 2025.

SSA criteria	Summary of assessment
Proximity to military activities	Passes (based on the advice of the Nuclear Regulators and Ministry of Defence).
Flooding, store surge and tsunami	Passes. Noting that this takes into account in particular the low risk to flooding at the site and it is reasonable to conclude the site could be protected against flood risk measures throughout its lifetime (paragraph C.9.28).
Coastal processes	Passes. Noting “the low level of risk” and that <i>“it is reasonable to conclude that the site can be protected against coastal erosion for the lifetime of the site”</i> (paragraph C.9.33).
Proximity to hazardous industrial facilities and operations	Passes. Noting that it is reasonable to conclude that any power station development can be protected against risk arising from proximity to hazardous facilities throughout its lifetime (paragraph C.9.40).
Proximity to civil aircraft movements	Passes. Concluding that on the basis of the advice of Civil Aviation Authority <i>“it is reasonable to conclude that any likely power station development within the site boundary can be protected against risks from civil aircraft movement, and that the effects on air traffic and aerodromes can be potentially mitigated”</i> (paragraph C.8.48).
Internationally designated sites of ecological importance	Passes. Noting the scope for avoidance and mitigation identified in the Habitats Regulations Assessment (HRA) and need for more detailed studies in the DCO (paragraph C.9.53). It notes that whilst the HRA could not rule out adverse impacts on sites of European nature conservation importance, there is an imperative reason of overriding public interest that favours the inclusion of the site in the NPS. This takes into account the need for sites to be available for deployment by 2025, lack of alternatives and consideration given to compensatory measures (paragraph C.9.54).
Nationally designated sites of ecological importance	Passes. Noting that given the scope for mitigation of biodiversity effects for sites of national importance it is reasonable to conclude that it may be possible to avoid or mitigate impacts to an extent. It highlights the proximity of Tre'r Gof SSSI and possibility for direct or indirect impacts on that site

SSA criteria	Summary of assessment
	(paragraph C.9.60). It notes further assessment at project level and the Government does not think the issues in relation to this criterion are sufficient to justify not including the site in the NPS (C.9.61).
Areas of amenity, cultural heritage and landscape value	Passes. Noting that given the likely scale of the development there are likely to be some long lasting adverse effects on landscape character and visual impacts on the AONB (even considered in the context of the existing power station and taking into account potential for mitigation). Further assessment required at the project level (paragraphs C.9.71 and C.9.72). Also notes that whilst scope for total avoidance and mitigation on impacts on the Snowdonia National Park is limited, the site passes this criterion (C.9.73).
Size of site to accommodate operation	Passes. Noting that <i>“based on the advice of the Office for Nuclear Regulation it is reasonable to conclude that there is enough land within the boundary nominated to safely and securely operate at least one new nuclear power station, including the safe and secure storage of all the spent fuel and intermediate level waste produced through operation, and from decommissioning, on the site of the station until it can be sent for disposal in a geological disposal facility”</i> (C.9.82).
Access to suitable sources of cooling	Passes. Noting detailed modelling will give greater certainty on the potential effects and mitigation (paragraph C.9.91).
Health	The AoS considered strategic effects on human health and well-being. Notes that regulations should ensure that there are no unacceptable risks to the health of the local population under normal operating conditions (paragraph C.9.101).
Socio-economic effects	NPS EN-1 requires socio-economic considerations to be considered when assessing development consent applications, at a point where it is clearer how many workers will be required for a development (paragraph C.9.111).

SSA criteria	Summary of assessment
Seismic risk	Concludes that this does not affect the potential suitability of the site (paragraph C.9.116).

- 3.2.14 The SSA in NPS EN-6 [RD5] outlines a number of areas which would require further consideration if a DCO application came forward for Wylfa. These included, among other things, the effect on the Anglesey AONB, Heritage Coast and on Tre'r Gof SSSI (paragraph C.9.117).
- 3.2.15 Overall, the UK Government concluded that none of the factors that require further consideration were sufficient to prevent the site from being considered potentially suitable (paragraph C.9.118).
- 3.2.16 Table 3-2 provides a list of all generic and nuclear impacts (both NPS EN-1 and NPS EN-6) and signposts to where these have been assessed in the relevant chapters of the ES (Application Reference Number: 6.1.1 – 6.11). and HIA Report (Application Reference Number: 8.19).

Table 3-2 Summary of generic and nuclear impacts identified in NPS EN-1 and NPS EN-6

Source	Topic	Chapters of the ES
NPS EN-1	Air quality and emissions	B5, C4, D5, E5, F5, G5, H5.
	Biodiversity and geological conservation	B9, D9, E9, F9, G9, H9. B7 D7, E7, F7, G7, H7.
	Civil and military aviation and defence interests	Scoped out.
	Coastal change	B12, D12, D13, E12, F12, G12, H12.
	Dust, odour, artificial light, smoke, steam and insect infestation	Dust - (B5, C4, D5, E8, F8, G8, H8) Odour – (B5, C4, D5, E8, F8, G8, H8) Artificial Light (B10, D10, E10, F10, G10, H10) Smoke - (B5, C4, D5, E5, F5, G5, H5) Steam (B5, C4, D5, E5, F5, G5, H5) Insect infestation – scoped out.

Source	Topic	Chapters of the ES
	Flood risk	B8, D8, E8, F8, G8, H8.
	Historic environment	B11, D11, E11, F11, G11, H11.
	Landscape and visual impacts	B10, D10, E10, F10, G10, H10.
	Land use including open space, green infrastructure and green belt	B4, D4, E4, F4, G4, H4. B7 D7, E7, F7, G7, H7.
	Noise and vibration	B6, D6, E6, F6, G6, H6.
	Socio-economics	B2, C1, D3, D3, E3, F13, G3, H3.
	Traffic and transport	B3, C2, C3, C4, C5.
	Waste management	B16, C6.
	Water quality and resources	B8, D8, E8, F8, G8, H8.
NPS EN-6	Flood risk (including storm surge and tsunami)	B8, D8, E8, F8, G8, H8.
	Water quality and resources	B8, D8, E8, F8, G8, H8.
	Coastal change	B12, D12, D13, E12, F12, G12, H12.
	Biodiversity and geological conservation	B9, D9, E9, F9, G9, H9.
	Landscape and visual impacts	B10, D10, E10, F10, G10, H10.
	Socio-economics	B2, C1, D3, D3, E3, F13, G3, H3.
	Human health and well-being	Health Impact Assessment (HIA).

Consultation on Siting

3.2.17 The 'Consultation on Siting and Process' for the new NPS (applicable to nuclear power stations expected to deploy after 2025 and capable of deployment by the end of 2035) proposes a list of strategic siting criteria,

based on those used for the original strategic siting process (described above).

3.2.18 The document states at paragraph 3 in the executive summary that:

“The period to 2025 was used to focus on the sites most likely to deploy the soonest, and to enable a realistic and manageable list of sites to be considered. EN-6 has successfully facilitated the granting of a Development Consent Order (“DCO”) for a new nuclear power station at Hinkley Point C in March 2013 and further nuclear projects are planning to make applications for DCOs in due course. Government therefore intends to publish a new NPS for Nuclear Power Generation for deployment between 2026-2035 (“the new NPS”). It is proposed the new NPS will sit outside of the 2011 Energy NPS suite. That is, it will be a standalone NPS which will set the framework for development consent decisions on applications for new nuclear power stations post 2025.” [RD6].

3.2.19 The consultation sets out the strategic siting criteria that Government proposes to use to assess whether sites listed in EN-6 should continue to be listed in the new NPS. It confirms that these are those criteria used in the original strategic siting process, updated to be consistent with current law and policy.

3.2.20 The consultation states that the “Government’s preliminary view is that the sites listed in EN-6 are likely to be those which can deploy the soonest and are the only sites capable of deploying a nuclear power station by 2035” (paragraph 1.18, [RD6]). It states that the proposed process for assessing and designating sites include carrying the list of sites from NPS EN-6 (other than Hinkley Point C) subject to them meeting the updated siting criteria and updates of their environmental assessments. No new site nominations will be invited until the 2020s. The new ‘capable of deployment by’ date will be 2035 to focus on those sites that can help meeting the need for nuclear as soon as possible.

3.2.21 Paragraph 1.22 confirms that “...sites listed in EN-6 on which a new nuclear power station is anticipated to deploy after 2025 will continue to be considered appropriate sites and retain strong Government support during the designation of the new NPS” [RD6]. Paragraph 1.23 confirms that where there is no relevant change in circumstance it is likely that significant weight would be given to the policy in NPS EN-1 and NPS EN-6. It also states (paragraph 1.24) that “...a published new NPS in draft form would be an important and relevant consideration under section 105(2)(c) of the Act 2008 when a decision is taken on an application for Development Consent” [RD6].

Relevant changes in circumstances

3.2.22 The Consultation on Siting and Process [RD6] makes it clear that the siting criteria have only been updated to reflect changes in law or policy. There have been no changes in law or policy which would affect the assessment of the Wylfa Newydd site against these siting criteria and therefore Wylfa Newydd

continues to be strongly supported as a potentially suitable site for the deployment of a new nuclear power station. Local environmental considerations, including impact on European designated sites, remain to be taken into account through the DCO application process.

3.3 Other relevant applications

Preliminary works applications

3.3.1 Horizon is proposing to undertake Enabling Works which include:

- SPC Works to prepare the site for the Main Construction stage; and
- A5025 On-line Highway Improvements to improve the existing A5025 (including widening, reconstructing and resurfacing the road from Valley to the Power Station Site).

Site Preparation and Clearance

3.3.2 The SPC Works represent the first stage of construction (as described above). This stage includes a series of works programmed to start prior to and then overlap with the early parts of the Main Construction stage.

3.3.3 The main SPC Works include:

- establishing the main site compound;
- fencing and site security area;
- storage;
- parking and temporary structures (providing offices, welfare, mess facilities etc.);
- an overflow car park;
- establishing road crossings, comprising a new vehicular crossing of the Existing Power Station access road and formalisation of existing vehicular crossing of Cemlyn Road; and
- other activities, including a remediation processing compound, additional compounds, treating Invasive Non-Native Species, vegetation clearance etc.

3.3.4 These works are subject to a separate planning application (ref: 38C310F/EIA/ECON) under the TCPA [RD2] which was submitted to IACC on 10 November 2017. In order to maintain flexibility in the consenting process for the Wylfa Newydd DCO Project, they are also included within the DCO.

3.3.5 If the DCO is not granted or the Wylfa Newydd Project does not proceed, all temporary infrastructure would be removed and the affected land would be subject to a scheme of restoration.

A5025 On-line Highway Improvements

- 3.3.6 The required changes to the existing A5025 between Valley and the Power Station Site are known as the 'A5025 On-line Highway Improvements' and include the following activities.
- Widening: the road to an overall width of 7.3 metres (with only a handful of locations where this is not possible).
 - Reconstruction: remove and replace the layers which make up the highway surface.
 - Resurfacing: resurfacing the base layers of the road where the base conditions are poor.
- 3.3.7 These works are subject to a separate planning application (ref: 27C106E/FR/ECON) under the TCPA [RD2] which was submitted to IACC on 17 November 2017.

Marine licences

- 3.3.8 The Marine and Coastal Access Act 2009 (MCAA) [RD12] prohibits a person from carrying out a 'licensable marine activity' except in accordance with a Marine Licence. In England, a Marine Licence may be 'deemed' under a DCO but this is not the case in Wales, meaning that a separate Marine Licence is required for a Welsh NSIP involving Marine Licensable Activities.
- 3.3.9 The Licensable Marine Activities comprise the Permanent Marine Works, the Temporary Marine Works, the disposal of dredged material at the Disposal Site (at Holyhead North), the drainage of surface water into the sea, the construction of a waste water treatment effluent outfall, and the drainage of treated sewage into the sea (during the construction phase only).
- 3.3.10 Two separate Marine Licence applications will be made to the Marine Licensing Team at Natural Resources Wales (NRW). NRW is the appropriate licensing authority for the purposes of determining Marine Licence applications (following delegation of this power to it by the Welsh Ministers). It is expected that a single Marine Licence will be issued by NRW for all Licensable Marine Activities.

4 Development of the Wylfa Newydd Project

4.1 Introduction

- 4.1.1 This section of the Planning Statement explains Horizon's overall vision for the Wylfa Newydd Project and how that vision has informed the approach taken to the development of the project.

4.2 Horizon's Project Vision and Objectives

Project Vision

- 4.2.1 Horizon Nuclear Power Limited (a parent company of Horizon) is a UK energy company, developing a new generation of nuclear power stations to help meet the UK's need for stable and sustainable low carbon energy. Building on core values of safety, courage, integrity, collaboration and inspiration, Horizon Nuclear Power Limited's vision is as follows:

"We believe there is a compelling requirement for new nuclear power in the UK to help tackle the vital and complex challenge of delivering a sustainable energy future. As part of this vision Horizon will deliver secure, affordable, low carbon energy for present and future generations."

- 4.2.2 Nuclear power can play a vital role in meeting the challenge of maintaining secure, low carbon energy supplies for the UK, whilst also tackling the global threat of climate change by meeting emissions reduction targets. Horizon's new nuclear power station on Anglesey, next to the recently commissioned Existing Power Station, would deliver a capacity of approximately 3,000MW of electricity, enough power for around five million homes for decades to come.
- 4.2.3 Horizon's vision is to deliver the Project in a safe and efficient manner, whilst seeking to reduce adverse effects and maximise the benefits on the environment and local communities on Anglesey as far as possible.

Project Objectives

- 4.2.4 In order to realise this vision, and having regard to the outcome of the SSA (described above). Horizon has set a series of project-wide objectives for the Wylfa Newydd Project. The Wylfa Newydd Project should:
- help to meet the energy challenge in the UK, by providing a reliable source of low carbon electricity;
 - to be delivered in a safe and efficient manner;
 - reflect the importance of its setting in Anglesey;
 - uphold the unique culture and language of Anglesey;
 - integrate sustainability into all physical designs;
 - develop a green and sustainable approach in the development and management of the buildings and operational activities;

- be a good neighbour; keeping local disruption to a minimum throughout the Wylfa Newydd Project lifecycle;
- build on the legacy of the Existing Power Station, and help to create a positive legacy for Anglesey; thinking about each significant investment and how it can create a positive future for the area, where appropriate;
- ensure that all the elements are designed to connect with the varied beauty and character of Anglesey and conserve and enhance the natural environment as far as possible; and
- respect communities and ensure that the effect of the Project on them is minimised and that opportunities to provide enhancements are taken, as far as possible.

The Power Station Site

- 4.2.5 The site vision for the Wylfa Newydd Nuclear Power Station reflects the importance of its setting on Anglesey. The Power Station will sit alongside the recently decommissioned Existing Power Station, and the two power stations will share the landscape setting of this coastal location on the northern coastline of Anglesey.
- 4.2.6 The construction of the Power Station buildings, Off-Site Power Station Facilities, Marine Works and Associated Development will undoubtedly alter the local landscape; however, we will seek to minimise this as far as possible.
- 4.2.7 In addition to the project-wide objectives set out above, the proposals for the Power Station Site aim to:
- minimise visual impact as far as possible;
 - ensure that the design reflects the difference between immediate and longer distance views;
 - reflect the importance of the human scale activities on the Power Station Site; and
 - respect our communities, and minimise impact on them as far as possible, particularly those very close to the Power Station Site.

Associated Development

- 4.2.8 In addition to the project-wide objectives set out above, the proposals for the Associated Development sites should, whilst recognising the temporary nature of the proposals:
- provide the necessary facilities to ensure the delivery of the Power Station that meets the urgent need for new nuclear power as early as possible in a safe and efficient manner;
 - minimise visual impact as far as possible;

- respect local communities, and minimise impact on them as far as possible, particularly those very close to the Associated Development sites; and
- help to create a positive legacy for Anglesey, thinking about each significant investment and how it can create a positive legacy for the area, recognising that this will not always involve retaining the buildings on the Associated Development sites.

Design evolution and need for flexibility

- 4.2.9 Horizon's commitment to its vision and objectives is apparent in the way the Project has evolved, throughout the design process including extensive consultation with the local authorities, public and stakeholders.
- 4.2.10 A summary of the development proposals is provided below, with full details of the scheme design in the DAS (Application Reference Number: 8.2.1 to 8.2.3), including the iterative design process from conception to the proposals in the DCO submission.
- 4.2.11 NSIPs consented through the DCO process are by their nature, usually large and very complex forms of development. Nuclear power stations have the additional need to comply with important safety and other regulatory requirements. Whilst the Project has been subject to an extensive process of design development and consultation, Horizon will have a continuing need to refine the proposals. Flexibility is required in the DCO to reduce the potential need for non-material changes post consent for minor amendments.
- 4.2.12 Similar to other DCOs of this scale, the draft Order is based on a 'parameters approach' (also known as the 'Rochdale Envelope') which identifies defined envelopes for the construction the Wylfa Newydd DCO Project within which future development will be undertaken. Further detail on the 'Rochdale Envelope' in relation to the EIA is set out at chapter B1 of the ES (Application Reference Number 6.2.1). A parameter based approach is deemed appropriate for the construction and operation of the Wylfa Newydd Project in order to provide sufficient flexibility to manage the inevitable change through the Generic Design Assessment (GDA), the Nuclear Site Licence and design development processes. Maximum and minimum parameters (such as limits on height and location of buildings) would be set by the DCO requirements in order to keep the development within a defined envelope.
- 4.2.13 The parameters are constrained within the following:
- Order Limit Plans: these identify the Order Limits for the development to be authorised.
 - Works Plans (Application Reference Number: 2.3): these identify the limits of deviation for, and location of each work package (or 'work area').
 - Schedule of Works: this outlines the works that could theoretically take place within each works area, as identified on the Works Plans.

- **Parameter Plans:** these identify the zones within which buildings, structures, and works identified in 'parameter tables' must be located. They provide an additional layer of restriction by further controlling where construction of certain elements can take place within the limits of deviation in the Works Plans.
- **Parameter tables:** these identify maximum and minimum building dimensions and where relevant final construction platform levels, dredging depths and volumes.

- 4.2.14 Some elements of the Wylfa Newydd DCO Project are largely fixed for consenting purposes (e.g. the location of the nuclear reactors), while other buildings, structures, works and construction methodology are restricted through application of the parameters. These parameters have been informed by the potential to create adverse environmental effects. For example, for those buildings where the location is sensitive in terms of EIA, e.g. because there is a stack emission on the building, the location has been limited to relatively modest limits of deviation.
- 4.2.15 In general, more limited parameters are used for the Associated Development and Off-Site Power Station Facilities site.
- 4.2.16 For sites where Horizon is intending to submit detailed design drawings for approval (i.e. Dalar Hir, Parc Cybi and elements of the A5025 Off-line Highways Works), the parameter approach has been implemented to enable Horizon to submit revised plans for approval (in accordance with the parameters) if, at a later date, the approved design is no longer feasible or preferred.
- 4.2.17 The DAS (Application Reference Number: 8.2.1) explains the approach sought with regard to flexibility for the various components of the Project.

4.3 Summary of Proposals

- 4.3.1 This section provides a summary of the Wylfa Newydd DCO Project and its constituent elements.

Power Station, other on-site development and Marine Works

- 4.3.2 The Power Station, other on-site developments and Marine Works would be located within the Wylfa Newydd Development Area (407 hectares), adjacent to the Existing Power Station at Wylfa Head, west of Cemaes on the north coast of Anglesey.
- 4.3.3 The Power Station Site would comprise a range of buildings, structures, facilities and features. These include the following:

Power Station

- **Main plant** – buildings that are located in and around the single power island and contain the plant that is particularly important for safe generation of electricity.
- **Common plant** – comprising those parts of the Power Station that support the process of generation of power and are shared between the two UK ABWRs.
- **Supporting facilities, buildings, structures and features** – including those parts of the Power Station necessary to support the operation and maintenance of the Power Station, including offices and security facilities.
- **Grid Connection** – apparatus to transfer electrical energy to the National Grid high voltage electricity transmission network.

Other on-site development

4.3.4 The other on-site development includes:

- landscape works and planting;
- drainage;
- surface water management systems;
- public access works including temporary and permanent closures and diversions of Public Rights of Way;
- new Power Station Access Road and internal site roads;
- car parking;
- construction compounds and temporary parking areas;
- laydown areas;
- working areas and temporary works and structures;
- temporary construction viewing area;
- diversion of utilities;
- perimeter fencing;
- construction fencing; and
- electricity connections.

Marine Works

4.3.5 The Marine Works comprise both Permanent Marine Works and Temporary Marine Works, as described below:

- Permanent Marine Works: The Cooling Water System, the Marine Off-loading Facility, breakwater structures, shore protection works, surface water drainage outfalls, waste water effluent outfall (and associated drainage of surface water and waste water effluent to the sea), fish

recovery and return system, fish deterrent system, navigation aids and Dredging; and

- Temporary Marine Works: temporary cofferdams, a temporary access ramp, navigation aids, temporary outfalls and a temporary barge berth.

Off-Site Power Station Facilities

4.3.6 All of the Off-Site Power Station Facilities would be located on the same site. The selected site is located adjacent to the A5025 at Llanfaethlu, approximately 7.5km from the Wylfa Newydd Development Area, on a site currently used as a garage and vehicle parking. The proposed development would consist of the following.

- An Alternative Emergency Control Centre (AECC) to provide back-up command and communications facilities that would be used to remotely manage an incident at the Power Station in the extremely unlikely event the primary facilities on the Power Station Site were unavailable or if there was no access to the Power Station Site.
- A Mobile Emergency Equipment Garage (MEEG) to enable Horizon to store a number of specialist vehicles at a location close to but separate from the Power Station Site, allowing them to be rapidly deployed if needed to support an incident. The MEEG could also be used as a marshalling point for support arriving on Anglesey before onward dispatch to the Power Station Site in an emergency situation. The MEEG would be located in the same building as the AECC.
- An Environmental Survey Laboratory (ESL) would perform a normal operating function on a daily basis for environmental monitoring and, as such, would contain facilities such as radiation monitoring equipment to conduct radiological surveys in the local area.
- Car parking and pedestrian walkways.
- Access and delivery areas.
- Generator.
- Pump house.
- Fuel pump and fill point.
- Substation.
- Two underground fuel tanks.
- Refuse compound.
- Portable office pods.
- Container storage.
- Security fencing.
- Drainage swale.

- 4.3.7 The Off-Site Power Station Facilities would be used during the operational phase of the Power Station. The facilities are required in order to provide resilience against extreme events with very low probabilities.
- 4.3.8 Further detailed description of the Off-Site Power Station Facilities is provided in appendix B of this Planning Statement, chapter E1 of the ES (Application Reference Number: 6.5.1) and volume 3 of the DAS (Application Reference Number: 8.2.3).

Associated Development

- 4.3.9 As explained above, the nature of the Project and the characteristics of the local area require a number of associated developments to form part of the Wylfa Newydd Project in order to facilitate the construction of Wylfa Newydd Power Station, and to mitigate potential environmental impacts associated with the project.
- 4.3.10 The selection of the Associated Development sites and their suitability in operational and planning terms is considered in the Site Selection Report (Application Reference Numbers: 8.24.4 to 8.24.7).

Site Campus

- 4.3.11 The Site Campus would provide temporary worker accommodation on land to the north-east of the WNDA, to be delivered in phases.
- 4.3.12 This will provide accommodation for up to 4,000 workers in 'campus' style modular form (providing an independent living space for each worker), as well as an amenity building (including cafeteria, café, reception area, gym, bar, shop, first aid facilities and other social space), outdoor recreational facilities (including two multi-use games areas, outdoor seating and informal public spaces) and a Site Campus Medical Centre.
- 4.3.13 The proposals include a bus set down and parking area and, disabled parking and parking for light vans / minibuses and temporary parking for workers during the initial phases of construction.
- 4.3.14 The Site Campus would be delivered in a phased manner and would only be present during construction of the Power Station. When it is no longer required, the Site Campus buildings would be removed and the area returned to its pre-developed condition. Public footpaths and access to Fisherman's Car Park would be reinstated after Site Campus decommissioning.
- 4.3.15 Further detailed description of the Site Campus is provided in appendix C of this Planning Statement, chapter D1 of the ES (Application Reference Number: 6.4.1) and volume 3 of the DAS (Application Reference Number: 8.2.3).

Park and Ride Facility

- 4.3.16 The proposed temporary Park and Ride facility at Dalar Hir will provide secure parking for 1,900 cars (including 10 disabled spaces), 55 minibuses,

35 motorbikes and cycle parking (for up to 25 bicycles). It will also include a bus pick up zone and transport facility.

- 4.3.17 This Park and Ride facility would be used during the construction phase of the Power Station to transport and manage the flow of some of the construction workforce to and from the WNDA, in order to reduce the number of vehicles being driven to the WNDA.
- 4.3.18 Following construction of the Power Station, the Park and Ride facility would be removed and the land restored to its existing use (agricultural land). The existing hedge line and proposed new hedge line to the west of the site, along with tree and shrub planting, using native species, on the southern boundary would be retained as a legacy benefit.
- 4.3.19 Further detailed description of the Park and Ride is provided in appendix D of this Planning Statement, chapter F1 of the ES (Application Reference Number: 6.6.1) and volume 3 of the DAS (Application Reference Number: 8.2.3).

Logistics Centre

- 4.3.20 The proposed temporary Logistics Centre at Parc Cybi will consist of:
- an office/welfare building;
 - security building;
 - driver instructor point;
 - a covered inspection bay;
 - heavy goods vehicle (HGV) scanner; and
 - parking for HGVs, medium goods vehicles, light goods vehicles and staff.
- 4.3.21 The Logistics Centre would be used during the construction phase of the Power Station to control the flow of traffic along the A5025, in order to prevent vehicles leaving in convoy and to avoid sensitive times of the day (such as peak work rush hour and school run).
- 4.3.22 Following construction of the Power Station, the site would be available for another use subject to necessary consents being secured.
- 4.3.23 Further detailed description of the Logistics Centre is provided in appendix E of this Planning Statement, chapter H1 of the ES (Application Reference Number: 6.8.1) and volume 3 of the DAS (Application Reference Number: 8.2.3).

A5025 Off-line Highways Improvements

- 4.3.24 A variety of highway improvement works along the A5025 would be needed to address existing safety and environmental concerns and mitigate the impacts of the construction and operation of the Wylfa Newydd Project.
- 4.3.25 The A5025 Off-line Highway Improvements involve the construction of new sections of road such as bypasses and road realignment works.

- 4.3.26 The A5025 Off-line Highway Improvements seek to address potential environmental effects on communities, including noise from increased road traffic and severance.
- 4.3.27 Further detailed description of the A5025 Off-line Highway Improvements is provided in appendix F of this Planning Statement, chapter G1 of the ES (Application Reference Number: 6.7.1) and volume 3 of the DAS (Application Reference Number: 8.2.3).

Ecological Compensation Sites

- 4.3.28 The Wylfa Newydd DCO Project includes wetland habitat creation and enhancement works as compensation for any potential impacts on the Tre'r Gof SSSI.
- 4.3.29 The SSSI Compensation Strategy volume 1 (Application Reference Numbers: 6.4.56) documents the methodology and findings of the exercise to identify sites that form the compensation proposal. The final selection of the sites at Tŷ Du, Cors Gwawr and Cae Canol-dydd follows initial identification, survey and evaluation of sites with potential to form part of the compensation proposal.
- 4.3.30 The outline design proposals for each site are set out in the Tre'r Gof SSSI Compensation Strategy Volume II in Appendix D9-24 (Application Reference Number: 6.4.57). Detailed design information will be prepared in accordance with the habitat and landscape principles relating to the Ecological Compensation Sites in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) and submitted to the IACC for approval. Development of the Ecological Compensation Sites will be undertaken in accordance with the approved design details. These measures will be secured through the DCO.
- 4.3.31 The proposals set out in the Tre'r Gof SSSI Compensation Strategy Volume II have been assessed within the Ecological Compensation Sites: Assessment of Environmental Effects in Appendix D1-2 (Application Reference Number: 6.4.18).

Outline programme for construction

- 4.3.32 The Power Station construction programme is anticipated to commence in the first year following award of development consent. The main construction phase is anticipated to take approximately seven years, with the first ABWR Unit operational at the end of that period, and the second ABWR Unit operational approximately two years later. Peak Construction (i.e. prior to the commissioning of Unit 1) represents the worst case scenario with higher traffic volumes than Unit 2 construction combined with Unit 1 operation. Completion of the spent fuel storage facility would not commence until year 15 as the facility is not required until approximately year 17. Further details on construction can be found in appendix D1-1 (Construction Method Statement) (Application Reference Number: 6.4.17) of the ES.

- 4.3.33 Activities such as bulk earthworks, deep excavations, rock excavation and the Marine Off-Loading Facility construction are likely to peak during years 1 and 2. The following activities are likely to peak during year 5:
- construction activities
 - concrete production;
 - distribution and placing;
 - steel reinforcing works;
 - craneage;
 - access to structures; and
 - related site logistics.
- 4.3.34 It is anticipated that construction of the Off-Site Power Station Facilities would commence in year 3 and last until year 5. It is anticipated that the Off-Site Power Station Facilities would be operated throughout the operation of the Power Station until decommissioning.
- 4.3.35 It is anticipated that construction of the Park and Ride facility at Dalar Hir would commence in year 1 and last for approximately 18 months. It is anticipated that the Park and Ride facility would be operated during construction of the Power Station.
- 4.3.36 The A5025 Off-line Highway Improvements are proposed to be completed in time for the start of major construction activities at the Wylfa Newydd Development Area. It is anticipated that construction of the A5025 Off-line Highway Improvements would commence in year 1 and last for approximately 18 months.
- 4.3.37 It is anticipated that construction of the Logistics Centre at Parc Cybi would commence in year 1 and last for approximately 15 months. It is anticipated that the Logistics Centre would be operated during construction of the Power Station.
- 4.3.38 The Site Campus facilities are required throughout the construction phase of the Power Station, but would be delivered in phases, to a maximum of 4,000 bed spaces.

Consultation

- 4.3.39 Horizon has undertaken a comprehensive consultation process through both statutory and non statutory engagement with the local community and key stakeholders.
- 4.3.40 The Planning Act 2008 [RD1] requires the developer of a NSIP, such as a nuclear generating station, to undertake Pre-Application Consultation before making an application for a DCO.
- section 42 of the Planning Act 2008 [RD1] sets out details of who must be consulted, including local authorities, other statutory bodies, and persons having an interest in the land to be developed; and

- section 47 of the Planning Act 2008 [RD1] requires a developer intending to submit an application for a DCO to prepare a Statement of Community Consultation (SOCC) setting out how it intends to consult the local community, and to carry out consultation in accordance with the proposals set out in the SOCC.
- 4.3.41 Horizon published its SOCC in September 2014 and carried out its Stage One Pre-Application Consultation in accordance with the document between September and December 2014.
- 4.3.42 An updated SOCC was published in January 2016 and Horizon undertook a Stage Two Pre-Application Consultation in accordance with that updated SOCC between August and October 2016.
- 4.3.43 A further updated SOCC was published in May 2017 and Horizon undertook a Stage Three Pre-Application Consultation between May and June 2017.
- 4.3.44 The SOCC was updated for the Stage Two and Three Pre-Application Consultation periods (in January 2016 and May 2017 respectively).
- 4.3.45 The Stage One, Stage Two and Stage Three Pre-Application Consultation periods conformed to the commitments established in Horizon's SOCC and represented a formal Pre-Application Consultation in terms of satisfying both section 42 and section 47 of the Planning Act 2008 [RD1]. It also meet the objectives of Horizon's Maximising Inclusion Strategy which applied to all stages of consultation.
- 4.3.46 Horizon also undertook a number of interim project updates as part of the consultation. This included a Project Update Consultation in January 2016 and specific consultation on the SPC Proposals (in May and October 2016) to support the separate application for those works through a planning application under the TCPA [RD2]. The plans to upgrade existing sections of the A5025 were also consulted on in October 2016.
- 4.3.47 A further period of Consultation on Additional Land was undertaken in January and February 2018. This included additional land required as part of the WNDA and at the Associated Development sites, as well as the sites required for the creation of the Ecological Compensation Sites.
- 4.3.48 Throughout the majority of the consultation period, the consenting process did not allow the Associated Development to be considered as part of a DCO (instead requiring separate planning applications under the TCPA [RD2]). Horizon, however, undertook the Pre-Application Consultation process for these sites in accordance with the requirements of the Planning Act 2008 [RD1] in anticipation of the change to the consenting process (through the enactment of the Wales Act 2017 in January 2017 [RD13]) which meant that the Associated Development can be considered as part of the DCO process.
- 4.3.49 In line with the Planning Act 2008: guidance on the pre-application process for major infrastructure projects [RD15], Horizon provided draft application documents for review by certain key consultees in advance of submission. This process was undertaken between September and December 2017 in order to allow comments from stakeholders on their areas of expertise, with

sufficient time to take on board any comments made during that period prior to submission.

- 4.3.50 The Consultation Report (Application Reference Number: 5.1) provides further detail on the approach to both formal Pre-Application Consultation and the additional informal consultation with stakeholders and the community. Horizon have analysed, recorded and had regard to comments received at each stage of the consultation. How the consultation process has informed the iterative design evolution of the Wylfa Newydd DCO Project is set out in the DAS (Application Reference Number: 8.2.1).

5 Need for the Wylfa Newydd Project and the planning framework

5.1 Introduction

- 5.1.1 The purpose of this chapter is to confirm the urgent need for new electricity generation capacity in the UK recognised both in national policy and supporting documents, and to set out the planning policy framework against which the Wylfa Newydd DCO Project has been assessed.
- 5.1.2 It outlines the legislative context and how this informs the policies that are relevant to the determination of the DCO, including the relationship between the relevant NPSs and other national, regional and local planning policy.

5.2 Need for nuclear power

- 5.2.1 Horizon has commissioned Oxera to examine the available evidence pertaining to the urgent need for new nuclear power, over and above that considered in NPS EN-1 and EN-6. This analysis ('the Oxera analysis') is provided at appendix G of this Planning Statement and presents the needs case for new nuclear power.
- 5.2.2 Firstly, the Oxera analysis demonstrates that, on the judgement of the Department for Business, Energy and Industrial Strategy (BEIS), the National Audit Office (NAO) and National Grid, electricity demand is expected to increase. In particular, BEIS forecasts that electricity demand will increase by approximately 20% by 2035 [RD40].
- 5.2.3 Additionally, it notes that a significant amount of electricity capacity is set to be retired over the next two decades, including almost 90% of existing nuclear capacity and coal capacity [RD41].
- 5.2.4 It is therefore forecast that there will be a generation shortfall which, according to the NAO, will amount to 95GW by 2035 (i.e. 70% of UK's forecast energy needs in 2035) [RD42].
- 5.2.5 The prospect of all or a significant proportion of this shortfall being met by wind and solar alone is highly unlikely given that the industry estimates that by 2040, at least 50% (and up to 80% at certain times of the year) of the UK's energy needs will still be supplied by sources other than wind and solar [RD43]. This apparent lack of proven low-carbon alternatives to new nuclear that can be deployed at sufficient scale, in combination with the UK's binding emissions targets, highlights the urgent need for new nuclear plants.
- 5.2.6 Furthermore, the previous needs case as identified at paragraph 3.5.1 in NPS EN-1, which stated that nuclear power generation is *"anticipated to play an increasingly important role as we move to diversify and decarbonise our sources of electricity"* [RD4] continues to remain relevant, as recently confirmed in BEIS's recent ministerial statement:

"[m]y Department's annual updated energy and emissions projections state that by 2035 overall demand for electricity is expected to have increased.

Therefore, with a number of the existing coal and nuclear fleet due to close by 2030, new nuclear power generation remains key to meeting our 2050 obligations [...] Government has noted previously that there are technical and commercial barriers to deploying other technologies to produce the same annual generation as that of nuclear power”,

5.2.7 BEIS’s recent ministerial statement [RD3] concludes that:

“[t]he Government believes that it is important that there is a strong pipeline of new nuclear power to contribute to the UK’s future energy system”.

5.2.8 In further support of this position is the recent Consultation on Siting and Process [RD6], which states:

“[t]he Government’s view is that the assessment of the need for new electricity generation carried out to support EN-1 remains valuable and continues to be relevant. Currently all but one of the existing fleet of nuclear reactors are due to cease generating before 2030, so the need for new nuclear power remains significant [...] it is important that there is a strong pipeline of new nuclear power to contribute to the UK’s energy mix and security of supply in the future”.

5.2.9 In summary, the Oxera analysis at appendix G presents evidence for the continued need for new nuclear power to deliver the UK’s energy requirements to 2025 and beyond. Moreover, the significant lead time for delivery of new nuclear capacity makes this need urgent.

5.3 Legislative context

5.3.1 This section outlines the legislation that has informed the identification and review of relevant planning policy.

The DCO Application

5.3.2 The Power Station is a NSIP. Its construction and operation must therefore be authorised by a DCO granted by the SoS under the Planning Act 2008 [RD1].

5.3.3 The provisions of the Wales Act 2017 [RD13], enacted in January 2017, mean that the Associated Development can be considered as part of the DCO process.

5.3.4 The Planning Act 2008 sets out the requirements for the application and grant of a DCO.

5.3.5 The ministerial statement [RD3] makes it clear that, in the absence of a post 2025 nuclear NPS, nuclear power stations yet to apply for development consent and due for deployment beyond 2025 (i.e. including Wylfa) should be considered under section 105 of the Planning Act 2008 (until such time as a new NPS is adopted).

5.3.6 Section 105 of the Planning Act 2008 lists the matters that the SoS must have regard to in deciding the application, namely:

- (a) a local impact report;

- (b) any matters prescribed in relation to development of the description to which the application relates; and
- (c) any other matters which the SoS thinks are both important and relevant to the SoS's decision.

Local Impact Reports

- 5.3.7 As part of the Planning Act 2008 process, the IACC will be invited to submit a Local Impact Report (LIR) providing details of the likely impact of the proposed development on the authority's area. The content of the LIR is a matter for the local authority as long as it falls within the statutory definition of s60(3) of the Planning Act 2008 [RD1]. This can include consideration of relevant development plan policies and supplementary planning guidance.

Important and relevant matters

NPSs which are important and relevant to the proposed development

- 5.3.8 The relevant NPSs for the Wylfa Newydd DCO Project are:

- overarching NPS EN-1 dated July 2011 [RD4]; and
- NPS EN-6 dated July 2011 [RD5].

- 5.3.9 The ministerial statement [RD3] states that the:

“Government is confident that both EN-1 and EN-6 incorporate information, assessments and statements which will continue to be important and relevant for projects which will deploy after 2025 including statements concerning the need for nuclear power – as well as environmental and other assessments that continue to be relevant for those projects. As such, in deciding whether or not to grant development consent for such a project, the Secretary of State would be required, under 105(2)(c) of the Act, to have regard to the content of EN-1 and EN-6, unless they have been suspended or revoked. In respect of matters where there is no material change in circumstances it is likely that significant weight would be given to the policy in EN-1 and EN-6”.

Other matters which the SoS thinks are both important and relevant

- 5.3.10 Paragraph 4.1.5 of NPS EN-1 [RD4] states that other matters that the decision maker may consider both important and relevant to its decision making may include ‘Development Plan Documents’ and other documents in the ‘Local Development Framework’. However, NPS EN-1 confirms that in the event of a conflict between these or any other documents and an NPS, the NPS prevails for the purposes of decision making in relation to a DCO application. This is considered further with regard to the role and relevance of Welsh national planning policy and adopted development plan policy for the DCO application. This remains the case, even for DCO applications considered under Section 105, which although not placing a legal requirement for the decision maker to determine applications in accordance

with the NPS, does regard it as an important and relevant consideration, against which significant weight should be placed (as confirmed by the ministerial statement [RD3]).

- 5.3.11 The new NPS, currently subject to the Consultation on Siting [RD6], will in draft form be considered as relevant to a decision under section 105 of the Planning Act 2008 [RD1], provided that it has been published in advance of a decision on the DCO application.

Appropriate marine policy documents

- 5.3.12 Part of the Power Station would be located in the marine environment. Section 59 of the MCAA [RD12] sets out the appropriate marine policy documents that a public authority must have regard to in taking a decision which relates to the exercise of any function capable of affecting the whole or any part of the UK marine area (including a decision on a DCO application). Appropriate marine policy documents are:

- to the extent the decision relates to a marine plan area, any marine plan which is in effect for that area (with certain exceptions relating to devolved marine planning regions); and
- any Marine Policy Statement (MPS) which is in effect (provided that, in Wales, it has been adopted by the Welsh ministers). For the Wylfa Newydd Project, the appropriate marine policy documents are the UK MPS 2011 [RD16], which was jointly adopted by the SoS, Scottish Ministers, Welsh Ministers and the Department of the Environment in Northern Ireland.

- 5.3.13 The Welsh Government is currently developing the Welsh National Marine Plan which, when adopted, will also be an appropriate marine policy document. The Welsh Government is currently consulting on a draft of the Welsh National Marine Plan until 29 March 2018 [RD17]. There is therefore currently no relevant marine policy document that the decision maker can have regard to.

5.4 Planning policy overview

- 5.4.1 This section identifies those elements of policy which are particularly significant for the DCO application, having regard to the above legislative context, and the test which they set for the determination of the application.
- 5.4.2 It sets out the relationship between the relevant NPSs and other relevant material considerations including other national planning policy and regional and local planning policies, in the context of section 105 of the Planning Act 2008 [RD1].

National Policy Statements

- 5.4.3 Whilst the application does not need to be determined in accordance with the NPS pursuant to section 104(3) of the Planning Act 2008 [RD1]), the ministerial statement is clear that NPSs EN-1 and NPS EN-6 remain important and relevant matters which would carry significant weight in determining the

application under section 105. Indeed, NPSs EN-1 and EN-6 continue to represent the primary policy basis for a decision made by the SoS on this application for an order for development consent for the Wylfa Newydd DCO Project.

- 5.4.4 NPS EN-1 makes clear that the Government's key objectives in energy policy are to ensure energy security for the UK and to decarbonise energy capacity in order to meet the UK's 2050 climate change targets.
- 5.4.5 NPS EN-6 is the NPS for nuclear power generation that sits under the umbrella of NPS EN-1. NPS EN-6, again stresses the urgency of bringing forward new nuclear power projects as part of the drive to decarbonise the UK's electricity supply and to increase energy security.
- 5.4.6 This section provides an overview of NPS EN-1 and NPS EN-6 and their relevance to the Project.

Need for the Project

- 5.4.7 The ministerial statement confirms that statements in NPS EN-1 and NPS EN-6 concerning the need for nuclear power will continue to be important and relevant for projects which will deploy after 2025. The Consultation on Siting [RD6] reinforces this at paragraph 1.7, stating that *"the Government's view is that the assessment of the need for new electricity generation carried out in support of EN-1 remains valuable and continues to be relevant"*. These references are summarised below. The analysis at Appendix G demonstrates that the need for nuclear power is at least as great now as at the time of publication of the NPS EN-6 and probably greater.
- 5.4.8 NPS EN-1 explicitly identifies the urgent need for new (and particularly low carbon) electricity NSIPs in the UK within the next 10 years to 15 years, i.e. 2011 to 2025. It outlines the challenges facing the UK's energy security in light of the Government's carbon reduction objectives and notes that the UK not only needs a secure, diverse and reliable supply of electricity, but needs it in the context of reducing greenhouse gas emissions by at least 80% by 2050 (under the Climate Change Act 2008 [RD18]) (paragraphs 3.3.14 - 3.3.15, NPS EN-1 [RD4]).
- 5.4.9 This means that much of the new electricity generating capacity in the UK must be low carbon, and substantial investments will be required in new, low carbon generating technologies.
- 5.4.10 Paragraph 3.1.3 of NPS EN-1 [RD4] requires the decision maker to assess the applications on the basis that the need for all types of energy infrastructure covered by the NPS has already been demonstrated by the UK Government. The principle of the need for the Power Station is therefore well established.
- 5.4.11 Paragraph 3.2.3 provides guidance on the weight to be attached to that 'need' and states that the need for such infrastructure will often be *"urgent"* and *"without significant amounts of new large scale energy infrastructure, the objectives of its energy and climate change policy cannot be fulfilled"* [RD4]. NPS EN-1 therefore requires the decision maker to give substantial weight to considerations of need stating that *"the weight which is attributed to*

considerations of need in any given case should be proportionate to the extent of a project's actual contribution to satisfying the need for a particular type of infrastructure" (paragraph 3.2.3) [RD4].

- 5.4.12 NPS EN-1 recognises that the failure to decarbonise and diversify the country's energy sources could result in the UK becoming locked into a system of high carbon generation, which would make it very difficult to meet its carbon reduction targets (paragraph 3.3.16) [RD4].
- 5.4.13 For the UK to meet its energy and climate change objectives, new nuclear power is considered as one of the three key elements of the Government's strategy for moving towards a decarbonised, diversified electricity sector by 2050 (paragraphs 3.3.22, 3.5.2 and 3.5.6) [RD4].
- 5.4.14 NPS EN-1 states that the UK Government requires a significant proportion of the 18GW of the new non-renewable capacity needed by 2025 to be met by low carbon generation. It is Government policy that new nuclear power should be able to contribute as much as possible towards meeting this identified need (paragraphs 3.3.22 and 3.5.2) [RD4].
- 5.4.15 The need for new nuclear power and its role in the provision of reliable electricity as the UK transitions to a low carbon economy is reiterated by NPS EN-6 (paragraph 1.1.1). Paragraph 2.2.1 reiterates the messages in NPS EN-1 and requires the decision maker to "*assess applications for new nuclear power stations on the basis that the need for such infrastructure has been demonstrated*" [RD5]. This remains relevant, as confirmed by the ministerial statement [RD3].
- 5.4.16 Paragraph 3.5.1 of NPS EN-1 [RD4] describes nuclear power as a "low carbon, proven technology, which is anticipated to play an increasingly important role as we move to diversify and decarbonise our sources of electricity". Paragraph 3.5.3 of NPS EN-1 [RD4] states that new nuclear power stations will help to ensure a diverse mix of technology and fuel sources, which will increase the resilience of the UK's energy system. It will reduce exposure to the risks of sudden interruptions and sudden spikes in electricity prices "that can arise when a single technology of fuel dominates the electricity generation". Furthermore, nuclear fuel fabrication is described as a stable and mature industry, with a key advantage of having separate supply chains from gas and coal (paragraph 3.5.4).
- 5.4.17 Nuclear power is described as the "*only non-renewable low carbon technology*" that is currently proven and can be deployed on a large scale. Other advantages listed in NPS EN-1 are relatively low generating costs and the ability to operate for long periods without refuelling (paragraphs 3.5.4, 3.5.7 and 3.5.8) [RD4].
- 5.4.18 NPS EN-1 concludes that as nuclear power stations have an estimated design lifetime of 60 years "any new power stations operational by the end of 2025 will play a vitally important role in the decarbonisation of the electricity system" and therefore directly contribute towards the UK's 2050 targets and objectives (paragraph 3.5.10) [RD4]. The ministerial statement

[RD3] is clear that this remains relevant to those projects that will deploy beyond 2025.

The principle of the need for new nuclear power stations, and that this need is urgent, is therefore established in NPS EN-1 and NPS EN-6.

Assessment principles

- 5.4.19 Part 4 of NPS EN-1 [RD4] sets out general policies in accordance with which applications relating to energy infrastructure are to be decided that do not only relate to the need for new energy infrastructure (covered in part 3 of NPS EN-1) or to particular physical impacts of its construction and operation (as covered in part 5 of NPS EN-1 [RD4] and in relation to nuclear energy in NPS EN-6 [RD5], as addressed below).
- 5.4.20 Given the level and urgency of need, paragraph 4.1.2 of NPS EN-1 states that the decision maker should “*start with a presumption in favour of granting consent to applications for energy NSIPs*” [RD4].
- 5.4.21 Paragraph 4.1.3 of NPS EN-1 [RD4] explains that when considering any proposed NSIP, the decision maker should take into account its potential adverse impacts, including long term and cumulative adverse impacts, as well as measures to avoid, reduce or compensate these, and its potential benefits, including the contribution of a project to meeting the need for energy infrastructure, job creation and any other long term or wider benefits.
- 5.4.22 Paragraph 4.1.4 of NPS EN-1 provides additional policy on decision making and states that the decision maker should take into account “*environmental, social and economic benefits and adverse impacts, at national, regional and local levels*” [RD4].
- 5.4.23 Part 4 of NPS EN-1 sets out a number of policies in relation to the content and form of the ES and the methods of conducting EIA and HRA (sections 4.2 and 4.3) [RD4].
- 5.4.24 NPS EN-1 and NPS EN-6 do not contain a general policy requirement to consider alternatives, or the need to establish that the proposed development represents the best option (paragraph 4.4.1, NPS EN-1 [RD4]). Nevertheless, there are a number of requirements to consider alternatives in specific circumstances, including the following.
- Applicants must include in their ES, information about the main alternatives they have studied. This should include an indication of the main reasons for the applicant’s choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility.
 - In some circumstances there are specific legislative requirements, notably under the Habitats Directive, for the decision-maker to consider alternatives. These are required to be identified in the ES by the applicant.

- In some circumstances, the relevant energy NPSs may impose a policy requirement to consider alternatives.

5.4.25 Where there is a policy or legal requirement to consider alternatives, the applicant should describe the alternatives considered in compliance with the above requirements. However, the decision maker should be guided by the principles stated in paragraph 4.4.3 of NPS EN-1 [RD4] when deciding what weight should be given to the alternatives. These include the principle that *“the consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner”* (paragraph 4.4.3, NPS EN-1 [RD4]) and that as the application must be made in accordance with the relevant NPS (subject to the exceptions of the Planning Act 2008 [RD1] listed above), if the decision maker *“concludes that a decision to grant consent to a hypothetical alternative proposal would not be in accordance with the policies set out in the relevant NPS, the existence of that alternative is unlikely to be important and relevant to the... decision”* [RD4].

5.4.26 Part 4 of EN-1 also sets out policy in relation to:

- good design for energy infrastructure (4.5);
- consideration of Combined Heat and Power (CHP) (4.6);
- carbon capture and storage and carbon capture readiness (4.7);
- climate change adaptation (4.8);
- grid connection (4.9);
- pollution control and other environmental regularity regimes (4.10);
- safety (4.11);
- hazardous substances (4.12);
- health (4.13);
- common law and statutory nuisance (4.14); and
- security (4.15).

5.4.27 These assessment principles are addressed at chapter 6 of this Planning Statement (Application Reference Number: 8.1).

Generic Impacts

5.4.28 Section 5 of NPS EN-1 [RD4] sets out ‘generic impacts’ relevant to all energy NSIPs. This is followed by detailed guidance on a topic by topic basis to guide the applicants as well as the decision maker in their detailed approach to NSIPs, informing their design, assessment and mitigation. These are listed in table 3-2 in this Planning Statement.

Nuclear impacts and flags for local consideration

5.4.29 In addition to the generic impacts set out in NPS EN-1, NPS EN-6 sets out a list of *“Nuclear Impacts”* that are considered particularly relevant to the development of new nuclear power stations (paragraph 3.4.3, NPS EN-6 [RD5]). This is followed by detailed guidance on these topics informing their

design, assessment and mitigation (paragraphs 3.6-3.12). These Nuclear Impacts are:

- flood risk;
- water quality and resources;
- coastal change;
- biodiversity and geological conservation;
- landscape and visual impacts;
- socio-economic; and
- human health and well-being.

5.4.30 NPS EN-6 also identifies a series of “*Flags for Local Consideration*” to be considered by the decision maker that comprise issues that were identified through the SSA, but were considered more appropriately assessed at the project level (paragraph 3.5.2, NPS EN-6 [RD5]) and provides detailed policy in relation to these (section 3.13-3.16) [RD5]. These are:

- proximity to civil aircraft movements;
- access to transmission networks;
- impact on significant infrastructure and resources; and
- size of site to accommodate construction and decommissioning.

5.4.31 In addition, NPS EN-6 [RD5] states that there are other Flags for Local Consideration which will be considered at the time of the DCO application by the ONR which include matters such as demographics, seismic risk and meteorological conditions.

Matters demonstrated through the NPS or controlled by other regimes

5.4.32 NPS EN-1 and NPS EN-6 also identify matters that have already been considered by the UK Government or which are subject to control through other regimes, these are shown below.

- The Government has demonstrated that there is a need for the types of energy infrastructure covered by the NPSs (NPS EN-1, paragraph 3.1.3 [RD4]).
- From a policy perspective there is no general requirement to consider alternatives or to establish whether the proposed project represents the best option (paragraph 4.4.1, NPS EN-1 [RD4] and paragraphs 2.4.3 and 2.5.4, NPS EN-6 [RD5]).
- Matters covered by other regulatory regimes including pollution control, where the decision maker should work on the assumption that the relevant pollution control regime and other environmental regulatory regimes will be properly applied (paragraph 4.10.3, NPS EN-1 [RD4]).
- Safety, security considerations and emergency planning which are subject to other regimes. The same principles apply to those in relation

to pollution control and environmental regimes, i.e. that the decision maker should assume that the relevant regimes will be properly applied (paragraph 4.11.3, NPS EN-1 [RD4]).

- Radioactive waste management: NPS EN-6 clarifies that the UK has robust legislative and regulatory system in place for the management (including interim storage, disposal and transport) of all forms of radioactive waste produced by new nuclear power stations. The decision maker is expected to assume that arrangements to manage and dispose of radioactive waste will be in place and so should not consider this further (paragraphs 2.11.2, 2.11.4 and 2.11.6, NPS EN-6 [RD5]).

5.4.33 NPS EN-1 (paragraph 4.9.2) [RD4] states that the effects of any necessary grid connection can be assessed separately, though where there are separate applications, the first should contain “*some information*” about the second. Paragraph 4.9.3 requires that the applicant ensures that they provide sufficient information with regard to cumulative environmental effects [RD4].

5.4.34 NPS EN-1 (paragraph 4.13.5) [RD4] notes that those aspects of energy infrastructure which are most likely to have a significantly detrimental impact on health are subject to separate regulation. However, it also states that the decision maker will want to take account of health concerns when setting requirements relating to a range of impacts such as noise. The DCO application is supported by a separate HIA (the findings of which are described in the comprehensive HIA Report (Application Reference Number: 8.19).

Relevance of Welsh national and local policy

5.4.35 While NPS EN-1 and NPS EN-6 together form the primary basis for deciding DCO applications for nuclear NSIPs, paragraph 4.1.5 of NPS EN-1 [RD4] states that other matters which the decision maker may consider both “*important and relevant*” to its decision making include development plan documents or other documents in the local development framework. Welsh and local policy also falls under section 105 (2) (c) of the Planning Act 2008 as a matter(s) that may be important and relevant [RD1].

5.4.36 However, paragraph 4.1.5 of NPS EN-1 [RD4] then explains that in the event of a conflict between these or any other documents and an NPS, the NPS prevails for the purposes of decision making given the national significance of the infrastructure.

5.4.37 Under section 105 (2)(a) of the Planning Act 2008 the decision maker is also required to have regard to a LIR produced by the relevant local authorities, which is defined as a “*report in writing giving details of the likely impacts of the proposed development on the authority’s area (or any part of that area)*” [RD1]. Local authorities can determine the content of their own LIRs and this may include reference to development plan documents. This can assist identifying relevant issues to consider in determining the balance between adverse impacts and benefits.

- 5.4.38 With regard to national policy, NPS EN-1 states at paragraph 4.1.5 that the relevant NPSs have taken account of relevant Technical Advice Notes (TANs) where appropriate. As such, these policies are of limited relevance where they pre-date the NPSs. Newer Welsh national policies will be more relevant, though NPS EN-1 [RD4] and NPS EN-6 [RD5] will take precedence over them and are intended to provide self-contained policy for NSIPs.
- 5.4.39 Taking account of the above, it can be concluded that Welsh national and local planning policy may, therefore, be “*important and relevant*” within the Planning Act 2008 [RD1] regime and thus may have a role to play in informing the decision making on the DCO.
- 5.4.40 The following sections set out the national and local policy that is relevant to the Wylfa Newydd DCO Project.

Welsh national planning policy

- 5.4.41 For development in Wales, the principal strategic policy documents are PPW Edition 9 (2016)² [RD8], TANs and the Wales Spatial Plan (update 2008) [RD19]. Together, these comprise the national planning policy framework informing the preparation of local development plans.

Relevance of national policy

- 5.4.42 Those Welsh national policy documents that were adopted prior to NPS EN-1 and NPS EN-6 are likely to attract less weight in decisions on nationally significant infrastructure projects, as those NPSs will have already taken such policy into account where appropriate. This includes the Wales Spatial Plan [RD19] and the majority of the TANs.
- 5.4.43 The TANs which post-date the relevant NPSs include:
- TAN1 (2015) Joint housing land availability studies [RD20];
 - TAN4 (2016) Retail and commercial development [RD21];
 - TAN12 (2016) Design [RD22];
 - TAN20 (2017) Planning and the Welsh language [RD23];
 - TAN21 (2014) Waste [RD24];
 - TAN23 (2014) Economic development [RD25]; and
 - TAN24 (2017) The historic environment [RD26].
- 5.4.44 Some of these TANs are not relevant (e.g. TAN4) whilst others provide recent and relevant guidance (e.g. TAN12 2016 [RD16]) which may therefore be important and relevant for the purposes of the SoS’s decision.
- 5.4.45 PPW [RD8] has been updated five times since the NPSs (Edition 4 was extant at that time). The latest version (Edition 9) does not contain any specific policy relating to nuclear power generation. Whilst it does contain a range of broad objectives that are relevant to the Project (including promoting

² A Draft PPW: Edition 10 was published on 12th February 2018 for consultation until 18th May 2018.

climate change resilience, protection of the environment and cultural heritage etc.), these were already policy objectives at the time that the NPSs were prepared and therefore, it can be concluded that they have been taken into consideration in their preparation.

Local planning policy

Joint Local Development Plan (JLDP) (2017)

- 5.4.46 Gwynedd Council and IACC ('the Councils') have prepared a JLDP [RD27] for the Anglesey and Gwynedd Local Planning Authority area. The JLDP, adopted in July 2017, replaces the previous Development Plan and forms the basis for decisions on land use planning in the Councils' respective local planning authority areas.

Relevance of the JLDP

- 5.4.47 The JLDP, as up to date local planning policy, may be a "relevant and important" matter to be taken into account in decision-making (s105(2) of the 2008 Planning Act [RD1] and paragraph 4.1.5, NPS EN-1[RD4]) and in informing the LIR.

Supplementary Planning Guidance (SPG)

- 5.4.48 A number of SPG documents have been published by the IACC to further inform development plan policies. This includes the New Nuclear Build at Wylfa SPG published in 2014 (Wylfa SPG) [RD28].
- 5.4.49 The Wylfa SPG sets out the IACC's vision and objectives for the new nuclear development at Wylfa.
- 5.4.50 A draft Wylfa Newydd Supplementary Planning Guidance 2018 Consultation Draft [RD14] was published for consultation in January 2018. The intention of which is to update the adopted SPG to reflect changes in legislation, most notably the Wales Act 2017, and to reflect Horizon's consultations.
- 5.4.51 Much of the locational guidance within the draft SPG remains as previously set out in the 2014 Wylfa SPG [RD28]; however, Horizon's view is that there are revised parts of the draft SPG which are inconsistent with the JLDP and advice from the Planning Inspectorate on the appropriate level of detail for SPGs in relation to NSIPs (see below).
- 5.4.1 The draft SPG does, however, set out the IACC's overall support for the project, including a vision for it as "a positive driver for the transformation of the economy and communities on Anglesey, providing sustainable employment opportunities, improving the quality of life and wellbeing of existing and future generations and enhancing local identity and distinctiveness. It states at paragraph 4.1.1 that *the Wylfa Newydd Project is an unprecedented opportunity to transform the economies of Anglesey and the wider North Wales region and to deliver significant investment in employment, the supply chain, services and infrastructure*".
- 5.4.2 Other SPGs produced by the IACC which are relevant to the Project are:

- Design in the Urban and Rural Built Environment 2008 [RD29];
- Parking Standards 2008 [RD30];
- Planning and the Welsh Language 2007 [RD31]; and
- Planning Obligations (Section 106 Agreements), 2008 [RD32].

Relevance of SPG

- 5.4.3 Whilst the Wylfa Newydd SPG remains adopted guidance it is now out of date, as it pre-dates the adopted JLDP. Much of the context and the objective setting in the SPG may, however, be relevant in informing the position adopted by the IACC in its LIR.
- 5.4.4 The revised consultation draft SPG (January 2018) [RD14] recognises, at paragraph 7.33, that the policy framework for determining the DCO application is set out in NPSs, including NPS EN-1 and EN-6.
- 5.4.5 Horizon considers that in some cases the draft SPG goes further than is appropriate for an NSIP and in some cases is inconsistent with policy in the JLDP, which sets out a more flexible approach, following advice in the Planning Inspector's Report on the JLDP. Horizon has submitted representations to IACC in this regard. At the time of writing this Planning Statement, a revised version of the draft SPG was due to be considered by Full Council on 15 May 2018. Where appropriate, this Planning Statement (and its appendices) refers to the guiding principles in the draft SPG.
- 5.4.6 The changes in the consenting process also have a material impact on the relevance of the SPG. Guidance published by the Planning Inspectorate in *Advice Note Two: The role of local authorities in the development consent process* reemphasises (at paragraph 3.4) [RD33] that the local authority will need to ensure that any Supplementary Planning Document (or in this case SPG) is in accordance with any relevant NPS and, if there is any conflict between a designated NPS and any local planning document, the policies in the NPS will prevail.
- 5.4.7 Paragraph 3.4 [RD33] also states that local authorities should be careful not to undermine the purpose and effectiveness of the developer's Pre-Application Consultation by being too prescriptive in local planning policy, for example, by severely curtailing the choice of options for the location of associated development so as to undermine the purpose of the pre-application consultation. On this basis, guidance in the adopted SPG on the location of Associated Development sites has assisted in the approach to site selection undertaken by Horizon, but has not been a determinative factor. This is set out in detail in the Site Selection Report (Application Reference Number: 8.24.1). It is also relevant that the draft SPG was published after Associated Development sites were selected and consulted on. The draft SPG has therefore not influenced the choice of sites, but guidance within it is referred to where relevant.

Marine policy

- 5.4.8 The marine elements of the Project will be consented through the DCO and separate Marine Licence. As noted above, in deciding a DCO application, the decision maker must have regard to, among other matters, the appropriate marine policy documents which, for the Project, are the UK MPS 2011 [RD16] and, once adopted, the Welsh National Marine Plan. NPS EN-1 [RD4] makes clear that in the event of a conflict between any of these marine planning documents and an NPS, the NPS prevails for purposes of decision making.
- 5.4.9 In determining an application for a Marine Licence, the MCAA [RD12] requires NRW to have regard to the need to protect the environment and human health and the need to prevent interference with legitimate uses of the sea.

5.5 Summary

- 5.5.1 Whilst the application does not need to be determined in accordance with the NPS pursuant to section 104(3) of the Planning Act 2008 [RD1]), the ministerial statement is clear that NPS EN-1 and EN-6 remain important and relevant matters which would carry significant weight in determining the application under section 105. Indeed, NPSs EN-1 and EN-6 continue to represent the primary policy basis for a decision made by the SoS on this application for an order for development consent for the Wylfa Newydd DCO Project.
- 5.5.2 These NPSs firmly established the principle of the need for new nuclear power, and that this need is urgent. The analysis at appendix G is at least as great as at the time of the publication of the NPSs in 2011 and probably greater.
- 5.5.3 NPS EN-6 [RD5] confirms that given the site meets the SSA criteria, the UK Government has concluded that the site is potentially suitable for the deployment of a nuclear power station. The SSA identified certain matters that require further consideration through the DCO application, though the UK Government (in including it in the NPS) concluded that none of these factors were sufficient to prevent the site from being considered potentially suitable.
- 5.5.4 The Consultation on Siting [RD6] begins the process of designating a new NPS applicable to nuclear plants deployed after 2025 and capable of deployment by the end of 2035. It states that subject to the outcome of the consultation and provided sites meet the final criteria, Government proposes to carry forward the sites listed in EN-6 into the new NPS. The draft NPS, when published, would also be considered as relevant to a decision under section 105 of the Planning Act 2008 [RD1].
- 5.5.5 Whilst the NPSs form the primary basis for decision making for the DCO, other national and local planning policy may be “*important and relevant*” within the Planning Act 2008 [RD1] regime and thus may have a role to play in informing the decision maker on a DCO application.

6 Planning analysis

6.1 Introduction

- 6.1.1 This chapter provides an analysis of the Wylfa Newydd DCO Project against the relevant NPSs and national and local policies so far as they are “*relevant and important*” for the determination of the DCO.
- 6.1.2 As introduced in chapters 3 and 5 of this Planning Statement, NPS EN-1 [RD4] and NPS EN-6 [RD5] are the primary basis for deciding DCO applications for nuclear NSIPs. The NPSs set out assessment principles and identify ‘Generic Impacts’, ‘Nuclear Impacts’, ‘Flags for Local Consideration’ and other issues raised during the SSA consultation. While these are not exhaustive, they provide the primary basis for identifying the matters that should be taken into consideration in determining the DCO application. These matters therefore form the basis for the structure of this chapter of the Planning Statement.
- 6.1.3 The Generic and Nuclear Impacts include overarching considerations for the Wylfa Newydd DCO Project as a whole, including traffic and transport, waste, health and wellbeing, socio-economic effects, and Welsh language (which whilst not specifically referred to in the NPSs is an important consideration for this DCO application). Each of these topics is the subject of its own detailed assessment (submitted as part of the DCO application) which forms the basis for the analysis against relevant policy.
- 6.1.4 There are also matters (for example flooding, biodiversity, landscape and visual impact) which are specific to each of the components of the Wylfa Newydd DCO Project. These matters are addressed for each site appendices A - F of this Planning Statement and summarised in this chapter.
- 6.1.5 The overarching context for an analysis against policy is the urgent need for nuclear power and the advice in paragraph 4.1.2 of NPS EN-1 that the decision maker is to “*start with a presumption in favour of granting consent to applications for energy NSIPs*”. This policy presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused, and subject to the provisions of the Act. In considering the proposed development the decision maker should weigh the adverse impacts against its benefits (paragraph 4.1.3).
- 6.1.6 The required judgement is, therefore, whether there are any adverse effects or combination of adverse effects, specific and relevant policies in the relevant NPSs, or provisions of the Act that would override the benefits and the policy presumption in favour of granting development consent.

6.2 Benefits of the Wylfa Newydd Project

- 6.2.1 Before considering the assessment principles, the Generic and Nuclear Impacts and the specific impacts of each element of the Wylfa Newydd DCO Project, it is important (in the context of the balanced consideration of benefits and adverse impacts required by paragraph 4.1.3, NPS EN-1), to set out the

benefits arising from the Wylfa Newydd DCO Project. The decision maker should take into account environmental, social and economic impacts, at national, regional and local levels (paragraph 4.1.4 NPS EN-1).

- 6.2.2 The Wylfa Newydd Project would provide benefits at each of these spatial scales, from the contribution to the delivery of nuclear power generation at the national scale though to significant regional and local social and economic benefits. The potential adverse impacts of the project would, however, primarily arise at a local level.
- 6.2.3 This section of the Planning Statement sets out these benefits, with reference to the draft planning obligation Heads of Terms and the Mitigation Route Map (MRM).

Urgent need for nuclear power

- 6.2.4 As set out at chapter 5, the principle of the need for new nuclear power stations, and confirmation that this need is urgent, is established in NPS EN-1 and NPS EN-6. The ministerial statement is clear that the statements concerning need for nuclear power continue to be relevant for projects which will deploy after 2025. The analysis undertaken by Oxera (at Appendix G of this Planning Statement) demonstrates that the need for nuclear power is at least as great as when the NPSs were published and probably greater.
- 6.2.5 The Wylfa Newydd Power Station would have a nominal gross electrical capacity of 3.1GWe , providing enough secure, low carbon power for around 5.5 million homes.
- 6.2.6 The contribution that the Wylfa Newydd Project will make to meeting this need should be given considerable weight.

Economic benefits and job creation

- 6.2.7 There would be significant beneficial effects on the economies of Anglesey and north Wales, from the investment to be made by the Wylfa Newydd DCO Project, from the additional earnings of employees, from contracts with local businesses and investment in infrastructure, and from workers spending their income at local businesses.
- 6.2.8 Horizon estimates that at the peak of the construction phase it will need around 8,500 workers to build the Wylfa Newydd Project.
- 6.2.9 Approximately 2,000 home-based workers would be employed during the peak period of construction from the Daily Construction Commuting Zone (DCCZ), which would deliver major beneficial changes to employment in the construction sector in the DCCZ. An estimated 1,260 of these home based workers are expected from Anglesey, ensuring beneficial effects on the labour market on Anglesey itself are delivered during the construction phase.
- 6.2.10 The investment made within the local economy in north Wales as a result of the Wylfa Newydd Project is significant. It is estimated that 60% of the £10+ billion Wylfa Newydd Project value during the construction phase would be spent in the UK. It is not yet clear precisely how much of the value would be

spent locally within north Wales. Adopting a benchmark of between 2% and 4%, as explained at chapter C1 of the ES (Application Reference Number 6.3.1), this would equate to an investment of between £200 million and £400 million within north Wales over the construction period. There will also be increased spending by construction and operational workers within the north Wales area.

- 6.2.11 An investment of between £200 million and £400 million represents the provision or safeguarding of between 1,200 and 3,500 job years over the investment period, equivalent to 120 to 350 Full Time Equivalent jobs.
- 6.2.12 During operation of the Power Station Site it is estimated that a workforce of 850 will be required. This represents a significant contribution to local employment opportunities and to the long-term population stability on Anglesey. Given the magnitude of change in local employment, the long-term nature of the positions, and the potential to reduce outward migration trends, alongside the importance of the local labour market, this would represent a major beneficial effect on the labour market on Anglesey.
- 6.2.13 During planned periods of Power Station outage for maintenance, the additional outage workforce would comprise up to 1,000 additional staff.
- 6.2.14 The total value of the operating expenditure over the lifetime of the Power Station is equivalent to £1.8 billion in present value terms, equivalent to around £30 million per year. This estimate excludes staff costs, fuel, business rates, other financial contributions, National Grid fees or other trading costs.
- 6.2.15 The annual average direct, indirect and induced increase in income is estimated at around £20 million on Anglesey from staff costs at the Power Station. This is equivalent to an increase of 2.1% over baseline levels. This would represent a long term beneficial effect on the local economy on Anglesey.

Infrastructure improvements

- 6.2.16 In addition to the delivery of the nuclear power station, which has significant benefits in providing long term, sustainable infrastructure for the benefit of the UK as a whole, the Wylfa Newydd DCO Project results in local infrastructure benefits through the delivery of the A5025 Off-line Highways Improvements (as well as the A5025 On-line Highways Improvements that would be consented under a separate planning application).
- 6.2.17 The improvements will deliver benefits in specific locations. The A5025 Off-line Highways Improvements will, for example reduce existing traffic levels within Llanfachraeth by more than 60%. The highway improvements would also reduce traffic noise and air pollution in the communities of Valley, Llanfachraeth, Llanfaethlu and Llanrhuddlad (at Cefn Coch).
- 6.2.18 In addition, the development of the logistics centre at Parc Cybi is delivering an employment use which could be available in the long term, subject to achieving the necessary local consents. This also has the benefit of potentially kick-starting investment in this allocated employment area.

Tourism

- 6.2.19 During peak construction it is estimated that the additional revenue to tourism providers will be just over £12 million per year (of which the majority - £10.5 million – would be realised on Anglesey). This additional expenditure represents the provision or safeguarding of up to 571 jobs in that year. Using the employment multiplier of 1.3 for the accommodation sector, it is estimated that a further 146 jobs could be created in the wider economy. This is set out in detail in the socio-economic analysis at chapter C1 of the ES (Application Reference Number: 6.3.1).
- 6.2.20 In recognition that the construction of Wylfa Newydd itself may become a visitor attraction in its own right, Horizon will operate a temporary construction viewing area. This is expected to be able to operate from an appropriate point in the construction programme (having regard to safety and security considerations).
- 6.2.21 In acknowledgement of the importance of the tourism sector to the economy of Anglesey, Horizon will establish a tourism fund, which would be available to support Brand Anglesey during the construction project and to address adverse effects related to the Wylfa Newydd DCO Project, if identified through monitoring.

Other long term or wider benefits

- 6.2.22 The Wylfa Newydd DCO Project will deliver a package of measures which will provide a longer-term legacy to Anglesey and the wider North Wales region. These include:

Education

- 6.2.23 The Wylfa Newydd Project will create real opportunities for young people in the communities local to the development sites.
- 6.2.24 The Jobs and Skills Strategy (Application Reference Number: 8.3) identifies Horizon's existing programme of engagement with schools, the Primary Outreach Programme, Work Insight Week and work with key partners to deliver STEM initiatives.
- 6.2.25 Horizon will establish and maintain an Education and Skill Service, secured through the s106 agreement, to maximise local opportunities for local people.
- 6.2.26 Horizon will fund early action related to existing skills shortages through modern apprenticeships and graduate apprenticeships.
- 6.2.27 Horizon will implement a monitoring scheme accompanied by a fund to provide new capacity if demonstrated that the Wylfa Newydd Project creates a shortage in certain primary schools as a result of workers who bring children with them.
- 6.2.28 Horizon will also provide a peripatetic teacher service to support current immersion education capacity across primary and secondary schools (in Anglesey and Gwynedd if required).

Jobs and skills

- 6.2.29 The Jobs and Skills Strategy (Application Document Reference: 8.3) will seek to maximise the recruitment of locally-based workers and will seek to increase the number of home-based workers above the 2,000 estimate in order to minimise the effects caused by the arrival of construction workers. This will also seek to maximise the economic benefits for local residents that will result from the jobs created as a result of the Wylfa Newydd Project. The Jobs and Skills Strategy will be backed by a flexible Skills Fund that can be used to deliver any aspect of the strategy.
- 6.2.30 Horizon will, through an online Supply Chain Service Portal, also engage with the local supply chain and maximise opportunities for local people.
- 6.2.31 Horizon will work with local stakeholders and training providers to ensure training aligns better with likely demand for services. One of the key mechanisms for doing this will be the Wylfa Newydd Employment and Skills Service (WNESS).
- 6.2.32 Horizon is also currently working with local colleges and the CITB to understand the nature of local training provision and where gaps are identified the partners will work with funders and other providers to ensure capacity is sufficient, drawing on the Skills Fund as required.
- 6.2.33 Around a third of the operational workforce will be required to be skilled to a technical level. Horizon's apprentice programme is therefore a key part of the Jobs and Skills Strategy, making the apprenticeship route an important entry point to a career at Wylfa Newydd Power Station. Twenty-two apprentices were started with local provider Grŵp Llandrillo Menai in 2017 and 2018, and the apprentice programme will expand in a number of areas. Horizon will work with Grŵp Llandrillo Menai and industry skills bodies to ensure that the apprentice provision is constantly adapted and improved to meet the requirements of the Wylfa project.
- 6.2.34 Horizon will also make provision for emergency services for the construction workforce, including a financial contribution to the emergency services. Horizon will also support IACC and Betsi Cadwaladr University Health Board to develop their own workforce strategy.

Health and Well-being

- 6.2.35 When operational, the Power Station would help to bring a stable supply of low-carbon electricity to Wales and the UK. This has direct and indirect effects on health and well-being. For example, electricity enables people to heat and light their homes and to cook food. A stable power supply helps health and social care services to operate, jobs and economic activity to continue, and technology to function. Low-carbon energy generation can also help to reduce climate change and its many adverse effects on physical and mental health and well-being.
- 6.2.36 Horizon will provide appropriate occupational health and hygiene services for the construction and operational workforce, through on-site provision and financial contributions, to ensure that the local community health and welfare

services and resources used by local residents are not adversely affected by the Wylfa Newydd Project.

- 6.2.37 The significant employment during both construction and operation will deliver health and well-being benefits, as working improves mental and physical health. The Project would benefit working people, their dependants and the wider economy. This investment is also an opportunity to improve the health and well-being of people living on Anglesey and in the wider north Wales area, for example by reducing levels of deprivation.

Housing Fund

- 6.2.38 Horizon will provide a Housing Fund which could be used to:

- incentivise provision of new housing, especially affordable housing;
- augment IACC's existing empty homes programme and bring vacant properties back into use;
- encourage provision of more latent accommodation;
- fund measures to improve the function of the housing market – though helping people downsize or support rent deposits for example; and
- fund IACC officer time to deal with any increase in homelessness.

Welsh language and culture

- 6.2.39 Horizon is already contributing to the vitality of the Welsh language and culture by supporting a series of local events and initiatives and also by means of incorporating the Welsh language as an important aspect of working life, education and community services.
- 6.2.40 The significant employment opportunities offered during the construction phase is expected to reduce out-migration of young people resulting in a beneficial effect on Welsh language and culture. Around half of the local construction workforce speaks Welsh. Significant numbers of Welsh speakers are therefore expected to gain employment through the Wylfa Newydd DCO Project during construction.
- 6.2.41 The permanent, high-quality job opportunities offered during operation would also have a beneficial effect on Welsh language and culture as 85% of the operational workforce would be local people.
- 6.2.42 Additional spend in the local economy, representing a beneficial effect for local businesses in north Wales, would have a beneficial effect on businesses owned by Welsh speakers or providing services through the medium of Welsh.
- 6.2.43 Safeguarding the provision of local services, through increased demand during construction and operation, contributes towards sustainable communities, where Welsh language and culture forms part of the social fabric of communities.

Biodiversity and environmental

- 6.2.44 The overarching aim of the LHMS is to deliver a net biodiversity benefit by restoring, creating, enhancing and providing for the ongoing management of habitats within the WNDAs.
- 6.2.45 The proposals for the Off-Site Power Station facilities will deliver a long term benefit through reducing flood risk on the site by the introduction of a swale.
- 6.2.46 Enhanced management, plus creation of rich-fen habitat would deliver a beneficial effect for the Caeau Talwrn and Cors Bodeilio SSSI and Corsydd Môn/Anglesey Fens SAC.
- 6.2.47 A major beneficial effect would be the remediation of contaminated land across the WNDAs, which would benefit those using or accessing the site in future.

Recreation

- 6.2.48 As a result of PRoW within the WNDAs that would be open after construction, there would be an increase in the recreational amenity of new footpaths compared to baseline conditions as a result of the provision of routes suitable for wheelchair users, picnic areas, interpretation boards and a nature trail.

Summary

- 6.2.49 The significant contribution that the Wylfa Newydd Project would make to meeting the urgent national need for nuclear energy should be given considerable weight.
- 6.2.50 The Wylfa Newydd Project will also deliver other significant regional and local benefits that should be taken into consideration by the decision maker, including job creation and economic benefits during both construction and operational phases, as well as a number of other long term legacy benefits.

6.3 Assessment principles

- 6.3.1 This section of the report addresses the various assessment principles at part 4 of NPS EN-1 [RD4]. These comprise general policies in accordance with which applications relating to energy infrastructure are to be decided, that do not relate only to the need for energy infrastructure or to particular physical impacts of its construction or operation (paragraph 4.1.1).

Financial viability and Technical feasibility

- 6.3.2 Paragraph 4.1.9 of NPS EN-1 states that “in deciding to bring forward a proposal for infrastructure development, the applicant will have made a judgement on the financial and technical viability of the proposed development, within the market framework and taking account of Government interventions”. It continues to note that where the decision maker considers that the financial viability and technical feasibility of the proposal has been properly assessed by the applicant it is unlikely to be of relevance in decision making.

- 6.3.3 The construction and operational details (covered in part 5 of EN-1 and in EN-6) have been developed with Menter Newydd taking into account financial viability and technical feasibility. Menter Newydd is comprised of large organisations highly experienced in the delivery of nuclear projects.
- 6.3.4 Horizon has not included financial viability information in the application as this is commercially sensitive. To the extent that financial viability is relevant to the decision-making process it should be noted that the financial standing of a company wishing to build and operate a nuclear power station is considered by the Office for Nuclear Regulation (ONR) as part of the Nuclear Site Licensing process. Horizon would be a nuclear site licence holder and therefore financial viability has already been considered by a relevant regulatory body. As stated in NPS EN-6 (paragraph 2.7) the decision maker should act on the basis that the relevant licensing regimes will be properly applied and enforced, and should not seek to duplicate the regulatory framework.
- 6.3.5 The financing of the compulsory acquisition elements of the Application is addressed in the Funding Statement (Application Reference Number 4.2).
- 6.3.6 Specific matters relating to technical feasibility have been referred to where appropriate, in relation to the consideration of the feasibility of CHP as addressed below and in the Combined Heat and Power Feasibility Study (Application Reference Number: 8.28). The Site Selection Report (Application Reference Number: 8.24.1) also refers to instances where financial viability has influenced the choice of associated development sites, particularly with regard to worker accommodation and the location of the Site Campus.

Environmental Statement

- 6.3.7 All proposals for projects that are subject to the European EIA Directive must be accompanied by an ES describing the aspects of the environment likely to be significantly affected by the project paragraph 4.2.1, (NPS EN-1). The construction and operation of a nuclear power station is an Annex 1 project under the Directive 2001/92/EU (the EIA Directive). All Annex 1 projects require a formal, statutory EIA.
- 6.3.8 Section 4.2 of NPS EN-1 sets out the matters that an ES should cover, including “the environmental, social and economic effects arising from pre-construction, construction operation and decommissioning of the project” (paragraph 4.2.3).
- 6.3.9 When considering the proposal, the decision maker should satisfy themselves that “likely significant effects, including any significant residual effects taking account of any proposed mitigation measures or any adverse effects of those measures, have been adequately assessed” (paragraph 4.2.4).
- 6.3.10 Paragraph 4.2.5 in NPS EN-1 states that when considering cumulative effects, the ES should provide information on how the proposal would combine and interact with other development. Paragraphs 4.2.7 to 4.2.9 require that where some details are still to be finalised, the ES should set out what the maximum

extent of the proposed development may be to ensure that the impacts of the project as it may be constructed have been properly assessed.

- 6.3.11 The scope of the EIA reported in the ES has been informed by a Scoping Opinion provided by the Planning Inspectorate. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Infrastructure Regulations 2017') [RD36], came into force on the 16th May of 2017. However, the Infrastructure Planning (Environmental Impact Assessment (EIA) Regulations 2009 [RD34] continue to apply to any application for development consent where the Secretary of State has been requested to adopt a Scoping Opinion (as defined in the 2009 Regulations) prior to this date. The Scoping Opinion was requested prior to the 16th of May 2017 and the Wylfa Newydd Project is therefore subject to the EIA Infrastructure Regulations 2009. Nevertheless, the EIA has been undertaken taking into account the additional provisions of the EIA Infrastructure Regulations 2017.
- 6.3.12 The methodology and assessment process, including the approach in relation to the 'Rochdale Envelope' and assessing the worst case scenario, as introduced in chapter 4, are set out in detail in volume A (Application Reference Number: 6.1) and chapter B1 of the ES (Application Reference Number: 6.2.1), which complies with the requirements of section 4.2 of EN-1. The findings of the EIA are described in volume C to volume I of the ES (Application Reference Numbers: 6.3.1 to 6.9.1).
- 6.3.13 Paragraph 4.2.2 notes that the decision maker will find it helpful if the applicant sets out the information on likely significant social and economic effects and how any likely significant negative effects would be avoided / mitigated. This could include matters such as employment, equality, community cohesion and well being. In addition to the Socio-economics chapter of the ES (Chapter C1 Application Reference Number 6.3.1) the application includes an Equality Impact Assessment (Application Reference Number 8.22), Health Impact Assessment (Application Reference Number 8.18-8.19), Welsh Language Impact Assessment (Application Reference Number 8.20-8.21), Community Cohesion Report (Application Reference Number 6.3.10) and Community Impact Report (Application Reference Number 8.23).
- 6.3.14 Horizon has, therefore, complied with the requirements of section 4.2 of NPS EN-1.

Habitats and Species Regulations

- 6.3.15 Prior to granting a DCO, the decision maker must consider whether the project may have a significant effect on a European site or on any site to which the same protection is applied as a matter of policy, either alone or in combination with other plans or projects (paragraph 4.3.1, NPS EN-1). Paragraph 4.3.1 continues, to state that the applicant should seek the advice of the Countryside Council for Wales (now NRW) and provide the decision maker with such information as it may reasonably require to determine when an Appropriate Assessment is required. If an Appropriate Assessment is required the

applicant must provide the decision maker with such information as may reasonably be required to enable it to conduct the Appropriate Assessment.

- 6.3.16 A shadow Habitats Regulations Assessment (HRA) (Application Reference Number 5.2) is issued as a standalone report accompanying the applications for development consent and the Marine Licence. This report outlines the consultation undertaken on the HRA approach since 2011 through meetings with key stakeholders (including the Planning Inspectorate, NRW and the IACC). Chapter A7 of the ES (Application Reference Number 6.1.7) addresses consultation with environmental stakeholders.
- 6.3.17 In accordance with the requirements of paragraph 4.3.1 of NPS EN-1 the shadow HRA report provides information that the 'Competent Authorities' will use to carry out the Appropriate Assessment.

Alternatives

- 6.3.18 Whilst there is no general policy requirement in the relevant NPSs to consider alternatives, or to establish that the development proposed represents the best option (paragraph 4.4.1, NPS EN-1) there are obligations to include information on alternatives in the ES and the main alternatives that have been studied (paragraph 4.4.2, NPS EN-1).
- 6.3.19 Paragraph 4.4.3 in NPS EN-1 advises on how alternatives should be assessed where there is a policy or legal requirement to do so. It sets out a number of principles including that the consideration of alternatives should be carried out in a proportionate manner, and that there should be a reasonable prospect of the alternative delivering the same infrastructure capacity in the same timescale as the proposed development.
- 6.3.20 Paragraph 4.4.3 also states that if the decision maker "*concludes that a decision to grant consent to a hypothetical alternative proposal would not be in accordance with the policies set out in the relevant NPS, the existence of that alternative is unlikely to be important and relevant to the... decision*" (paragraph 4.4.3, NPS EN-1). As the NPS EN-1 and EN-6 are still important and relevant matters (in the context of s105 of the Planning Act 2008), and given the Government's specific continued support for Wylfa in the Consultation on Siting and Process [RD6], this is still applicable.
- 6.3.21 NPS EN-1 also states that the decision maker should also be guided by the principle that "*alternative proposals which mean the necessary development could not proceed, for example because the alternative proposals are not commercially viable or alternative proposals for sites would not be physically suitable, can be excluded on the grounds that they are not important and relevant to the Infrastructure Planning Commission's decision*" (paragraph 4.4.3, NPS EN-1).
- 6.3.22 It should be noted with regard to nuclear power, the SSA process which informed EN-6 (explained in Annex II of the NPS EN-6 [RD5]) clarifies that there are no alternatives to the eight sites identified in the process, and they should not be regarded as alternatives to one another. The Consultation on Siting and Process [RD6] states that "*sites listed in EN-6 on which a new*

nuclear power station is anticipated to deploy after 2025 will continue to be considered appropriate sites and retain strong Government support during the designation of the new NPS”.

- 6.3.23 Horizon has carried out a site selection exercise for the various components of the Wylfa Newydd DCO Project. The alternatives considered for the siting of the constituent parts of the WNDA are explained, together with the rationale for the choices made in volume 2 of the Site Selection Report (Application Reference Number: 8.24.2)). The extent to which alternative sites have been considered for each of the Associated Development sites and Off-Site Power Station Facilities is set out in the relevant volumes 3 to 7 of the Site Selection Report (Application Reference Number: 8.24.3 to 8.24.7).
- 6.3.24 The design evolution and alternative design options for each element of the Wylfa Newydd DCO Project are set out in the DAS (Application Reference Number: 8.2.1).
- 6.3.25 The ES (Application Reference Number: 6.1.1) summarises the environmental effects of each of the main alternatives considered.
- 6.3.26 In Horizon’s assessment of alternatives set out in the above documents regard has been had to the principles in paragraph 4.4.3 of EN-1.
- 6.3.27 The requirements of the Habitat Directive relating to the consideration of alternatives (EN-1 paragraph 4.4.3) do not arise because the conclusion of the Shadow HRA is that an adverse effect on the integrity of European Designated Sites or their qualifying features will not arise.

Good Design

- 6.3.28 NPS EN-1 sets out the criteria for good design for energy infrastructure at section 4.5. It notes that high quality and inclusive design goes beyond aesthetic considerations. It states that *“the functionality of an object — be it a building or other type of infrastructure — including fitness for purpose and sustainability, is equally important. Applying ‘good design’ to energy projects should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible”* (paragraph 4.5.1, NPS EN-1).
- 6.3.29 Paragraph 4.5.2 of EN-1 says that *“good design is also a means by which many policy objectives in the NPS can be met, for example the impact sections show how good design, in terms of siting and use of appropriate technologies can help mitigate adverse impacts such as noise”*.
- 6.3.30 NPS EN-1 acknowledges that the nature of energy infrastructure development will often limit the extent to which it can enhance the quality of an area. It advises, at paragraph 4.5.3, however, that *“whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, landform and vegetation. Furthermore, the design and sensitive use of*

materials in any associated development such as electricity substations will assist in ensuring that such development contributes to the quality of the area”.

- 6.3.31 NPS EN-1 states that energy infrastructure developments should be sustainable and be *“as attractive, durable and adaptable (including taking account of natural hazards such as flooding) as they can be”* (paragraph 4.5.3). In so doing, account should be given to both functionality and aesthetics as far as possible.
- 6.3.32 NPS EN-1, at paragraph 4.5.4, states that the decision maker *“should take into account the ultimate purpose of the infrastructure and bear in mind the operational, safety and security requirements which the design has to satisfy”*
- 6.3.33 Paragraph 4.5.5 notes that applicants and decision makers should consider taking independent professional advice on the design aspects of the proposal.
- 6.3.34 NPS EN-6, in specifically applying the principles of good design in NPS EN-1 to nuclear power stations, sets out the need to ensure the safety and security of the Power Station and the need to control the impacts of its operations. These *“must be given substantial weight given the importance of these factors to the operation of a nuclear power station”* (paragraph 2.8.1) [EN5]. With reference to section 3.10 of EN-6 and section 5.9 of NPS EN-1, the decision maker should consider how good design can act to mitigate the impacts of new nuclear power stations, such as landscape and visual impacts.
- 6.3.35 The emphasis on good design is a thread which also runs through Welsh national policy (in PPW [RD8] and TAN12 2016 [RD22]) and in local development plan policy through the JLDP [RD27].
- 6.3.36 Horizon has engaged in pre-application consultation with Design Commission for Wales (DCfW) in the form of design reviews (commencing in 2014) in relation to the Power Station Site and the Associated Development.
- 6.3.37 The DAS (Application Reference Number: 8.2.1) demonstrates how each of the design principles underpin the delivery of good design.

Consideration of CHP

- 6.3.38 The UK Government's commitment to promoting the installation of CHP wherever economical, is set out in national policy, in particular NPS EN-1 and NPS EN-6, and guidance relating to energy infrastructure.
- 6.3.39 NPS EN-1 identifies that CHP is technically feasible for all types of thermal generating stations, including nuclear, although recognises that the majority of CHP plants in the UK are fuelled by gas (paragraph 4.6.2, NPS EN-1).
- 6.3.40 Paragraph 4.6.6 in NPS EN-1 sets out the requirement that any application to develop a thermal generating station must either include CHP or contain evidence that the possibilities of CHP have been fully explored to inform the decision maker's consideration of the application. This should be through an audit trail of dialogue between the applicant and prospective customers. It states that the same principle applies to any thermal power station which is subject to a DCO application under the Planning Act 2008 [RD1]. Paragraph

2.9.2 of NPS EN-6 [RD5] states that this applies to DCO applications for nuclear power stations.

- 6.3.41 Paragraphs 4.6.5, 4.6.7 and 4.6.8 of NPS EN-1 set out some practical considerations with respect to CHP. Paragraph 4.6.9 in NPS EN-1 states that the material the applicants provide should explain how the development can be both ready to provide CHP in the future and also be carbon capture ready.
- 6.3.42 In NPS EN-1, paragraph 4.6.10 states that if the decision maker is not satisfied with the evidence provided it may wish to investigate this further and paragraph 4.6.11 suggests that if the decision maker identifies a potential heat customer that is not explored in the application it should request that the applicant pursues this. Where agreement cannot be reached with a potential customer the applicant should provide evidence why it was not possible.
- 6.3.43 NPS EN-6 states that whilst the policy requirements apply to nuclear power, *“the economic viability of CHP opportunities (see paragraph 4.6.5 of EN-1 for further details) may be more limited for new nuclear power stations because the application of a demographic criterion for new nuclear power stations can result in stations being located away from major population centres and industrial heat demand. Future industrial, residential or commercial developments may also be constrained to preserve the general characteristics of the area around the nuclear site throughout its lifecycle to ensure that the basis on which the site is licensed is not undermined”* (paragraph 2.9.3).
- 6.3.44 A high-level assessment of the potential for CHP has been conducted by following the stages below.
- Making an initial assessment, from mapping of where the most significant heat load is located and developing a potential pipeline route. The largest heat load has been identified as the area of Holyhead, which is by far the most significant settlement and has commercial heat load.
 - Assessing the likely heat load existing in Holyhead and along a pipeline route.
 - Reviewing the relevant local development plans for the area to determine the potential increase in heat load demand in the foreseeable future, and consulting the IACC to provide greater insight into the plans and the likely take-up of development opportunities.
 - Developing an initial cost estimate for the installation and operation of a CHP system that can be compared with the alternative cost of natural gas, which is the most common heating fuel.
 - Making an initial assessment of the potential carbon dioxide abatement benefits of the project and the approximate cost of abatement.
- 6.3.45 Considering alternative options, which may offer similar carbon dioxide abatement benefits at lower cost, the assessment has concluded that a CHP system connected to the Wylfa Newydd Power Station is not viable, largely due to the remote location of the Power Station Site, meaning that the nearest significant head load for any CHP scheme is a long distance away. A further

assessment was made to evaluate what would be necessary to make the system viable and it was found that the reductions in capital cost or increases in heat load, which would be necessary, are unachievable. The proposal is not viable by a considerable margin and this high-level analysis is sufficient to demonstrate this.

- 6.3.46 This is set out in more detail in the Combined Heat and Power Feasibility Study (Application Reference Number 8.28).
- 6.3.47 The draft report was shared with IACC and they responded to confirm that based on planned and forecast growth, they agree with its conclusions that it is effectively impossible that the combination of developments required to make a CHP scheme economic would occur close to the pipeline in the foreseeable future. IACC also recommended however that Horizon meet with Menter Mon (a not for profit group exploring various opportunities on the island) to understand whether there were future opportunities which may be of the scale that could make CHP feasible. Horizon therefore met with a representative from Menter Mon to explore whether there are other opportunities for CHP on Anglesey and it was jointly concluded that there are not.
- 6.3.48 Horizon has, therefore, complied with the requirements of section 4.6 of NPS EN-1.

Climate change adaptation

- 6.3.49 Section 4.8 of NPS EN-1 advises that applicants and the decision maker should ensure that new energy infrastructure is sufficiently resilient to the possible impacts of climate change (paragraph 4.8.1).
- 6.3.50 Paragraph 4.8.6 in NPS EN-1 states that the decision maker should be *“satisfied that applicants for new energy infrastructure have taken into account the potential impacts of climate change using the latest UK Climate Projections available at the time the ES was prepared to ensure they have identified appropriate mitigation or adaptations measures. This should cover the estimated lifetime of the new infrastructure”*.
- 6.3.51 NPS EN-6 [RD5] states at paragraph 2.10.3 that the applicant should consider how the proposal will take account of the projected impacts of climate change.
- 6.3.52 The design of the Power Station has considered predicted climate change trends up to the year 2183 (the expected end of spent fuel storage and decommissioning).
- 6.3.53 Chapter B1 of the ES (Application Reference Number: 6.2.1) explains how climate change has been considered with regard to design resilience and the effects of climate change on the project. For example, the Cooling Water System has been designed so as not to be affected by sea level rise. The likelihood of drought, sea temperature change, increase in precipitation and changes in wind speed, air temperature and humidity have all been considered during the design of the Wylfa Newydd Project.

- 6.3.54 The effect of climate change on the evolution of baseline conditions have been taken into account in the EIA where appropriate, as explained in chapter B1 of the ES (Application Reference Number: 6.2.1).
- 6.3.55 In respect of coastal change (paragraph 4.8.4 of EN-1) a coastal and geomorphological assessment has been undertaken for the marine facilities at the Power Station site and is reported in chapter D12 of the ES (Application Reference Number 6.4.12).
- 6.3.56 Horizon has, therefore, complied with the requirements of section 4.8 of NPS EN-1.

Grid connection

- 6.3.57 Paragraph 4.9.1 of NPS EN-1 states that *“it is for the applicant to ensure that there will be necessary infrastructure and capacity within an existing or planned transmission or distribution network to accommodate the electricity generated”*.
- 6.3.58 Paragraph 4.9.2 in NPS EN-1 states that the effects of any necessary grid connection can be assessed separately, though where there are separate applications the first should contain *“some information”* about the second. Paragraph 4.9.3 requires that the applicant ensures that they provide sufficient information with regard to cumulative environmental effects.
- 6.3.59 The Power Station includes apparatus to transfer electrical energy to the National Grid high voltage electricity transmission network.
- 6.3.60 The electrical energy generated by the Power Station would be transferred to the National Grid via the existing 400kV substation at the Existing Power Station.
- 6.3.61 National Grid and Horizon have entered into a bilateral connection agreement and a construction agreement. These contractual arrangements set out the works that will be required to connect Wylfa Newydd Power Station to the electricity transmission network. The decision maker should therefore be satisfied that there is no obvious reason why a grid connection would not be possible.
- 6.3.62 A separate DCO is being prepared by National Grid to provide 400kV electricity transmission reinforcements in North Wales to connect Wylfa Newydd to the national grid (known as the “North Wales Connection” project).
- 6.3.63 The DCO application for the North Wales Connection Project will also include an ES. The cumulative effects of the Project together with the North Wales Connection Project have been assessed and are reported in volume I, chapter 5 of the ES (Application Reference Number: 6.9.5).
- 6.3.64 The Electricity Grid Connection Statement (Application Document Reference: 7.1) provides further details on the grid connection.
- 6.3.65 Horizon has, therefore, complied with the requirements of section 4.9 of NPS EN-1.

Pollution control and other environmental regulatory regimes

- 6.3.66 NPS EN-1 advises at paragraph 4.10.1 that *“issues relating to discharges or emissions which affect air quality, water quality, land quality or noise and vibration may be subject to separate regulations under the pollution control framework or other consenting and licensing regimes”*.
- 6.3.67 Paragraph 4.10.3 of NPS EN-1 also states that the decision maker *“should work on the assumption that the relevant pollution control regime and other environmental regulatory regimes, including those on land drainage, water abstraction and biodiversity, will be properly applied and enforced by the relevant regulator”*.
- 6.3.68 The document Details of Other Consents, Licences & Agreements (Application Reference Number: 5.4) lists other consents, licences and agreements that Horizon intends to obtain, to allow the construction, operation and maintenance of the Wylfa Newydd Project, in addition to those being requested as part of the draft Wylfa Newydd (Nuclear Generating Station) Order. For example, Environmental Permits under the Environmental Permitting (England and Wales) Regulations 2016 or Section 61 Prior Consent under the Control of Pollution Act 1974.
- 6.3.69 The environmental regulator in Wales is NRW and consultation has been undertaken with them throughout the duration of the Project on both the DCO and the Environmental Permitting regimes.
- 6.3.70 Since the publication of NPS EN-1 NRW have become the successor body to the Marine Management Organisation (MMO) in Welsh waters (having regard to paragraph 4.10.4 for the applicant to consult the MMO on NSIPs that would affect any relevant marine areas). The DCO application does not seek a deemed marine licence for Welsh waters and a separate marine licence is being sought for licensable activities in the marine environment, which will be submitted concurrently with the DCO.
- 6.3.71 Paragraph 4.10.8 of EN-1 notes that the decision maker should not refuse consent on the basis of pollution impacts unless it has good reason to believe that any relevant necessary operational pollution control permits or licences, or other consents, will not subsequently be granted. Environment permit applications for the WNDA (minor permits for the Associated Development sites will follow) are being made concurrently with the DCO and Horizon is actively engaging with the regulator (NRW) to ensure that the applications reflect their expectations and their comments are taken into account. On this basis, Horizon are not aware of any reason why these consents should not be forthcoming.
- 6.3.72 The assessments, including EIA and Health Impact Assessment have proceeded on the assumption that the appropriate regulatory standards will be enforced (e.g. in relation to public exposure to radiation).
- 6.3.73 Horizon has, therefore, complied with the requirements of section 4.10 of NPS EN-1.

Safety and hazardous substances

- 6.3.74 NPS EN-1 paragraph 4.11.1 states that applications should consult with the Health and Safety Executive (HSE) on matters relating to safety.
- 6.3.75 Paragraph 4.12 in NPS EN-1 states that applicants should consult the HSE at pre-application stage if a project is likely to need hazardous substances consent.
- 6.3.76 As a prescribed consultee (as set out under Schedule 1 of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009) the HSE have been consulted in accordance with its duty under Section 42 of the Planning Act 2008 [RD1]. Further detail on consultation is provided in the Consultation Report (Application Reference Number: 5.1).
- 6.3.77 The Office for Nuclear Regulation (ONR) is, in addition to nuclear safety, responsible for regulating non nuclear health and safety on nuclear licensed sites. The ONR have been consulted during the development of the project and throughout Pre-Application Consultation.
- 6.3.78 Depending on the tier category either a COMAH notification, MAPP or Safety Report will be required (with reference to paragraphs 4.11.3 and 4.11.4 of EN-1). Discussions to date with ONR, the HSE and NRW have indicated that a COMAH notification will be required. The COMAH notification is currently being prepared in discussion with the competent authority and will be submitted at least 3 months prior to construction.
- 6.3.79 Consent under the Planning (Hazardous Substances) Act 1990 and Planning (Hazardous Substances) (Wales) Regulations 2015 from the local planning authority (Isle of Anglesey County Council) will be required. An application will be made prior to the construction of the Power Station commencing (as required by paragraph 4.12.1 of EN-1).
- 6.3.80 Horizon has, therefore, complied with the requirements of section 4.11 of NPS EN-1.

Health

- 6.3.81 NPS EN-1 states at paragraph 4.13.1 that energy production has the potential to impact on the health and well-being of the population, and that whilst *“access to energy is clearly beneficial to society and to our health as a whole...the production, distribution and use of energy may have negative impacts on some people’s health”*. It states that where the project has an effect on human beings (e.g. as a result of increased traffic, air pollution, dust, noise, access to public services etc.), the ES should assess these effects identifying any adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts (paragraphs 4.13.2 – 4.13.4, NPS EN-1).
- 6.3.82 NPS EN-1 then states (paragraph 4.13.5) that generally those aspects of energy infrastructure which are most likely to have a significantly detrimental impact on health are subject to separate regulation which will constitute effective mitigation, so that *“it is unlikely that health concerns will either constitute a reason to refuse consents or require specific mitigation under the Planning Act 2008”*. This paragraph then states that health concerns would

be taken into account when setting requirements relating to a range of impacts such as noise.

6.3.83 Potential health impacts of a NSIP are not included within the Generic Impacts for consideration. Human health and wellbeing is however identified as a Nuclear Impact in NPS EN-6 [RD5]. The guidance at section 3.12 advises that:

- “The operation of a new nuclear power station is unlikely to be associated with significant noise, vibration or air quality impacts (although there may be local impacts from transport and associated activities during construction; and if cooling towers are required, particularly forced draught towers, the potential noise impact may be greater). With appropriate mitigation, the subsequent effect of these potential impacts on human health is unlikely to be significant” (paragraph 3.12.3, NPS EN-6).
- “In common with other major industrial processes, the construction, operation and decommissioning of new nuclear power stations could affect health care provision” (paragraph 3.12.5, NPS EN-6).
- “The Nuclear AoS also identified that there could be positive effects for health and well-being resulting from the positive socio-economic benefits of new nuclear power stations” (paragraph 3.12.6, NPS EN-6).

6.3.84 NPS EN-6 therefore requires that the applicant’s assessment identifies any potentially significant health impacts and appropriate mitigation measures (paragraph 3.12.17). The decision maker should also consider the positive effect of employment and other socio-economic effects on human health and well-being (paragraph 3.12.18, NPS EN-6).

6.3.85 With regard to the risk of adverse effects resulting from exposure to radiation for workers, the decision maker should act on the basis that the public and the environment will be adequately mitigated because of the need to satisfy the strict legislative and regulatory regime (paragraph 3.12.11, NPS EN-6).

6.3.86 With specific regard to Wylfa, Annex C of NPS EN-6 (paragraph C.9.103) states that it is possible that the presence of a nuclear power station may lead to increased stress levels in certain individuals. Overall, the AoS finds that likely enhancement in employment, community wealth, housing stock and other associated neighbourhood infrastructure should improve community well-being and health generally.

6.3.87 Ensuring that development proposals *“contribute to the protection, and where possible, the improvement of people’s health and well-being as a core component of sustainable development”* is also a stated objective of national Welsh policy (PPW [RD8], paragraph 4.4.3). This paragraph states that the *“consideration of the possible impacts of developments – positive or negative – on people’s health at an early stage will help to clarify the relevance of health and the extent to which it needs to be taken into account”* [RD8].

- 6.3.88 The Wylfa SPG [RD28] at GP 7 states that the applicant should work with IACC and the Betsi Cadwaladr University Health Board (BCUHB) to identify any potentially significant health impacts and appropriate mitigation measures.
- 6.3.89 One of Horizon's core values is to prioritise the health, safety, security and well-being of the public, employees and the environment. This includes delivering world-class levels of health and safety on the Wylfa Newydd Project, but also encouraging well-being in our local communities.
- 6.3.90 In accordance with good practice, and as suggested by national and local policy an HIA has been undertaken, which is described in the Health Impact Assessment (HIA) Report (Application Reference Number: 8.19). BCUHB is a member of the HIA Steering Group which guided the development of the HIA and Horizon is continuing to discuss the approach for planning for the healthcare needs of workers and their dependants and is documenting this through the Statement of Common Ground process.
- 6.3.91 The HIA Report explains how Horizon will take opportunities to improve health and well-being as well as any steps that will address any potentially significant adverse effects of the Project on health and well-being.
- 6.3.92 The methodology for the assessment has been developed alongside an independently chaired HIA Steering Group, made up of local, regional and national stakeholders (including representatives from the Welsh Government and the IACC). It assesses both project-wide effects (summarised below) and site specific assessments of each component of the Wylfa Newydd DCO Project.
- 6.3.93 The HIA Report (Application Reference Number: 8.19) assesses a range of factors related to health and well-being (and satisfies the requirements of paragraphs 4.13.3 and 4.13.4 of EN-1), including, amongst others, demand for health services, employment, education, community, physical activity, housing and transport.
- 6.3.94 A summary of benefits of the Project as a whole on health and well-being include the following.
- Employment: improvement to mental and physical health from employment opportunities.
 - Investment: the investment of the Wylfa Newydd Project is an opportunity to improve the health and well-being of people living on Anglesey and in the wider north Wales area, for example by reducing levels of deprivation.
 - Jobs, skills and education: the Wylfa Newydd Project would create many types of opportunities for local workers, young people, school leavers and graduates, as well as the currently under-employed. Supporting education and training would make a big difference to the long-term health and well-being of the communities of Anglesey, for example through better earnings that allow greater spend on health-promoting goods and services such as heating or healthy food.

- Local environment: the Wylfa Newydd Project would bring some improvements to the local environment in the short, medium and long term. For example, the proposed highway works would upgrade parts of the A5025 to make the road safer to travel for everyone.
- The Power Station: the Power Station would help to bring a stable supply of low carbon electricity to Wales and the UK. This has many direct and indirect effects on health and well-being.
- Long term benefits: the Wylfa Newydd Project would, for example, deliver the benefit of better roads and Horizon will also work with community groups to strengthen community identity and networks.

6.3.95 Potential adverse impacts on health and well-being could include:

- changes in air quality and noise during construction for vulnerable groups living closest to the Power Station;
- road safety;
- labour churn;
- the influx of the construction workforce;
- community identity; and
- changes in physical activity.

6.3.96 The HIA Report (Application Reference Number: 8.19) provides a full and detailed assessment, outlining the mitigation commitments proposed in order to address these potentially negative impacts. These include the establishment of a Health Monitoring Group, appointment of Community Involvement Officers (CIOs), provision of appropriate Occupational Health and Hygiene services for the construction and operational workforce, implementing best construction practices (including mitigation in relation to air quality and noise) and safeguarding the welfare of employees and its supply chain, and the general public (in relation to the activities of its construction workforce).

6.3.97 Minor to major beneficial effects are expected to occur predominantly at the local, regional, national and international geographic levels, with many such benefits also extending to site specific communities. Minor to moderate adverse effects are expected to occur mainly for some site specific communities, but also in some cases for the local and regional level. The majority of adverse effects would be during the construction stage. Many of the beneficial effects would start in the construction stage and most would carry on into the operation stage.

6.3.98 In identifying the adverse and positive impacts, and mitigation measures, the Report (Application Reference Number: 8.19) satisfies the requirements of paragraphs 3.12.17 and 3.12.8 of NPS EN-6 [RD5]. It draws an overall conclusion on the range of beneficial and adverse effects identified, finding that the overall effect for population health, taking account of differing effects across vulnerable groups and geographic levels, of the Wylfa Newydd Project

is considered to be beneficial. This is consistent with the findings of the AoS that enhancement in employment, community wealth, housing stock and other associated neighbourhood infrastructure should improve community well-being and health generally.

- 6.3.99 The HIA Report (Application Reference Number: 8.19) considers how the construction workforce requirements may affect health care provision, including the need for monitoring, in accordance with paragraph 3.12.5 of EN-6.
- 6.3.100 The HIA Report also provides mitigation commitments in relation to air quality and noise in accordance with the requirements of paragraph 4.13.5 of NPS EN-1.
- 6.3.101 Horizon has, therefore, complied with the requirements of section 4.13 of NPS EN-1 and 3.12 of EN-6.

Common law and statutory nuisance

- 6.3.102 Paragraph 4.14.1 of NPS EN-1 states that it *“is very important that, at the application stage of an energy NSIP, possible sources of nuisance under section 79(1) of the 1990 Act and how they may be mitigated or limited are considered...so that appropriate requirements can be included in any subsequent order granting development consent”*. The paragraph then cross refers to the Generic Impact policy relating to dust, odour, artificial light etc. (section 5.6) and noise and vibration (section 5.11) of NPS EN-1.
- 6.3.103 The DCO application is accompanied by a Statement of Statutory Nuisances (Application Reference Number: 5.3) which details the possible sources of statutory nuisances and how they may be mitigated or limited.
- 6.3.104 The application is therefore compliant with the requirements of paragraph 4.14.1 of NPS EN-1 in providing sufficient information for the decision maker to consider possible sources of nuisance and mitigation measures at the application stage.

Security

- 6.3.105 NPS EN-1 states at paragraph 4.15.2 that it is Government policy to ensure that *“where possible proportionate protective security measures are designed into new infrastructure projects at an early stage in the project development”*.
- 6.3.106 The ONR is responsible for regulation of nuclear safety and security across the UK.
- 6.3.107 Details of nuclear security measures are considered Sensitive Nuclear Information. In the interests of preventing malicious activity, certain information cannot be shared in the public domain. This section, therefore, describes only the high level security principles that would be followed at the Power Station Site during construction and operation, designed to meet the requirements of the Anti-Terrorism, Crime and Security Act 2001 [RD38] and defined in the Nuclear Industries Security Regulations 2003 (as amended) [RD39].

- 6.3.108 Horizon has engaged with ONR, Home Office and Civil Nuclear Constabularies in developing and refining the proposed security arrangements for the Wylfa Newydd Power Station.
- 6.3.109 Horizon has developed a Security Management Strategy to follow a recognised approach that embeds security fully into the daily business of Horizon. This will be achieved by implementing a Security Management System to provide a holistic approach to security. The approach will be aligned with wider Horizon processes and as a baseline follow the 'Plan, Do, Check, Act' methodology.
- 6.3.110 The Horizon Security Manual is the overarching security management document and is supported by a series of further documents including delivery strategies, plans and procedures in the areas of physical, personnel, information and cyber security; some of these are regulatory requirements and others support non-regulatory business needs. These security documents would outline approaches to be implemented in a phased manner as the project progresses and will be classified 'according to content' as Sensitive Nuclear Information.
- 6.3.111 A package of interdependent and mutually supportive security measures, fully integrated across Horizon, would be implemented to prevent unauthorised access to the Power Station Site during both construction and operation. This package would be designed to protect people, property, information and assets, including nuclear material, although care would be taken to ensure arrangements minimise the intrusiveness for local communities. This includes:
- perimeter fencing;
 - lighting;
 - alarm systems;
 - CCTV;
 - security officers; and
 - access control measures.
- 6.3.112 Details of these are set out in volume 2 of the DAS (Application Reference Number: 8.2.2) in relation to the WNDA. The security measures would each be supported by comprehensive and robust procedures.
- 6.3.113 Each of the Associated Developments and the Off-Site Power Station Facilities have been designed in accordance with Secured by Design and/or Park Mark principles.
- 6.3.114 Horizon have provided sufficient information in order to enable the decision maker to make a properly informed decision on the application, and have complied with the requirements of section 4.15 of NPS EN-1.

6.4 Generic and nuclear impacts

- 6.4.1 This section of the report addresses the various Generic and Nuclear Impacts identified at part 5 of NPS EN-1 [RD4] and Part 3 of NPS EN-6 [RD5] respectively.
- 6.4.2 All relevant environmental, social and economic benefits and adverse impacts have been assessed and are reported on in the application documents. Mitigation has been identified where required, for all stages of the project and is presented comprehensively in the Mitigation Route Map (Application Reference Number: 8.14).
- 6.4.3 Topic areas for inclusion in the assessment were identified through a scoping process, including the submission of two scoping reports (2009 and 2016) and a scoping report addendum (2017); in each case the Planning Inspectorate provided a Scoping Opinion.
- 6.4.4 A number of the topics covered by the Generic and Nuclear Impacts are assessed on a site level, and addressed in the relevant site specific appendix to this Planning Statement. They are summarised in this section, identifying potential significant adverse effects resulting from the Wylfa Newydd DCO Project, to be considered in the planning balance against its benefits.
- 6.4.5 Also addressed in this section are those project-wide effects that are not site specific, namely socio-economics; traffic and transport (including effects of project wide traffic on public access and recreation, air quality and noise and vibration); and waste management. These matters are assessed in volume C of the ES (Application Reference Number: 6.3.1-6.3.7), which relates to project-wide effects. Unlike the site-specific effects, these have not been considered elsewhere in this Planning Statement.

Air quality and emissions

Policy context

National Policy Statements

- 6.4.6 EN-1 advises that infrastructure development can have adverse effects on air quality (paragraph 5.2.1). Paragraph 5.2.2 of EN-1 recognises that CO₂ emissions are a significant adverse impact from some types of energy infrastructure which cannot be totally avoided, (even with the full deployment of carbon capture and storage technology). However, paragraph 5.2.2, EN-1 confirms that:

“Government has determined that CO₂ emissions are not reasons to prohibit the consenting of projects which use these technologies or to impose more restrictions on them in the planning policy framework than are set out in the energy NPSs (e.g. the Carbon Capture Readiness and, for coal, Carbon Capture and Storage requirements)”.
- 6.4.7 Paragraph 5.2.3 notes that a particular effect of air emissions from some energy infrastructure may be eutrophication.

- 6.4.8 Paragraph 5.2.4 notes that exhaust stack heights would be determined by statutory requirements and is not a matter for the decision maker in terms of air quality.
- 6.4.9 Where a project is likely to have adverse effects on air quality, paragraph 5.2.6 in EN-1 requires that an assessment of the impacts of the proposed project should be undertaken as part of the ES. Paragraph 5.2.7 of EN-1 identifies the air quality and emission requirements that should be assessed within an ES stating:
- “The ES should describe:
- any significant air emissions, their mitigation and any residual effects distinguishing between the project stages and taking account of any significant emissions from any road traffic generated by the project;
 - the predicted absolute emission levels of the proposed project, after mitigation methods have been applied;
 - existing air quality levels and the relative change in air quality from existing levels; and
 - any potential eutrophication impacts”.
- 6.4.10 EN-1 states at paragraph 5.2.9 that the decision maker should generally give air quality considerations substantial weight where a project would lead to a deterioration in air quality in an area, or lead to a new area where air quality breaches any national air quality limits. Further, paragraph 5.2.9 in EN-1 confirms that air quality considerations will also be important where substantial changes in air quality levels are expected, even if this does not lead to any breaches of national air quality limits.
- 6.4.11 Where a project is likely to lead to a breach of national air quality limits, paragraph 5.2.9 in EN-1 provides that the applicant should work with the relevant local authorities to secure appropriate mitigation measures to allow the proposal to proceed. In the event that a project will lead to non-compliance with a statutory limit the decision maker should refuse consent (paragraph 5.2.10, EN-1).
- 6.4.12 Paragraph 5.2.11 of EN-1 advises that the decision maker should consider *“whether mitigation measures are needed both for operational and construction emissions over and above any which may form part of the project application”*. Paragraph 5.2.13 notes that mitigation measures identified in section 5.13 of NPS EN-1 will help mitigate the effects of air emissions from transport.
- 6.4.13 Paragraph 4.13.5 of EN-1 states that generally, those aspects of energy infrastructure which are most likely have a significantly detrimental impact on health are subject to separate regulation (for example, for air pollution) which will constitute effective mitigation of them, so that it is unlikely that health concerns will either constitute a reason to refuse consents or require specific mitigation under the *Planning Act 2008* [RD1].

- 6.4.14 Paragraph 3.12.3 of EN-6 recognises that the operation of a new nuclear power station is unlikely to be associated with significant air quality impacts, although there may be local impacts from transport and associated activities during construction.

Welsh national and local policy

- 6.4.15 PPW [RD8] sets out at chapter 13 (Minimising and Managing Environmental Risks and Pollution) that while planning authorities should not seek to control through planning measures, matters that are the proper concern of the pollution control authority, where pollution considerations affect the use and development of land, they can be material planning considerations.
- 6.4.16 Policy PCYFF 2 in the JLDP [RD27] states that planning permission will be refused where the proposed development would have an unacceptable adverse impact on:
- “...the health, safety or amenity of occupiers of local residences, other land and property uses or characteristics of the locality due to increased activity, disturbance, vibration, noise, dust, fumes, litter, drainage, light pollution, or other forms of pollution or nuisance”.
- 6.4.17 GP 26 of the Wylfa SPG [RD28] states that IACC expect the applicant to assess measures to reduce disturbance-related impacts such as emissions to air from construction activity and HGV movements.

Assessment

- 6.4.18 This section demonstrates how the Wylfa Newydd DCO Project is in accordance with national and local policy in relation to air quality and emissions. Emissions from traffic are considered separately below.
- 6.4.19 With regard to paragraph 5.2.2 of EN-1, CO₂ emissions are not a significant adverse impact from nuclear power station development and therefore they have not been assessed in the Environmental Statement. However, a separate Carbon and Energy Report (Application Reference 8.15) accompanies the Application, providing further information on CO₂ emissions.
- 6.4.20 In accordance with the requirements of paragraphs 5.2.6 and 5.2.7 in EN-1, a comprehensive air quality assessment is provided in the ES, considering all potential emissions and receptors for each of the respective development sites at all stages of the project from construction through to decommissioning.
- 6.4.21 Having regard to paragraph 5.2.3, the ES includes an assessment of changes in air quality (including nutrient nitrogen deposition rates which could lead to eutrophication) on sensitive ecological receptors using information provided in the air quality assessment. These assessments have also been used to inform scheme design to mitigate potential effects on such receptors. The assessment has concluded that deposition effects on eutrophication would be negligible.

- 6.4.22 The optimal heights for the combustion plant stacks were determined from a stack height assessment undertaken as part of the application for the Environmental Permit to NRW. The optimal heights were used in the various assessments for the application for development consent.
- 6.4.23 The air quality assessment sets out assessment criteria in chapter B5 of the ES (Application Reference Number: 6.2.5) that are air quality objective (AQO) values, which embody EU legal requirements including limit values, in accordance with paragraph 5.2.1 in EN-1. Adverse effects on health, protected species, habitats and wider countryside have been addressed in the air quality assessment.
- 6.4.24 The assessment of non-traffic related air quality matters in relation to the WNDAs is provided at chapter D5 of the ES (Application Reference Number: 6.4.5). The assessment of non traffic related air quality matters in relation to the Off-Site Power Station Facilities and Associated Development sites is provided at volumes D to H of the ES (Application Reference Number: 6.4.1 to 6.8.1) with the assessment of cumulative effects and summary of residual effects at volumes I and J respectively (Application Reference Numbers 6.9.1 – 6.10.2).
- 6.4.25 These assessments have identified the magnitude of changes in air quality concentrations at all receptor locations within the study areas and undertaken an assessment of these, taking background concentrations into account, and comparing the total concentrations against the AQO / limit values.
- 6.4.26 These conclude that with mitigation in place (as summarised in the site specific analysis at appendices A-F of this Planning Statement), no significant residual effects on air quality are anticipated (either individually or cumulatively) during operation, construction or decommissioning.
- 6.4.27 As the proposals would not lead to a breach in national air quality limits at construction, operation or decommissioning, they are in accordance with paragraph 5.2.10 of NPS EN-1. Adverse effects on air quality are not significant and therefore paragraph 5.2.9 of EN-1 does not apply because there would be no “substantial changes in air quality levels”.
- 6.4.28 To reach this position, mitigation would be used including those described above in accordance with paragraph 5.2.11 of NPS EN-1. Where relevant these have been proposed as part of the CoCP (Application Reference Numbers 8.7-8.12). The Applicant believes that mitigation measures over and above those set out in the CoCP are not required.
- 6.4.29 Adverse air quality effects that are identified as likely during construction are in accordance with paragraph 3.12.3 of EN-6 [RD5], which recognises that local impacts may occur during construction but with appropriate mitigation, the subsequent effect of these potential impacts on human health is unlikely to be significant.
- 6.4.30 The Wylfa Newydd DCO Project would not (at construction, operational or decommissioning phases) have a significant adverse impact on health, safety or amenity in terms of air quality. This is in accordance with part 7 of Policy PCYFF 2 of the JLDP, which requires that development does not have an

unacceptable impact in relation to dust, fumes and other forms of pollution. It is also in accordance with GP26 of the Wylfa SPG in its inclusion of measures to reduce emissions to air from construction activity.

- 6.4.31 The project-wide assessment of the air quality effects of traffic are provided in chapter C4 the ES (Application Reference Number: 6.3.4) and summarised below in the traffic and traffic and transport section. This concludes that taking into account both adverse and beneficial effects (identified in the assessment), the overall effect on air quality due to the Wylfa Newydd DCO project-wide road traffic emissions are not significant.
- 6.4.32 The assessment of the intra-project additive air quality effects of road traffic sources and emission sources within the WNDA (e.g. construction plant, machinery and marine vessels) does not alter the outcome of this assessment (as demonstrated in appendix I4-02 of the ES).
- 6.4.33 Having considered all traffic and non-traffic related air quality effects, taking into account the mitigation measures proposed, and in light of the relevant planning framework, it can be concluded that the Wylfa Newydd DCO Project as a whole, is compliant with EN-1 [RD4] and EN-6 [RD5] and also the relevant policies of PPW [RD8] and policy PCYFF 2 in the JLDP [RD27]. Additionally, the air quality effects of the Wylfa Newydd DCO Project align with the guidance provided and GP 26 in the Wylfa SPG [RD28].

Biodiversity and geological conservation

- 6.4.34 Biodiversity and geological conservation is identified as both a Generic Impact in EN-1 [RD4] and a Nuclear Impact in EN-6 [RD5].
- 6.4.35 Annex C of EN-6 is relevant to this assessment because it has to an extent already considered the area and its potential sensitivity to biodiversity effects, but nevertheless considers that the issues in relation to internationally and nationally designated sites of ecological importance were not sufficient to justify excluding Wylfa in EN-6.
- 6.4.36 This section deals only with biodiversity, with geological conservation addressed separately in considering soils and geology.

Policy context

National Policy Statements

- 6.4.37 Generic biodiversity conservation impacts of new energy NSIPs are covered in section 5.3 of EN-1.
- 6.4.38 Paragraph 5.3.3 in EN-1 requires an ES to clearly set out: “...*any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity*”.
- 6.4.39 Further, paragraph 5.3.4 in EN-1 states that the applicant should show how the proposals have taken advantage of opportunities to conserve and

enhance biodiversity interests (and refers to the Government's biodiversity strategy '*Working with the grain of nature*' at paragraph 5.3.5).

- 6.4.40 Paragraph 5.3.7 EN-1 states that as a general principle, and subject to other paragraphs in EN-1, development should aim to avoid significant harm to biodiversity interests, including through mitigation and consideration of reasonable alternatives; where significant harm cannot be avoided, then appropriate compensation measures should be sought.
- 6.4.41 Paragraph 5.3.8 in EN-1 confirms that the decision maker should ensure that appropriate weight is attached to designated sites of international, national and local importance; protected species; habitats and other species of principal importance for the conservation of biodiversity; and to biodiversity interests within the wider environment.
- 6.4.42 Paragraph 5.3.6 (and 5.3.15) in EN-1 recognise that the benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and that these may outweigh harm to these interests.
- 6.4.43 Paragraph 5.3.11 in EN-1 relates to SSSIs and states:
- "Where a proposed development on land within or outside an SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect, after mitigation, on the site's notified special interest features is likely, an exception should only be made where the benefits (including need) of the development at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs. The decision maker should use requirements and/or planning obligations to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest".
- 6.4.44 Paragraph C.9.58 of EN-6 [RD5] states that there is the potential for significant adverse effects at Tre'r Gof SSSI, Cemlyn Bay SSSI and Cae Gwyn SSSI. Paragraph C.9.60 in of EN-6 has recognised that given the scope for mitigation of biodiversity effects (identified in the Appraisal of Sustainability (AoS)) it is reasonable to conclude that it may be possible to avoid or mitigate impacts to an extent. For that reason, the Government does not think this justifies not including the site in this NPS. Paragraph C.9.61 of EN-6 recognises the need for further assessment at the application stage.
- 6.4.45 Sites of regional and local geological interest (including RIGS, Local Nature Reserves and Local Sites) should be given due consideration by the decision maker, though given the need for new infrastructure, these designations should not be used in themselves to refuse development consent (EN-1 paragraph 5.3.13).

Paragraph 5.3.14 in EN-1 confirms that ancient woodland is a valuable biodiversity resource and the decision maker should not grant development consent for any development that would result in its loss or deterioration

“...unless the benefits (including need) of the development, in that location outweigh the loss of the woodland habitat”.

- 6.4.46 Paragraph 5.3.15 notes that development proposals provide many opportunities for building in beneficial biodiversity features as part of good design.
- 6.4.47 Paragraph 5.3.17 in EN-1 states that other species and habitats have been identified as being of principal importance for the conservation of biodiversity in England and Wales and thereby requiring conservation action. The decision maker should ensure that these species and habitats are protected from the adverse effects of development by using requirements or planning obligations. The decision maker should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits (including need) of the development outweigh that harm. In this context, the decision maker should give substantial weight to any such harm to the detriment of biodiversity features of national or regional importance which it considers may result from a proposed development.
- 6.4.48 Paragraph 3.9.2 in EN-6 states that the nuclear AoS identified some common implications for biodiversity resulting from:
- water discharge, abstraction and quality issues;
 - habitat and species loss and fragmentation/coastal squeeze;
 - disturbance events (noise, light and visual); and
 - air quality.
- 6.4.49 Paragraph 3.9.3 of EN-6 states that in carrying out an assessment in accordance with section 5.3 of EN-1, applicants should also consider the effects of the construction of a new nuclear power station on the groundwater regime and its effects on terrestrial habitats.
- 6.4.50 Paragraphs 5.3.18 and 5.3.19 of EN-1 identify that the applicant should include appropriate mitigation measures as an integral part of the proposed development (and 5.3.20 requires to the decision maker to take into account what mitigation measures may have been agreed with NRW). Paragraph 3.9.6 of EN-6 states that potential mitigation measures could include variations to building layout to avoid ecologically sensitive areas and on-site measures to protect habitats and species and to avoid or minimise pollution and the disturbance of wildlife.

Welsh national and local policy

- 6.4.51 Paragraph 5.2.8 of PPW [RD8] states that the planning system should promote biodiversity objectives and seek to minimise the fragmentation of habitats.
- 6.4.52 The planning system has an important part to play in meeting biodiversity objectives by promoting approaches to development which create new opportunities to enhance biodiversity, prevent biodiversity losses, or compensate for losses where damage is unavoidable. Paragraph 5.2.8 in PPW confirms that the adaptation needs of biodiversity could be considered

by identifying the scope for minimising or reversing the fragmentation of habitats and improving habitat connectivity through the promotion of wildlife corridors.

- 6.4.53 Section 5.5 of PPW states that sites should be protected relative to their importance. In the interests of achieving sustainable development, it is important to balance conservation objectives with the wider economic needs of communities. Where development does occur, it is important to ensure that all reasonable steps are taken to safeguard or enhance the environmental quality of land. Further, section 5.5 of PPW recognises where other material considerations outweigh the potential adverse environmental effects, authorities should seek to minimise those effects.
- 6.4.54 Policy PCYFF 2 in the JLDP [RD27] states that proposals should include provision for the appropriate management and eradication of invasive species.
- 6.4.55 Strategic Policy PS 5 in the JLDP states that development will be supported where it is demonstrated that it is consistent with the principles of sustainable development. It also states that all proposals should protect and improve the quality of the natural environment, its landscapes and biodiversity assets.
- 6.4.56 Strategic Policy PS 9 in the JLDP requires all Associated Development to avoid, minimise, mitigate or compensate for potentially adverse ecological impacts in the local and wider area, both in the short and longer term.
- 6.4.57 Strategic Policy PS 19 in the JLDP states that the Councils will manage development so as to conserve and where appropriate enhance the distinctive natural environment, countryside and coastline, and that proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area. Strategic Policy PS 19 also states that when determining planning application, consideration should be *inter alia* to the following items.
- Safeguarding habitats and species and geology.
 - Protecting or where appropriate enhancing sites of international, national, regional and local importance and, where appropriate, their settings in line with National Policy.
 - Protecting or enhancing biodiversity through networks of green/blue infrastructure and/or restoring networks of natural habitats.
 - Protecting, retaining or enhancing trees, hedgerows or woodland of ecological value.
 - Having appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with National Policy.

- 6.4.58 Policy AMG 5 in the JLDP states that proposals must protect and, where appropriate, enhance biodiversity that has been identified as being important to the local area. This policy also confirms that proposals affecting sites of local biodiversity importance will be refused unless they can conform with all of the following criteria:
- “That there are no other satisfactory alternative sites available for the development.
 - The need for the development outweighs the importance of the site for local nature conservation.
 - That appropriate mitigation or compensation measures are included as part of the proposal”.
- 6.4.59 Policy AMG 6 in the JLDP states that proposals likely to cause direct or indirect significant harm to Local Nature Reserves, Wildlife Sites or RIGS would be refused, unless it can be proven that there is an overriding need for the development, and that there is no other suitable site that would avoid having a detrimental impact on sites of local nature conservation value or local geological importance.
- 6.4.60 Section 4.10 of the Wylfa SPG [RD28] relates to the natural environment and GP 20 states that the Wylfa Newydd DCO Project should seek to ensure that the island’s unique and distinctive natural environment is conserved and, where possible, enhanced. This includes the consideration of, among other things:
- the integrity of statutory and non-statutory sites for nature conservation;
 - internationally and nationally protected habitats and species; and
 - ecological functionality and relationships within the wider landscape.
- 6.4.61 GP 20 of the Wylfa SPG states that *inter alia*; protected species, the ecological functionality of nature conservation sites, Special Areas of Conservation, Special Protection Areas, SSSIs, RIGS and the Geopark status of Anglesey should not be subjected to significant adverse impacts, or if they are, sufficient mitigation should be implemented. GP 20 of the Wylfa SPG goes on to state that where adverse effects cannot be avoided, the Council seeks appropriate mitigation and/or compensation measures.

Assessment

- 6.4.62 This section addresses biodiversity, with geological conservation considered separately below.
- 6.4.63 The designated sites of national, international and local importance that are considered to be relevant to the assessment are listed in the baseline sections of each chapter of the ES. These are shown on the Nature Conservation Plans at Chapter D9 of the ES (Application Reference Number 6.4.9).
- 6.4.64 The Shadow HRA (Application Reference Number 5.2) considers internationally designated nature conservation sites.

- 6.4.65 The ES identifies all relevant ecological receptors with the potential to be affected by the Wylfa Newydd DCO Project and fully assesses these, recommending mitigation and compensation where appropriate.
- 6.4.66 In the context of paragraph 5.3.6 of EN-1, potential effects of climate change are considered within all chapters within the context of evolution of the baseline. The assessments find that there is limited (if any) potential for the value of most ecological (and geological receptors) to alter in the short to medium term due to climate change, in the absence of the Wylfa Newydd DCO Project.
- 6.4.67 Embedded, good practice and additional mitigation measures have been designed to conserve and, wherever practicable, enhance biodiversity (in accordance with paragraph 5.3.4 of EN-1) and follow the hierarchy of mitigation in terms of avoidance and minimising effects. Opportunities for conservation and enhancement of terrestrial and freshwater ecology are identified in respective chapters for each development site, notably for the Wylfa Newydd Development Area and the A5025 Off-line Highway Improvements.
- 6.4.68 Marine ecological enhancement opportunities have been identified in relation to provision of new habitat on the new breakwaters. Final details of these enhancements would be agreed with NRW as part of the marine licensing process.
- 6.4.69 Where adverse effects cannot be avoided, additional mitigation has been designed to reduce adverse effects to levels which are not significant. Compensation is proposed as a last resort where significant residual effects remain.
- 6.4.70 The environmental impact assessment of development within the WNDA on terrestrial and freshwater ecology matters is set out in chapter D9 of the ES (Application Reference Number: 6.4.9) and assessed at appendix A of this Planning Statement.
- 6.4.71 Additional mitigation identified to provide opportunities to preserve biodiversity during construction are listed at Appendix A, and include buffer zones to the Tre'r Gof SSSI, bat barn and watercourses, sensitive location of construction compounds, watercourse realignment, creation of new habitat to accommodate translocated species and translocation of soil from the ancient woodland. Further measures at the operational stage include ongoing management and monitoring of the ecological enhancements introduced at construction stage.
- 6.4.72 Temporary minor residual effects are likely to occur during construction on choughs, fungi and the Arfordir Mynydd y Wylfa - Trwyn Penrhyn Wildlife Site. These effects are assessed to be significant.
- 6.4.73 Despite measures to avoid significant harm to biodiversity interests in accordance with paragraph 5.3.7 of NPS EN-1, residual major adverse effects are, however, predicted due to the loss of two areas of ancient woodland within the Power Station Site during the construction period. Also, during construction major adverse effects on Tre'r Goff SSSI would result from water

quality and quantity changes and are likely to remain despite identified mitigation (set out at Appendix A). This would cause a major adverse effect on species for which the SSSI is notified.

- 6.4.74 The need for compensation has only, therefore, been identified in relation to potential effects on Tre'r Gof Site of Specific Scientific Interest (SSSI) and the loss of ancient woodland, where the significant harm to these two receptors can not be avoided. New areas of off-site habitat creation are proposed as compensation for potential effects on the SSSI, while translocation of ancient woodland soil to a new larger area of woodland is proposed as compensation for the latter.
- 6.4.75 An assessment of the Tre'r Gof SSSI during the operation stage is set out in the Water Quality and Resources section. There are no other likely significant effects during the operational period. No significant effects have been identified at this stage for the decommissioning phase.
- 6.4.76 Appendix A provides a detailed assessment of the development within the WND A against the policy context relating to biodiversity set out above. In summary, that opportunities that have been taken to conserve biodiversity interests and avoid significant adverse impacts accord with paragraphs 5.3.4 and 5.3.7 of EN-1. Whilst the loss of two areas of ancient woodland represents a residual major adverse effect, the loss is necessary to facilitate the development of the Power Station itself. The benefits of the development in that location outweigh the loss of the woodland habitat (and it is considered that no alternative locations are available). The positive effects to international, national and local biodiversity interests created by the reduction in greenhouse gas emissions from low-carbon generation from the project give rise to a net overall benefit.
- 6.4.77 Measures have been incorporated into the design of the proposals, in accordance with paragraph 5.3.15 of EN-1, in order to maximise beneficial biodiversity features. In addition to creation of new areas of habitat outside the WND A (comprising an area for reptile mitigation and another to provide compensatory habitat for species listed under Section 7 of the Environment (Wales) Act 2016) the LHMS secures thereinstatement, creation and enhancement of significant areas of habitat which would be of benefit to those ecological receptors present within the WND A.
- 6.4.78 These habitats would replace the existing baseline condition which is a predominantly agricultural landscape of lower biodiversity value. As such it is anticipated the provisions of the landscape scheme have the potential to result in net biodiversity gain which would preserve and possibly enhance the conservation status of the ecological receptors present.
- 6.4.79 It is also assessed that the separate compensation package to address potential effects at Tre'r Gof SSSI will lead to overall biodiversity benefits within Anglesey.
- 6.4.80 With regard to paragraph 5.3.5 of EN-1, the provisions of the LHMS and bespoke mitigation strategies such as the construction of bat barns and the provision and management of receptor sites for displaced and translocated

species, aim to ensure no detriment in the conservation status of those ecological receptors potentially affected by the Wylfa Newydd DCO Project. This meets the requirements of the Government's biodiversity strategy.

- 6.4.81 Having regard to paragraph 5.3.18 of EN-1, embedded measures are integral to the design while good practice measures are those which will be followed by Contractors and are detailed in the CoCP and sub-CoCPs. These include measures for addressing any potential effects on protected species, reducing disturbance, and habitat restoration. Additional measures are those identified through the assessment process as being required to reduce any significant effects identified. Enhancement measures have been identified where opportunities exist, for example provision of biodiversity gain through landscaping proposals.
- 6.4.82 Taking into account the overall planning balance set out in section 8 of this Planning Statement and with particular regard to the measures set out above it can, therefore, be concluded that the benefits of the development outweigh the harm and the development within the WNDA is in accordance with paragraphs 5.3.11, 5.3.14, 5.3.15, 5.3.17 and 5.3.18 of EN-1. This is also in accordance with Strategic Policy PS19 of the JLDP, which is permissive of adverse impacts on the natural environment where the benefits of the development clearly outweigh the value of the site or area.
- 6.4.83 The compensation measures proposed are compliant with other elements of Policy PS5 in promoting improvements in the quality of the natural environment and biodiversity assets.
- 6.4.84 With specific regard to Policy AMG 6 of the JLDP, all relevant non-statutory wildlife sites have been identified and fully assessed within relevant volumes of the ES, and no Local Nature Reserves or Wildlife Sites have been identified as potentially suffering significant adverse effects.
- 6.4.85 This includes the Arfordir Mynydd y Wylfa - Trwyn Penrhyn (Wylfa Head) Wildlife Site. Horizon acknowledge that there is uncertainty regarding the designation of Wylfa Head as a Wildlife Site but for the purposes of the ES assessment Horizon is treating this as a Wildlife Site. Chapter D9 of the ES (Application Reference Number 6.4.9) concludes there would be a minor adverse impact on Wylfa Head following mitigation. As a result, Policy AMG6 of the JLDP is not applicable as the proposals would not lead to any significant harm to this Wildlife Site.
- 6.4.86 The above assessment of the effect of the development in the WNDA demonstrates compliance with GP20 of the Wylfa SPG [RD28], in demonstrating that the Wylfa Newydd DCO Project has sought to ensure that the natural environment is conserved, and where this is not possible additional mitigation proposed to enhance in other areas.
- 6.4.87 The assessment of biodiversity matters in relation to the Off-Site Power Station Facilities and Associated Development sites are addressed at appendices B to F (with regard to the relevant volume of the ES). It is concluded, for each, that with proposed mitigation and good practice measures in place, there is likely to be no significant residual adverse effects

on ecology and therefore each complies with paragraph 5.3.7 of EN-1 and Policy PS 9 of the JLDP.

- 6.4.88 In summary, having considered all biodiversity effects, taking into account the mitigation measures proposed, it can be concluded that the Wylfa Newydd DCO Project as a whole, is compliant with EN-1 [RD4] and EN-6 [RD5] and also the relevant policies of PPW [RD8] and Policies PS 9 and AMG6 in the JLDP [RD27] as well GP 20 of the Wylfa SPG [RD28].

Civil and military aviation and defence interests

Policy context

- 6.4.89 Paragraph 5.4.1 in EN-1 confirms that civil and military aerodromes, aviation technical sites, and other types of defence interests (both onshore and offshore) can be affected by new energy development.
- 6.4.90 Paragraph 5.4.10 of EN-1 requires that *“where the proposed development may have an effect on civil or military aviation and/or other defence assets an assessment of potential effects should be set out in the ES...”*.
- 6.4.91 Paragraph 3.13.2 of EN-6 [RD5] states that *“given the special security arrangements in relation to air movements around nuclear sites, and the potential impact that new nuclear power stations may have on existing aerodromes and aviation activities, the application should assess the proximity of aircraft movements to the proposed site”*.

Assessment

- 6.4.92 Civil and military aviation and defence interests were scoped out of the EIA following receipt of a Scoping Opinion from the SoS (via the Planning Inspectorate) in June 2017, on the basis that no likely significant effects are anticipated.

Coastal change and marine environment

- 6.4.93 Coastal change is identified as both a Generic Impact in section 5.5 of EN-1 and a Nuclear Impact in EN-6. For ease, and consistency with the ES and Appendix A, this section also addresses the marine environment.
- 6.4.94 The topic of coastal processes and coastal geomorphology is considered in chapter D12 of the ES (Application Reference Number: 6.4.12). Appendix A of this Planning Statement in relation to the WNDA addresses the topic in two subsections, namely a) coastal processes and coastal geomorphology; and b) marine environment. The topic of coastal change is not relevant to, and therefore not assessed in respect of, the Off-Site Power Station Facilities or Associated Developments sites.

Policy context

National Policy Statements

- 6.4.95 Paragraph 4.1.6 of EN-1 confirms that the *Marine and Coastal Access Act 2009* (MCAA) [RD12] provides for the preparation of a Marine Policy Statement (MPS) [RD16] and a number of marine plans. It states that the decision maker must have regard to the MPS and applicable marine plans in taking any decision which relates to the exercise of any function capable of affecting the whole or any part of the United Kingdom (UK) marine area. In the event of a conflict between any of these marine planning documents and an NPS, paragraph 4.1.6 of EN-1 confirms that the NPS prevails for purposes of decision making given the national significance of the infrastructure.
- 6.4.96 Paragraph 5.3.4 of EN-1 states that the applicant should show how the proposals have taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.
- 6.4.97 Paragraph 5.3.7 EN-1 states that as a general principle, and subject to other paragraphs in EN-1, development should aim to avoid significant harm to biodiversity interests, including through mitigation and consideration of reasonable alternatives; where significant harm cannot be avoided, then appropriate compensation measures should be sought.
- 6.4.98 Paragraph 5.5.10 of EN-1 states that the decision maker should be satisfied that the proposed development will be resilient to coastal erosion and deposition, taking account of climate change, during the Project's operational life and any decommissioning period.
- 6.4.99 Paragraph 5.5.11 of EN-1 states that the decision maker should not normally consent new development in areas of dynamic shorelines where the proposal could inhibit sediment flow or have an adverse impact on coastal processes at other locations. Impacts on coastal processes must be managed to minimise adverse impacts on other parts of the coast. Where such proposals are brought forward consent should only be granted where the decision maker is satisfied that the benefits (including need) of the development outweigh the adverse impacts.
- 6.4.100 Paragraph 5.5.12 of EN-1 states that the decision maker should ensure that applicants have restoration plans for areas of foreshore disturbed by direct works and will undertake pre- and post- construction coastal monitoring arrangements with defined triggers for intervention and restoration.
- 6.4.101 Paragraph 5.5.15 of EN-1 states that the decision maker must have regard to the appropriate marine policy documents, as provided for in the MCAA, 2009 [RD12].
- 6.4.102 Paragraph 5.5.17 of EN-1 confirms that applicants should propose appropriate mitigation measures to address adverse physical changes to the coast in consultation with stakeholders. Where this is not the case, the decision maker should consider what appropriate mitigation requirements might be attached to any grant of development consent.
- 6.4.103 EN-6 [RD5] states at paragraph 2.10.3 that the ES should take into account how the proposal will take account of the projected impacts of climate change in accordance with section 4.8 of EN-1, which includes climate change adaptation.

6.4.104 Paragraph 3.9.3 of EN-6 [RD5] states that in carrying out an assessment in accordance with section 5.3 of EN-1, applicants should also consider the effects of the construction of a new nuclear power station on the groundwater regime and its effects on terrestrial/coastal habitats.

Welsh national and local policy

6.4.105 Other national and local policies which may be considered relevant to the consideration of coastal change are set out at appendix A of the Planning Statement.

6.4.106 In March 2011, the Welsh Government adopted the UK MPS [RD16] through which they are committed to develop and implement a Marine Plan for Wales. The MPS [RD16] contains objectives including the following in respect of the marine environment.

- Biodiversity is protected, conserved and where appropriate recovered and loss has been halted.
- Healthy marine and coastal habitats occur across their natural range and are able to support strong, biodiverse biological communities and the functioning of healthy, resilient and adaptable marine ecosystems.
- Oceans support viable populations of representative, rare, vulnerable, and valued species.

6.4.107 The National Marine Plan for Wales [RD17] is currently being drafted, drawing upon the framework and high level objectives for marine planning outlined in the MPS [RD16]. The purpose of the plan is to manage marine activities in a sustainable way, taking into account economic, social and environmental priorities.

6.4.108 Policy AMG 4 of the JLDP [RD27] states that proposals on the coast are only acceptable if the nature of the development requires them to be located on the coast and there is an overriding economic and social benefit from the development. The policy also seeks no unacceptable harm to water quality, public accessibility, local character and biodiversity.

6.4.109 Strategic Policy PS 19 in the JLDP confirms the Councils will have regard to the relative significance of international, national or local designations in considering weight to be attached to acknowledged interests. Proposals that have a significant adverse effect on the area's distinctive natural environment, countryside and coastline will be refused, unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protections for that site or area.

6.4.110 The Wylfa SPG [RD28] states that the proposals should conserve and enhance Anglesey's distinctive environment, taking into account climate change. GP 20 in the Wylfa SPG confirms that it is anticipated that this will be achieved for the water environment by:

- conserving the integrity of sites on or near Anglesey designated at a European, national or local level for their nature conservation value;

- minimising the release of potentially polluting substances to water; and
- Implementing measures to mitigate potential adverse impacts.

Assessment

6.4.111 The topic of coastal change and marine environment is only relevant to the development within the WNDA. This is therefore addressed in detail at appendix A of this Planning Statement and summarised below.

Coastal processes and coastal geomorphology

6.4.112 The coastal processes and coastal geomorphology assessment, along with the assessment of the marine environment, have considered impacts from all proposed marine works on geomorphology and marine ecology and biodiversity receptors.

6.4.113 This includes all physical works, dredging and disposal (construction phase and ongoing maintenance dredging) and modelling of cooling water discharges for thermal and chemical effects.

6.4.114 Chapter D12 of the ES demonstrates that during construction, coastal processes and coastal geomorphology effects are not likely to be significant, as the MOLF, breakwaters, CW intake, CW outfall structures and dredging activities have all been designed to reduce changes to coastal and marine processes and effects on coastal geomorphology receptors that may otherwise have occurred.

6.4.115 Proposed mitigation includes a monitoring programme (to determine any changes would be carried out throughout the construction phase and into the operational phase) and during decommissioning analysis of historic monitoring data.

6.4.116 No significant residual effects have been identified on coastal processes and coastal geomorphology for the construction, operational or decommissioning phases.

6.4.117 As the proposed design will result in no significant residual adverse effects on coastal processes and coastal geomorphology (at construction, operation and decommissioning stages), the Wylfa Newydd DCO Project is therefore consistent with paragraph 5.5.11 of EN-1 (on the basis that no adverse effect is identified) and Policy AMG 4 of the JLDP [RD27] as well as Policy PS19 where it relates to impacts on the area's coastline.

6.4.118 In accordance with Policy AMG4 of the JLDP, the proposals are located on the coast by virtue of the NPS designation and the necessity of a coastal location. There are also overriding economic and social benefits arising from the development, as explained elsewhere in this Planning Statement. Effects in relation to water quality, public accessibility, local character and biodiversity are dealt with elsewhere in this Planning Statement; however, on the basis that any harm has been minimised through mitigation and compensation as far as possible, it is considered that this is not unacceptable.

6.4.119 It is also noteworthy that the Appraisal of Sustainability carried out by the Government when Wylfa was designated as a potentially suitable site for a new nuclear power station stated at paragraph C.9.32 that:

“The Environment Agency has advised that, based on the current understanding of coastal erosion in the area, the site could potentially be protected from the effects of coastal erosion. The Shoreline Management Plan (SMP) (May 2001) describes the area around Wylfa Head as “Hard Rock Shore” and it is therefore at minimal risk of erosion.”

6.4.120 The EIA takes account of climate change in accordance with paragraph 5.5.10 of EN-1 and paragraph 2.10.3 of EN-6 [RD5].

Marine environment

6.4.121 The assessment of development within the WNDAs on the marine environment is set out in chapter D13 of the ES (Application Reference Number: 6.4.13), and assessed against the above policy context at appendix A.

6.4.122 With mitigation in place (which comprises marine ecological habitat enhancements and the implementation of a monitoring programme to identify non-native species), residual significant impacts are not predicted to occur during the construction, operation or decommissioning stages. This satisfies paragraph 5.3.7 of EN-1, and the proposals have had regard to the UK MPS [RD16] in accordance with paragraph 5.5.15 of EN-1.

6.4.123 Horizon has consulted with stakeholders including NRW and the National Trust to identify potential mitigation measures in accordance with paragraph 5.5.17 of NPS EN-1.

6.4.124 The conclusion that there would be no significant adverse effects on the marine environment also satisfies Strategic Policy PS 19 in the JLDP [RD27] in relation to impacts on the natural environment and coastline, and GP 20 in the Wylfa SPG [RD28] with regard to the implementation of mitigation measures.

Dust, odour, artificial light, smoke, steam and insect infestation

Policy Context

National Policy Statements

6.4.125 Paragraph 4.13.2 of EN-1 [RD4] states that the ES should assess effects on human beings for each element of the project, identifying any adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts as appropriate. The impacts of more than one development may affect people simultaneously, so paragraph 4.13.2 of EN-1 [RD4] states that the applicant and the decision maker should consider the cumulative impact on health.

6.4.126 Because of the potential effects of these emissions and infestation, and in view of the availability of the defence of statutory authority against nuisance

claims described in Section 4.14 (of EN-1), it is important that the potential for these impacts is considered by the decision maker (EN-1 paragraph 5.6.2).

- 6.4.127 Paragraph 5.6.3 states that for energy NSIPs some impact on amenity for local communities is likely to be unavoidable. The aim should be to keep impacts to a minimum.
- 6.4.128 Paragraph 5.6.4 of EN-1 advises that applicants should “...*assess the potential for insect infestation and emissions of odour, dust, steam, smoke and artificial light to have a detrimental impact on amenity, as part of the Environmental Statement*”.
- 6.4.129 Paragraph 5.6.7 of EN-1 states that the decision maker should be satisfied that an assessment of the potential for artificial light, dust, odour, smoke, steam and insect infestation to have a detrimental impact on amenity has been carried out and that all reasonable steps have been taken, and will be taken, to minimise any such detrimental impacts.
- 6.4.130 Paragraph 5.6.9 of EN-1 states that where the decision maker believes it is appropriate, they may consider attaching requirements to the development consent, in order to secure certain mitigation measures. Paragraph 5.6.10 notes that this could include schemes of management and mitigation.

Welsh national and local policy

- 6.4.131 Policy PCYFF 2 in the JLDP [RD27] states that planning permission will be refused where the development would have an unacceptable impact on the health, safety or amenity of occupiers of local residencies, other land and property uses or characteristics of the locality due to *inter alia*: disturbance; vibration; dust; fumes; light pollution; or other forms of pollution or nuisance.
- 6.4.132 The Wylfa SPG [RD28] at GP 7 states that Associated Developments should not be proposed where construction activities would give rise to unacceptable impacts on air quality, noise/vibration and light pollution and the amenity of the existing residents, visitors, businesses and construction workers.

Assessment

- 6.4.133 In accordance with paragraph 5.6.7 of EN-1, the applicant has assessed the potential for emissions of odour, dust, steam, smoke and artificial light to have a detrimental impact on amenity, as part of the Environmental Statement. Insect infestation was scoped out of the assessment. Chapter A6 of the ES (Application Reference Number: 6.1.6) provides further information on the scoping process.
- 6.4.134 Particulate matter (including smoke and dust) and odour (where relevant) are considered within the air quality assessment, and mitigation has been proposed to reduce any detrimental effects on amenity as part of the CoCP, sub-CoCPs and CoOP, in accordance with paragraph 5.6.7 of EN-1.
- 6.4.135 To assess the effect of artificial light, a night-time visual impact assessment is included in chapter D10 (Application Reference Number: 6.4.10) for the Power Station Site, with a high level assessment of lighting effects included

in each of Volume E-H (Application Reference Numbers: 6.5.1 to 6.8.29) for the Associated Developments.

- 6.4.136 Chapter D10 (Application Reference Number: 6.4.10) makes it clear that there would be no visible plumes from the main stacks. The assessment does acknowledge visible plumes from the house boilers during certain weather conditions but concludes that the plumes are not considered likely to lead to an increase in the level of visual effect for any visual receptors; as such they have not been specifically referred to in the detailed assessment presented in volume D, Appendix D10-7, visual effects table (Application Reference Number: 6.4.64). Proposals for mitigating potential effects from artificial light are detailed in the CoCP and sub-CoCPs. A Lighting Strategy is provided as part of the CoOP.
- 6.4.137 All reasonable steps have been taken, and will be taken, to minimise any such detrimental impacts, in part through the measures set out in the CoCP, sub-CoCPs and CoOP, in accordance with paragraphs 5.6.3 and 5.6.7 of EN-1, policy PCYFF 2 in the JLDP [RD27] and in relation to the Associated Developments GP 7 in the Wylfa Newydd SPG [RD28].

Flood risk

- 6.4.138 Flood risk is identified as both a Generic Impact in EN-1 [RD4] and a Nuclear Impact in EN-6 [RD5].

Policy context

National Policy Statements

- 6.4.139 Paragraph 5.15.2 of EN-1 states that where a project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and impacts of the proposed project on, water quality, water resources and physical characteristics of the water environment as part of the ES.
- 6.4.140 Paragraph 5.15.9 and 5.15.10 of EN-1 states that the risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution practice and impacts on local water resources can be minimised through planning and design for the efficient use of water, including water recycling.
- 6.4.141 EN-6 states at paragraph 3.7.8 that contamination of water resources “...*can be mitigated through the EIA process and managed through the possible implementation of Environmental Management Plans*”.
- 6.4.142 EN-6 states at paragraph 3.6.11 that applicants need to submit a flood risk assessment in accordance with section 5.7 of EN-1. Paragraph 3.6.16 in EN-6 states that applicants should set out measures to mitigate the risk of flooding on or from individual sites that may result from the development.
- 6.4.143 Paragraph 5.7.9 of EN-1 states that in determining an application for development consent, the decision maker should be satisfied that where relevant:

- the application is supported by an appropriate Flood Risk Assessment;
- the Sequential Test has been applied as part of site selection;
- a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;
- the proposal is in line with any relevant national and local flood risk management strategy;
- priority has been given to the use of Sustainable Drainage Systems; and
- in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed over the lifetime of the development.

6.4.144 Paragraph 5.7.12 of EN-1 states that the decision maker should not consent development in Flood Zone 2 in England or Zone B in Wales unless it is satisfied that the sequential test requirements have been met. It should not consent development in Flood Zone 3 or Zone C unless it is satisfied that the Sequential and Exception Test requirements have been met. Paragraph 5.7.12 in EN-1 continues to confirm that the technology-specific NPSs set out some exceptions to the application of the sequential test. However, when seeking development consent on a site allocated in a development plan through the application of the Sequential Test, informed by a strategic flood risk assessment, paragraph 5.7.12 in EN-1 advises that applicants need not apply the Sequential Test, but should apply the sequential approach to locating development within the site.

6.4.145 Paragraph 5.7.13 in EN-1 describes the Sequential Test, stating:

“Preference should be given to locating projects in Flood Zone 1 in England or Zone A in Wales. If there is no reasonably available site in Flood Zone 1 or Zone A, then projects can be located in Flood Zone 2 or Zone B. If there is no reasonably available site in Flood Zones 1 or 2 or Zones A & B, then nationally significant energy infrastructure projects can be located in Flood Zone 3 or Zone C subject to the Exception Test. Consideration of alternative sites should take account of the policy on alternatives set out in section 4.4 above”.

6.4.146 Paragraph 5.7.14 in EN-1 then explains the approach to be taken where the Sequential Test cannot be met:

“If, following application of the sequential test, it is not possible, consistent with wider sustainability objectives, for the project to be located in zones of lower probability of flooding than Flood Zone 3 or Zone C, the Exception Test can be applied. The test provides a method of managing flood risk while still allowing necessary development to occur”.

6.4.147 Paragraph 5.7.16 in EN-1 continues to state that:

“All three elements of the test will have to be passed for development to be consented. For the Exception Test to be passed:

- it must be demonstrated that the project provides wider sustainability benefits to the community that outweigh flood risk;
- the project should be on developable, previously developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously developed land subject to any exceptions set out in the technology-specific NPSs; and
- a Flood Risk Assessment must demonstrate that the project will be safe, without increasing flood risk elsewhere subject to the exception below and, where possible, will reduce flood risk overall”.

6.4.148 Paragraph 5.7.15 in EN-1 clarifies that the Exception Test is only appropriate for use where the sequential test alone cannot deliver an acceptable site, taking into account the need for energy infrastructure to remain operational during floods.

6.4.149 Paragraph 5.7.23 of EN-1 requires that the sequential approach should be applied at the site level to the layout and design of the project, with more vulnerable uses located on parts of the site at lower probability of flooding.

6.4.150 A more detailed policy analysis is provided in each of the site specific appendices in the Planning Statement, in relation to flood zone categorisation and the Sequential and Exceptions Tests (paragraphs 5.7.12, EN-1 and paragraphs 3.6.6 to 3.6.13, EN-6).

Welsh national and local policy

6.4.151 Sections 13.4 of PPW [RD8] sets out the Welsh Government’s approach to flood risk and development in areas of high flood risk and dealing with contaminated land such that the development does not impact on the water environment.

6.4.152 Paragraph 13.4.2 of PPW states that local planning authorities should ensure that development does not increase the risk of flooding elsewhere by loss of flood storage or flood flow route or increase the problem of surface water run-off. Paragraph 13.4.3 of PPW confirms that flood risk is a material consideration in the determination of planning applications.

6.4.153 TAN 15 (2004) [RD18] states that that flood risk is a material consideration in the determination of planning applications and provides a framework within which risks arising from both river and coastal flooding, and from additional runoff from development in any location, can be assessed.

6.4.154 Strategic Policy PS 5 in the JLDP seeks developments that manage flood risk and maximise use of Sustainable Drainage Systems.

6.4.155 Strategic Policy PS 6 in the JLDP asserts that, in order to adapt to effects of climate change, proposals will only be permitted where they are located away from flood risk areas unless it can be clearly demonstrated that there is no risk or that the risk can be managed.

- 6.4.156 Policy PCYFF 3 in the JLDP states that proposals would only be permitted where their drainage systems are designed to limit surface water run-off, flood risk and pollution.
- 6.4.157 Policy PCYFF 6 in the JLDP requires development to incorporate water conservation measures where practicable, including Sustainable Drainage Systems. This policy also notes that proposals should use flood minimisation or mitigation measures where possible, to reduce surface water run-off and minimise its contribution to flood risk elsewhere.
- 6.4.158 GP 21 of the Wylfa SPG [RD28] suggests that the Wylfa Newydd Project should include measures to control surface water runoff.

Assessment

- 6.4.159 Flood risk is discussed in the ES chapters with Flood Consequence Assessments provided as appendices. Each assessment takes into account policy requirements, the location of development relative to flood zones and any mitigation required to address flood risks. For small catchments (not captured by TAN15 larger scale flood zone mapping), bespoke flood risk modelling has been undertaken and discussed in the Environmental Statement. Each assessment covers each phase of the development.
- 6.4.160 The methodologies and conclusions from the FCAs have been discussed with NRW and consultation is ongoing. Details of consultation on the water environment are included in chapter B8 Environmental Statement (Application Reference Number 6.2.8) and in the Consultation Report (Application Reference Number 5.1).
- 6.4.161 Flood risk was a major consideration in the UK Government's Strategic Siting Assessment for the Power Station (NPS EN-6), in Horizon's site selection studies for the Associated Development, and in the design evolution for the Power Station Site and the Associated Development Sites.
- 6.4.162 The FCAs for each site, and any mitigation identified, make appropriate allowances for climate change (Application Reference Number: 6.4 to 6.8). Where unacceptable flooding has been identified then mitigation measures have been identified, as identified below.
- 6.4.163 The FCA for the WNDA is provided at volume D, appendix D8-04 of the ES (Application Reference Number: 6.4.29), in accordance with section 5.7 of EN-1.
- 6.4.164 As set out at appendix A, the vast majority of the WNDA and surrounding area is located in the lowest risk zone (Flood Zone A). Critical infrastructure associated with the development is located in Flood Zone A. Some elements of the construction will need to take place in Flood Zone C and during operation various components of the Marine Works will be located within Flood Zone C2. No specific mitigation measures are necessary to increase flood capacity of the site, though a series of measures would be provided to prevent increased risks to off site flooding. With these measures in place no significant residual adverse effects are likely in relation to flood risk as a result of development at the WNDA.

- 6.4.165 Appendix A demonstrates that the Exception Test is passed in accordance with paragraph 5.7.16 of NPS EN-1 and paragraph 3.6.13 of NPS-EN-6. The site level sequential approach is also in accordance with paragraph 3.6.11 of NPS EN-6 (and paragraph 5.7.23 of EN-1), as the proposals require works during construction and operation within high flood risk areas due to the nature of the development within and adjacent to the Irish Sea.
- 6.4.166 The Marine Works are water compatible uses and would remain operational and safe for users in times of flood. As such they can be appropriately located in an area at risk of flooding. Critical infrastructure is located in Flood Zone A in accordance with paragraph 3.6.11 of NPS-EN6.
- 6.4.167 With the mitigation proposed during the construction and operation phases to prevent increased risk of off-site flooding, the development within the WNDA is in accordance with paragraph 3.6.13 of NPS-EN-6 paragraph 13.4.2 of PPW, policy PCYFF 3 of the JLDP [RD27] and GP21 of the Wylfa SPG [RD28].
- 6.4.168 The incorporation of SuDS as part of the mitigation strategy (as set out in appendix A) is in accordance with Policy PCYFF 6 of the JLDP which requires the inclusion of sustainable drainage where practicable.
- 6.4.169 FCAs are provided for the Off-Site Power Station Facilities and each of the Associated Development sites (other than the Site Campus which is considered holistically with the WNDA) at volumes E to H of the ES (Application Reference Number: 6.5.1 to 6.8.1). These are considered on a site by site basis at appendices B to F of the Planning Statement.
- 6.4.170 The Associated Development sites are all located in Flood Zone A, with the exception of small areas associated with the A5025 Off-line Highway Improvements to the A5025 and the Park and Ride site, where flood risk mitigation has been designed as required.
- 6.4.171 No post mitigation significant adverse effects are identified for the Off-Site Highways Facilities, Logistics Centre or A5025 Off-Line Highways Improvements. However, there is potential for surface water flooding at the Park and Ride facility. The embedded mitigation includes storage ponds, and installation of a granular sub-base to allow surface flows in permeable car park areas to permeate to the below-ground storage.
- 6.4.172 Despite this mitigation a flood risk remains due to the Park and Ride being constructed within the natural floodplain of Nant Dalar Hir and the associated loss of flood storage. Proposed additional mitigation measures would be implemented to address potential significant flooding effects. This includes further detailed manipulation of the topography of the Park and Ride and redirection of flow paths to manage the flood waters within the Park and Ride site without increasing flood risk elsewhere. A design principle contained within the DAS will secure a flood compensation scheme (Application Reference Number: 8.2.3).
- 6.4.173 The Site Selection Report in relation the Park and Ride (Application Reference Number: 8.24.5) finds that there is no other reasonably available site in Flood Zone A and therefore the sequential approach is satisfied (in

accordance with paragraph 5.7.9 of NPS EN-1). The Exceptions Test does not need to be applied as the site is not located within Flood Zone C. As per paragraph 5.7.9 of NPS EN-1, the proposed layout of the Park and Ride facility site has also followed a sequential approach at site level to minimise risk (in accordance with paragraph 5.7.23 of EN-1). This involves directing the most vulnerable uses to areas of lowest flood risk.

6.4.174 In summary, each element of the Wylfa Newydd DCO Project has been assessed through an appropriate FCA as required by paragraph 5.7.9 of EN-1. Compliance with the Sequential and Exceptions Tests (where applicable) is demonstrated at a site specific level at appendices A - F of the Planning Statement, in accordance with paragraphs 5.7.12 to 5.7.16 in EN-1.

6.4.175 In summary, the Wylfa Newydd DCO Project is in accordance with national and local policy, including EN-1 and EN-6, in relation to flood risk as well as paragraph 13.4.2 of PPW [RD5], and policies PCYFF 3 and PCYFF 6 of the JLDP [RD27].

Historic environment

6.4.176 The historic environment is identified as a Generic Impact in EN-1 [RD4].

Policy context

National Policy Statements

6.4.177 Paragraph 1.7.2 of EN-1 states that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects on cultural heritage.

6.4.178 This is also reflected at Paragraph 5.8.1 of EN-1 which recognises that the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment.

6.4.179 Paragraph 5.8.2 of EN-1 confirms that those elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest are called 'heritage assets'. Some heritage assets have a level of significance that justify official designation (such as Scheduled Monuments, Listed Buildings and Scheduled Monuments) (paragraph 5.8.3) and other non designated heritage assets identified either through local listing or the decision maker's judgement based on clear evidence that the asset has heritage significance (paragraph 5.8.6).

6.4.180 In relation to Wylfa, paragraphs C.9.68 and C.9.69 of EN-6 [RD5] identify the potential for adverse effects on heritage assets, namely Cestyll Garden, the Bronze Age standing stones Scheduled Monument, three Grade II Listed Buildings in Cafnan and Listed Buildings around Cemaes. It is noted that it should be possible to mitigate against the potential adverse effects on Scheduled Monuments, although further detailed assessment at project level will be required.

6.4.181 As part of the ES the applicant should provide a description of the significance of heritages assets affected by the proposed development and the

contribution of their setting to that significance (paragraph 5.8.8 of EN-1), and carry out an appropriate desk based assessment and where necessary field evaluation (paragraph 5.8.9).

6.4.182 The decision maker should take into account the desirability of sustaining or where appropriate enhancing the significance of heritage assets, the contribution of their settings and the positive contributions they can make to sustainable communities and economic vitality (paragraph 5.8.13).

6.4.183 Paragraph 5.8.14 of EN-1 states that *“there should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be”*. Paragraph 5.8.14 of EN-1 also states:

“Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II* listed buildings; grade I and II* registered parks and gardens; and World Heritage Sites, should be wholly exceptional”.

6.4.184 Paragraph 5.8.15 of EN-1 states that any harmful impacts on the significance of designated heritage assets should be *“...weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss”*. Where the application would lead to substantial harm or total loss of significance of a designated heritage asset the decision maker should “refuse consent unless it can be demonstrated that the substantial harm to or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm”.

6.4.185 Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010 states that when deciding an application which affects a listed building or its setting, the decision-maker must have regard to the desirability of preserving the listed building or its setting or any features of special architectural or historic interest which it possesses.

Welsh national and local policy

6.4.186 Relevant national and local planning policies are referred to in the site specific analysis at appendices A to F of the Planning Statement.

6.4.187 PPW [RD8] identifies objectives including conserving and enhancing the historic environment at section 6.2. PPW confirms that the greater the significance and/or impact on the historic environment, then the greater the benefit needed to justify any harm (paragraph 6.5.1).

6.4.188 PPW also clarifies at paragraph 6.5.5 that where nationally important archaeological remains, whether scheduled or not, and their settings are likely to be affected by proposed development, there should be a presumption in favour of their physical protection *in situ*. Paragraph 6.5.5 in PPW states:

“It will only be in exceptional circumstances that planning permission will be granted if development would result in an adverse impact on a Scheduled Monument (or an archaeological site shown to be of national importance) or has a significantly damaging effect upon its setting. In cases involving less significant archaeological remains, local planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development”.

- 6.4.189 TAN 12 [RD22] sets out advice on good design, including advice on considering the historic environment in design.
- 6.4.190 TAN 24 [RD26] sets out a presumption in favour of preservation *in situ* of Scheduled Monuments or other nationally significant archaeological remains. Where the significance of archaeological remains does not merit preservation *in situ*, a programme of archaeological recording may be undertaken, including analysis and publication of the results.
- 6.4.191 At the local level, Strategic Policy PS 5 in the JLDP [RD27] confirms that development will be supported where it is consistent with its sustainable development principles, including preserving and enhancing the quality of the built and historic environment assets including their setting.
- 6.4.192 For example, Policy PS 9 in the JLDP relates to the main site and states that the layout and design of the Power Station and the scale of open spaces, landscaping, planting (including hedging and tree belts), waterways and similar features should avoid, minimise, mitigate or compensate for impacts on cultural and historic aspects of the landscape, both in the short and longer term.
- 6.4.193 Policy PCYFF 3 in the JLDP states that all proposals will be expected to demonstrate high quality design taking into account the historic environmental context and to contribute to the creation of attractive, sustainable places.
- 6.4.194 Policy PS 20 in the JLDP states that local planning authorities should endeavour to preserve or enhance heritage assets, both designated and undesignated. Policy PS 20 also states that proposals which preserve and where appropriate enhance the heritage assets, their setting and Significant Views into and out of the building/area will be granted.
- 6.4.195 Policy AT 1 in the JLDP states that any proposal within or assessed to affect the setting of Conservation Areas, World Heritage Sites, Registered Historic Landscapes and Parks and Gardens should have regard to relevant character appraisals, management plans, delivery strategies and assessments adopted by the Local Planning Authority.
- 6.4.196 Policy AT 3 in the JLDP states that proposals will be required to conserve and seek opportunities to enhance buildings, structures and areas of locally or regionally significant non-designated heritage assets, which create a sense of local character, identity and variation.
- 6.4.197 Policy AT 4 in the JLDP states that the importance and condition of archaeological sites, and the potential impact of development on this should be assessed prior to planning. Consent will only be granted if development

need outweighs the significance of the archaeology, and may include a requirement for archaeological investigation.

Assessment

- 6.4.198 Construction, operation and decommissioning impacts on cultural heritage receptors have been assessed for all aspects of the Wylfa Newydd DCO Project.
- 6.4.199 In accordance with paragraph 8.5.2 - 8.5.8 of EN-1, heritage assets have been identified under four sub-topics in the ES - archaeological remains, historic buildings, the historic landscape and marine archaeology. All are included in the assessment and effects on individual heritage assets have been assessed. The term "value" has been used to avoid confusion with "significance of effect" used in the Environmental Statement. The baselines have been informed by desk-based surveys (one of the sources consulted was the Historic Environment Record), non-invasive and invasive investigations, and archaeological dive surveys. Where required, additional expert advice has been taken from marine archaeological specialists and horticultural specialists.
- 6.4.200 Desk-based surveys and walkover surveys, non-invasive and invasive investigations have been undertaken to identify heritage assets which could be affected and inform an assessment of their value. Where appropriate to illustrate an assessment, photomontages have also been included.
- 6.4.201 The EIA of development within the WNDAs on historic environment matters is set out chapter D11 of the Environmental Statement (Application Reference Number: 6.4.11) and assessed against the relevant policy at appendix A of the Planning Statement. This identifies the programme of embedded and good practice mitigation measures to reduce the effects on the historic environment. This approach is in accordance with the principles of policies PS 9, PS20, AT 1, AT 3 and AT 4 of the JLDP.
- 6.4.202 A programme of mitigation and good practice measures would be secured via the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) to reduce the effects on the historic environment.
- 6.4.203 As set out in chapter 7, in addition to the off-site planting delivered through the Landscape and Habitat Management Strategy, Horizon will agree with National Trust, Cadw and Gwynedd Archaeological Planning Service, the designs of appropriate landscape measures to restore and/or enhance the former location of the Cestyll Garden kitchen garden. This will be secured through a planning obligation. Other mitigation measures are set out at Appendix A.
- 6.4.204 Within the WNDAs, following the implementation of embedded mitigation and good practice measures, no significant residual effects on any known archaeological remains are predicted.
- 6.4.205 During construction moderate and major residual adverse residual effects have been identified at Felin Gafnan Corn Mill, a Grade II* Listed Building located immediately to the west of the Power Station Site and WNDAs. A

moderate adverse residual effect has also been identified for St. Patrick's Church in Llanbadrig (although construction would not affect key attributes of the asset's setting, such as its coastal location and views out to sea). A major adverse residual effect is identified at Cestyll Garden, a Grade II Registered Historic Park and Garden, due to the permanent removal of the kitchen garden, the plot of land where Cestyll House formerly stood, and parts of its Essential Setting.

- 6.4.206 The operational phase would result in effects on historic assets (with regard to loss of amenity and visual intrusion) which cannot be mitigated due to their location on the landscape. These are listed at Appendix A. During decommissioning, many of the buildings on the Power Station Site would be removed, which would restore the setting of some of the cultural heritage assets, with some noise and visual intrusion from continued presence of structures such as the breakwater.
- 6.4.207 Appendix A provides a policy assessment of the heritage effects arising from the development within the WNDA. The project will not result in total loss of any designated heritage assets. However, at the Wylfa Newydd Development Area, a major adverse effect is predicted after mitigation on Cestyll Garden, a Grade II Registered Historic Park and Garden, and there are potential effects on the setting of other designated assets
- 6.4.208 In accordance with paragraph 5.8.14 of NPS EN-1, Appendix A demonstrates why the need for the location of the construction laydown area (which results in this loss) justifies exceptional circumstances (required for compliance with paragraph 5.8.14 of NPS EN-1) for the substantial harm to a Grade II Registered Historic Park and Garden. The loss is necessary to achieve the substantial public benefits of delivering the Power Station. There are no alternative locations that could accommodate the construction laydown area that would result in the loss. It needs to be in this location to provide access to the western breakwater, with all other areas adjacent to Porth-y-pistyll bay required to support proposals such as the MOLF. Repositioning the laydown area further away from Cestyll Gardens would require other laydown areas within the WNDA to be repositioned, which would be likely to encroach on the Tre'r Gof SSSI.
- 6.4.209 The substantial harm and loss identified to Cestyll Gardens is therefore compliant with paragraph 5.8.15 of NPS EN-1, as it is necessary to achieve the substantial public benefits of delivering the Power Station (as set out in section 6.2 above).
- 6.4.210 Adverse impacts on other heritage assets, including the significant residual adverse effect on Felin Gafnan Corn Mill, are not considered to constitute substantial harm (because the effect would not result in a permanent and substantial loss of the significance of this heritage asset). This is also therefore compliant with Policy AT 4 of the JLDP [RD27].
- 6.4.211 An assessment of the historic environment for the Off-Site Power Station Facilities and each of the Associated Development sites (other than the Site Campus which is considered holistically with the WNDA), are provided on a

site by site basis at appendices B to F of the Planning Statement (Application Reference Number: 8.1).

- 6.4.212 After mitigation, no significant adverse effects on heritage assets are identified for the Off-Site Power Station Facilities, Park and Ride or Logistics Centre, in compliance with paragraph 5.8.17 of EN-1 (and the relevant national and local policy identified for each site in the relevant appendix of this Planning Statement).
- 6.4.213 With regard to the A5020 Off-Line Highways Improvements, as explained at chapter G11 of the ES (Application Reference Number: 6.7.11), whilst the likely impact on archaeology and cultural heritage has been minimised as far as possible, significant adverse residual effects are identified during construction and operational stages for two archaeological remains and on three historic buildings during construction. It is considered (as set out at appendix F) that the adverse impacts are acceptable in the balance of the overriding need for the A5025 Off-line Highways Improvements as an integral part of the Wylfa Newydd DCO Project.
- 6.4.214 Each element of the Wylfa Newydd DCO Project has been examined through an appropriate assessment in relation to the historic environment. These are considered in detail at a site specific level at appendices A to F of the Planning Statement.
- 6.4.215 In summary, the Wylfa Newydd DCO Project is in accordance with the EN-1 and EN-6 in relation to the effects on the historic environment, and is also in accordance with Welsh national and local policy.

Landscape and visual impacts

- 6.4.216 Landscape and visual impacts is identified as a Generic Impact in EN-1 [RD4] and a Nuclear Impact in EN-6 [RD5].

Policy context

National Policy Statements

- 6.4.217 Paragraph 1.7.2 of EN-1 states that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects *inter alia* on landscape and visual amenity. In general, it should be possible to mitigate satisfactorily the most significant potential negative effects of new energy infrastructure consented in accordance with the energy NPSs. However, paragraph 1.7.2 of EN-1 acknowledges that the impacts on landscape and visual amenity in particular will sometimes be hard to mitigate.
- 6.4.218 Paragraph 1.7.11 of EN-1 states that EN-1 already contains policies which severely limit the prospects for development of large-scale energy infrastructure in the most attractive landscapes and townscapes. Paragraph 1.7.11 of EN-1 continues to state that:
- “Tightening the development consent policies in EN-1 to make it harder for energy infrastructure to be consented which would have adverse landscape*

or townscape effects would be likely to make it significantly more difficult to gain consent for a range of large-scale energy infrastructure projects”.

- 6.4.219 The landscape and visual effects of energy projects will vary on a case by case basis according to the type of development, its location and the landscape setting of the proposed development, as clarified at paragraph 5.9.1 in EN-1.
- 6.4.220 EN-1 states at paragraph 4.5.1 that the visual appearance of a building is sometimes considered to be the most important factor in good design. But high quality and inclusive design goes far beyond aesthetic considerations. It clarifies that the functionality of an object — be it a building or other type of infrastructure — including fitness for purpose and sustainability, is equally important.
- 6.4.221 Paragraph 4.5.1 in EN-1 continues to state that:
- “Applying ‘good design’ to energy projects should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible. It is acknowledged, however that the nature of much energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area”.
- 6.4.222 Paragraph 5.9.8 of EN-1 states that virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.
- 6.4.223 EN-1 also clarifies at paragraph 5.9.5 that:
- “The landscape and visual assessment should include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project. The applicant’s assessment should also take account of any relevant policies based on these assessments in local development documents in England and local development plans in Wales”.
- 6.4.224 The assessment should include the visibility and conspicuousness of the project during construction and operation and potential impacts on views and visual amenity (paragraph 5.9.6). This should include effects on light pollution effects on local amenity and nature conservation.
- 6.4.225 Paragraph 5.9.2 notes that among the features of energy infrastructure which are common to a number of different technologies, cooling towers and exhaust stacks and their plumes have the most obvious impact on landscape and visual amenity for thermal combustion generating stations.
- 6.4.226 For development proposed within nationally designated landscapes, Paragraph 5.9.9 in EN-1 states that the conservation of the natural beauty of the landscape and countryside should be given substantial weight by the

decision maker in deciding on applications for development consent in nationally designated landscapes, such as an AONB.

6.4.227 Paragraph 5.9.10 in EN-1 confirms that the decision maker may grant development consent in nationally designated landscapes, such as AONBs, in exceptional circumstances. The development should be demonstrated to be in the public interest and consideration of such applications should include an assessment of:

- the need for the development, including in terms of national considerations, and the impact of consenting or not consenting it upon the local economy;
- the cost of, and scope for, developing elsewhere outside the designated area or meeting the need for it in some other way, taking account of the policy on alternatives set out in section 4.4 of EN-1 ; and
- any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

6.4.228 Paragraph 5.9.11 in EN-1 states that the decision maker should, “...ensure that any projects consented in these designated areas should be carried out to high environmental standards, including through the application of appropriate requirements where necessary”.

6.4.229 Paragraphs 5.9.12 and 5.9.13 then deal with developments outside nationally designated areas but might affect them. Paragraph 5.9.12 in EN-1 confirms that the duty to have regard to the purposes of nationally designated sites also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints. Importantly, paragraph 5.9.13 in EN-1 confirms that the fact that a proposed project will be visible from within a designated area should not in itself be a reason for refusing consent.

6.4.230 Paragraph 5.9.14 in EN-1 confirms that local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.

6.4.231 Paragraphs 5.14 to 5.17 of in EN-1 then address developments in other areas (i.e. outside nationally designated areas, or that won't affect nationally designated areas), with paragraph 5.14 noting that local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.

6.4.232 Paragraph 5.9.15 in EN-1 acknowledges that the scale of such projects means that they will often be visible within many miles of the site of the proposed infrastructure. The decision maker should therefore judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the Project.

- 6.4.233 Paragraph 5.9.16 in EN-1 states that the decision maker should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the decision maker considers reasonable.
- 6.4.234 Paragraph 5.9.17 in EN-1 states that the decision maker “...*should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation*”.
- 6.4.235 Paragraph 5.9.18 in EN-1 recognises that coastal areas are particularly vulnerable to visual intrusion because of the potential high visibility of development on the foreshore, on the skyline and affecting views along stretches of undeveloped coast.
- 6.4.236 At paragraph 5.9.19, EN-1 advises that it may be helpful for applicants to draw attention, in the supporting evidence to their applications, to any examples of existing permitted infrastructure they are aware of with a similar magnitude of impact on sensitive receptors, as this may assist the decision maker in judging the weight it should give to the assessed visual impacts of the proposed development.
- 6.4.237 Paragraph 5.9.20 in EN-1 states that the decision maker should ensure applicants have taken into account the landscape and visual impacts of visible plumes from chimney stacks and/or the cooling assembly.
- 6.4.238 Paragraph 5.9.21 in EN-1 states that there may be exceptional circumstances where mitigation could have a very significant benefit and warrant a small reduction in function. In these circumstances, the decision maker may decide that the benefits of the mitigation to reduce the landscape and/or visual effects outweigh the marginal loss of function.
- 6.4.239 Paragraph 5.9.22 in EN-1 states that within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed
- 6.4.240 Paragraph 5.9.23 in EN-1 states that “depending on the topography of the surrounding terrain and areas of population it may be appropriate to undertake landscaping off site. For example, filling in gaps in existing tree and hedge lines would mitigate the impact when viewed from a more distant vista”.
- 6.4.241 Paragraph 2.8.3 of EN-6 states that the decision maker should consider how good design can act to mitigate the impacts of new nuclear power stations, such as landscape and visual impacts.
- 6.4.242 Paragraph 3.10.8 of EN-6 states that the decision maker “...*should not expect the visual impacts associated with new nuclear power stations to be eliminated with mitigation. Indeed, the scope for visual mitigation will be quite limited. Mitigations should, however, be designed to reduce the visual intrusion of the project as far as reasonably practicable*”.

6.4.243 Paragraph C.9.71 and C.9.72 of EN-6 state that there are likely to be some long lasting adverse direct and indirect effects on landscape character and visual impacts on the AONB. Further detailed assessment is therefore required to understand these effects and whether they affect the purpose of the designation.

Welsh national and local policy

6.4.244 Section 5.3 of PPW [RD8] sets out measures to conserve landscape and biodiversity.

- AONBs should be given the highest status of protection from inappropriate development. Great weight should be given to the conservation and enhancement of their natural beauty;
- Non-statutory designations, such as, Special Landscape Areas should be protected; and
- LANDMAP NRW, (2011 and 2013a-2013d) [RD47] provides an important information resource to use in undertaking landscape assessments which inform decision making.

6.4.245 PPW [RD8] states that, while the value of all the landscapes of Wales is recognised local planning authorities should have regard to the relative significance of international, national and local designations in considering the weight to be attached to nature conservation interests and should take care to avoid placing unnecessary constraints on development (paragraph 5.3.2).

6.4.246 JLDP [RD27] Strategic Policy PS 5 states that proposals should protect and improve the quality of the natural environment, its landscapes and biodiversity assets.

6.4.247 Strategic Policy PS 9 in the JLDP [RD27] states that the design of all the Wylfa Newydd Project and related development should ensure the scheme layout and design and the scale of open spaces, landscaping, planting, waterways and similar features proposed should avoid, minimize, mitigate or compensate for visual and landscape 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. This policy clarifies that proposals will be expected to be commensurate with the scale of the development, and the extent of its impact.

6.4.248 Policy PCYFF 4 in the JLDP [RD27] states that all proposals should integrate into their surroundings and clarifies that those proposals that fail to show (in a manner appropriate to the nature, scale and location of the proposed development) how landscaping has been considered from the outset as part of the design proposal will be refused. This policy also requires that landscape schemes for developments should *inter alia*:

- give due consideration to the Landscape Character Area Assessment or Seascape Character Area Assessment;
- respect the natural contours of the landscape;
- respect and protects local and strategic views;

- respect, retain and complement any existing positive natural features, landscapes, or other features on site;
- identify trees, hedgerows, water courses and topographical features to be retained; and
- justify circumstances where the removal/loss of existing trees, hedgerows, water courses and topographical features cannot be avoided and provides details of replacements.

6.4.249 Strategic Policy PS 19 states that development should conserve and where appropriate enhance the distinctive natural environment, countryside and coastline, and confirms that proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area.

6.4.250 This policy also states that when determining planning application, consideration should be given to:

- Safeguarding the coastline and landscapes;
- Protecting or where appropriate enhance sites of international, national, regional and local importance and, where appropriate, their settings in line with National Policy;
- Having appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with National Policy;
- Protecting, retaining or enhancing the local character and distinctiveness of the individual Landscape Character Areas and Seascape Character Areas; and
- Protecting, retaining or enhancing trees, hedgerows or woodland of visual, ecological, historic cultural or amenity value.

6.4.251 Policy AMG 1 of the JLDP [RD27] states that proposals within or affecting the setting and/or Significant Views into and out of the AONB must, where appropriate, have regard to the relevant AONB management plan.

6.4.252 Policy AMG 2 of the JLDP states that proposals within Special Landscape Areas will need to appropriately consider the scale and nature of the development ensuring that there is no significant adverse detrimental impact on the landscape, adding that such development should aim to maintain, enhance or restore the recognised character and qualities of the SLA. However, this policy clarifies that in exceptional circumstances, where development is necessary and could result in significant impacts on the landscape, appropriate mitigation and compensation measures should be provided.

- 6.4.253 Policy AMG 3 of the JLDP requires proposals that would have a significant adverse impact upon landscape character, as defined by the Landscape Character Areas, to demonstrate how landscape character has influenced the design, scale and nature and site selection of the development.
- 6.4.254 Policy CCC 3.1 of the Isle of Anglesey AONB Management Plan (2015) [RD47] states that all development proposals within and up to 2km adjacent to the Isle of Anglesey AONB should be subjected to rigorous assessment to reduce inappropriate development.
- 6.4.255 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.
- 6.4.256 The Wylfa SPG [RD28] also encourages 20 the project promoter at policy GP to demonstrate that the Wylfa Newydd Project either alone or in combination with other proposals, would not have significant adverse impacts on the local landscape character with reference to the Special Landscape Areas and Local Landscape Character Areas. GP 20 also clarifies that where adverse impacts cannot be avoided, IACC expect appropriate mitigation and/or compensation measures to be implemented.
- 6.4.257 Relevant national and local planning policy are also set out at appendix A in relation to the WNDA, and at appendices B to F in relation to the Off-Site Power Station Facilities and Associated Development sites.

Assessment

- 6.4.258 An assessment of the landscape and visual effects of the Wylfa Newydd DCO Project is provided in the ES, in accordance with paragraph 4.2.1 in EN-1. This landscape and visual assessment includes reference to the relevant landscape character assessments and associated studies in addition to local policies, in accordance with paragraph 5.9.5 of EN-1. This assessment also covers the visual impacts from artificial light, steam and smoke in accordance with the requirements of paragraphs 5.9.7 and 5.9.20 in EN-1.
- 6.4.259 The assessment of development within the WNDA on landscape and visual matters is set out in chapter D10 of the ES (Application Reference Number: 6.4.10), and considered against the above policy context at appendix A of the Planning Statement. Appendix A sets out the measures proposed to mitigate construction and operational effects (as well as consideration to the decommissioning stage).
- 6.4.260 The key issue for the landscape and visual impact assessment is the scale of the Power Station in relation to the existing landscape and seascape context and its appearance in views from the surrounding area. Due to the scale and nature of the Power Station, the residual effects remain significant following additional mitigation for nearly all of the landscape and visual receptors. This is the case despite substantial measures to reduce the impact set out at tables 4-2 to 4-4 of Appendix A.

6.4.261 The proposals have sought to reduce the visual intrusion of the Wylfa Newydd Project as far as reasonably practicable in accordance with paragraph 3.10.8 of EN-6. The applicant has worked closely with stakeholders to design mitigation in parallel with meeting the Power Station requirements and it is considered that the resulting proposals would result in a new naturalistic setting that complements the surrounding area whilst also seeking to balance earthwork movements through cut and fill.

6.4.262 There would be no visible plumes from the Power Station main stacks. As the cooling system is based on a seawater extraction system, there would be no need for large cooling towers. There would be visible plumes from the house boilers during certain weather conditions but, as concluded in chapter D10 of the ES, the plumes are not considered likely to lead to an increase in the level of visual effect for any visual receptors.

6.4.263 Appendix A addresses the effect of development within the WNDA on Anglesey AONB and the North Anglesey Heritage Coast. Directly affected areas of the AONB will receive a major significant residual adverse landscape impact during the construction period due to the construction of a landscaped mound within the AONB. As the landscaping matures, the impact on the directly affected areas of the AONB is likely to reduce to a moderate adverse impact by the 15th summer following planting. The special qualities of the AONB are also likely to be adversely affected in other ways as listed at section 4.2 of Appendix A. The Wylfa Newydd DCO Project would not have an impact on National Parks and therefore this is not considered further. The potential for visual impact on Snowdonia National Park is considered in the Scoping Opinion Tracker (Application Reference Number: 6.1.9, Appendix A6-1). This confirms that visual impacts on the mainland have been scoped out of chapter D10 and sets out the Secretary of State's view from the Scoping Opinion as follows:

"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 (paragraph 3.40)."

6.4.264 Major adverse impacts on localised areas of the Heritage Coast have also been identified for the duration of the construction and operation periods due to the presence of the construction project and Power Station.

6.4.265 As set out above, paragraph 5.9.10 of NPS EN-1 states that development consent may be granted in nationally designated landscapes, such as AONB and Heritage Coast, in exceptional circumstances. The development must be demonstrably in the public interest, with relevant considerations set out at 5.9.10. Taking these in turn:

- The need for the Wylfa Newydd DCO Project is significant, both in terms of the contribution it would make to delivering a secure, diverse and reliable supply of electricity, and to the local economy. The impact of not being consented would result in the significant economic benefits (as set out in section 6.2) not being realised.

- The majority of the development in the WNDA is located outside of the nationally designated areas. The element of the development that encroaches into the AONB is a proposed landscaped earth mound, which is itself a mitigation measure to minimise the impacts of the Power Station on the AONB. The encroachment on the Heritage Coast is required in order to deliver infrastructure critical to the delivery of the Wylfa Newydd DCO Project and to reduce adverse traffic and transport effects that would have otherwise occurred.
- The extent of the effect of the Power Station on the designated landscapes has been moderated through the proposed landscaped earth mound and other mitigation measures.

6.4.266 In summary it can be concluded that the benefits of the Wylfa Newydd DCO Project, the approach to site selection and the specific need for development within the AONB represent exceptional circumstances which justify the elements of the Wylfa Newydd DCO Project that are located within the AONB and North Anglesey Heritage Coast.

6.4.267 The majority of the development in the WNDA, including the Power Station is located outside the nationally designated areas. In accordance with paragraph 5.9.2 of EN-1, the extent to which the Power Station has an effect on the designated landscapes is minimised through mitigation and design. As noted in 5.9.10 the fact that the development within the WNDA will be visible from a designated area should not in itself be a reason for refusing consent.

6.4.268 Although the construction and operation phases for the WNDA would result in significant residual effects on non designated wider landscapes the effects would not be so damaging that it would not be offset by the benefits, in accordance with paragraph 5.9.15 of EN-1.

6.4.269 An assessment of the landscape and visual impact for the Off-Site Power Station Facilities and each of the Associated Development sites (other than the Site Campus which is considered holistically with the WNDA), are provided on a site by site basis at appendices B to F of the Planning Statement.

6.4.270 Chapter J2 of the ES (Application Reference Number: 6.10.2) concludes that the intra project landscape effects on the Isle of Anglesey AONB would be moderate adverse locally (primarily relating to the WNDA Development) but minor adverse overall.

6.4.271 Whilst the design of each of the proposals has sought to minimise adverse impacts on landscape and reduce any visual intrusion as far as possible, there are likely to be a number of significant adverse residual effects on non designated wider landscapes and local landscape character. These impacts would however be largely temporary and would be reversed through restoration after the construction phase.

6.4.272 In summary, the text above and in the relevant appendices, shows that the Proposed Development is in accordance with NPS EN-1 and EN-6, in relation to landscape and visual impacts and with relevant national and local policy.

Land use including open space, green infrastructure and green belt

- 6.4.273 Paragraph 5.10.1 of EN-1 [RD4] recognises that energy infrastructure projects will have a direct effect on the existing use of proposed sites and may have indirect effects on the uses, or planned uses, of land in the vicinity for other types of development. This may have particular effects on open space including green infrastructure, given the likely location of energy infrastructure projects.
- 6.4.274 The principle of development at the WNDA is addressed at appendix A of this Planning Statement. Wylfa has, based on the SSA, been identified as potentially suitable for the deployment of a new nuclear power station by 2025 and therefore included in EN-6 [RD5]. The Consultation on Siting and Process [RD6] states that *“sites listed in EN-6 on which a new nuclear power station is anticipated to deploy after 2025 will continue to be considered appropriate sites and retain strong Government support during the designation of the new NPS”*.
- 6.4.275 The principle of the development for the Off-Site Power Station Facilities, and each of the Associated Developments are addressed at appendices B to F of the Planning Statement, which demonstrate that as integral components of the Wylfa Newydd DCO Project they are appropriate in land use terms for each of the proposal sites.
- 6.4.276 The rationale for the location of the Site Campus within the WNDA is set out at appendix C of this Planning Statement. Whilst it is greenfield land, the development would be temporary, and the site would be reinstated to its current undeveloped state following construction in accordance with the landscaping strategy. New surfaced paths connecting the Wales Coast Path to the Fisherman’s Car Park, and paths to the south and east will be retained, as would the new viewpoint on the Wales Coast Path.
- 6.4.277 The Park and Ride, would also represent temporary development on a greenfield site. The site would not only be reinstated to its existing use (agricultural land) but also enhanced through a proposed new hedge line to the west of the site, along with the enhanced tree and shrub planting, using native species, on the southern boundary. Consideration of Strategic Policy PS 12 of the JLDP [RD27] which specifically concerns the Park and Ride facility is provided at appendix D of the Planning Statement.
- 6.4.278 The Logistics Centre site at Parc Cybi is allocated for employment use and within the development limits. Consideration of Strategic Policy PS 11 of the JLDP [RD27], which specifically concerns the Logistics Centre, is provided at appendix E of the Planning Statement.
- 6.4.279 The approach to site selection is covered in more detail in the Site Selection Report (Application Reference Number: 8.24.1).
- 6.4.280 In addition to the principle of the proposed use, the effects on land use is considered in terms of public access and recreation and soils and geology below.

Public access and recreation

Policy context

National Policy Statements

- 6.4.281 Paragraph 5.10.16 of EN-1 [RD4] states that the decision maker should expect applicants to have taken advantage of opportunities to maintain and enhance access to the coast. In doing so the decision maker should consider the implications for development of the creation of a continuous signed and managed route around the coast, as provided for in the MCAA, 2009 [RD12].
- 6.4.282 Paragraph 5.10.24 of EN-1 [RD4] states that PRowS, National Trails and other rights of access to land are important recreational facilities. The decision maker should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails and other PRowS. Where this is not the case the decision maker should consider what appropriate mitigation requirements might be attached to any grant of development consent.
- 6.4.283 Paragraph 3.12.2 of EN-6 [RD5] states that the nuclear AoS noted that the sites listed in the NPS are on coastal or estuarine locations in rural areas and that there is therefore the potential for impact on land that has recreational and amenity value.

Welsh national and local policy

- 6.4.284 Paragraph 5.2.11 in section 5 of PPW [RD8] states that common land should not be developed and access should not be prevented or impeded unnecessarily. Paragraph 11.1.13 of PPW [RD8] states that local authorities should seek to protect and enhance the rights of way network as a recreational and environmental resource. Paragraph 11.1.13 also confirms that local authorities are encouraged to promote the national cycle network, long distance footpaths, bridleways, canals, and the use of inland waters and disused railways as greenways for sustainable recreation.
- 6.4.285 Strategic Policy PS 4 in the JLDP [RD27] states that, where possible, PRow and cycle networks should be safeguarded, improved, enhanced and promoted in order to increase health, leisure, well-being and tourism benefits for both local residents and visitors.
- 6.4.286 GP 5 in the Wylfa SPG [RD28] states that the detailed assessments should consider the impacts on access to the Island's natural and built environmental assets, including on PRow. GP 8 in the Wylfa SPG [RD28] expects applicants to undertake a comprehensive assessment of the potential impacts of the Project on open space, recreation and leisure provision. GP 20 in the Wylfa SPG [RD28] states that the Project should not have a significant adverse impact on the Wales Coast Path. GP 26 in the Wylfa SPG [RD28] seeks improvement to the Wales Coast Path and PRowS.

Assessment

- 6.4.287 Volume D, chapter 4 of the ES (Application Reference Number: 6.4.4) includes an assessment of the effects on recreational amenity as a result of the construction, operation and decommissioning of the Power Station. This includes the potential effects on Open Access Land as well as informal open space such as beaches, National Trust land and Wylfa Head. These potential effects on recreational amenity are then assessed against the above policy context at appendix A of the Planning Statement.
- 6.4.288 In summary, this identifies significant adverse effects on PRoWs within the WNDA and within a 2km radius of the development area. The particular adverse effects described here would be temporary during the construction period only and mitigation would be provided, where possible, during the operational stage as set out in appendix A of the Planning Statement.
- 6.4.289 It is considered that these mitigation measures are appropriate, as set out in paragraph 5.10.24 of EN-1 [RD4], given the adverse effects on coastal access and other PRoWs, however it is not possible to fully address the adverse effects.
- 6.4.290 During the operational phase the permanent diversion of the Wales Coast Path would result in a significant adverse residual effect (as a result of fewer sea views and lengthening of the route). Whilst paragraph 5.10.16 in EN-1 [RD4] expects applicants to take advantage of opportunities to maintain and enhance access to the coast, it is considered that there are no such reasonable or practicable opportunities available. All other local PRoWs and permissive paths would however experience a major beneficial effect due to increased recreational amenity resulting from footpath upgrades and new routes.
- 6.4.291 As set out in chapter 7, a payment would be made to IACC via a planning obligation, for them to spend on improving other PRoW in the vicinity of the site as an overall improvement to the PRoW network during construction. These improvements would represent a legacy benefit.
- 6.4.292 No significant adverse effects have been identified during the decommissioning phase, in accordance with paragraph 5.10.24 of EN-1 [RD4].
- 6.4.293 An assessment of the public access and recreation for the Off-Site Power Station Facilities and Associated Development sites (other than the Site Campus, which is considered holistically with the WNDA) is provided at chapters E4, F4, G4 and H4 of the ES (Application Reference Number: 8).
- 6.4.294 No significant residual effects are predicted for public access and recreation, other than for the A5025 Off-line Highway Improvements, which involves the permanent closure of PRoW 18/018/1. This would result in a moderate adverse effect during construction (or major adverse conserved cumulatively with inter project effects), and the introduction of an at-grade crossing within the route of PRoW 27/020/1 would cause a moderate adverse effect during operation.

- 6.4.295 Additional cumulative project-wide adverse effects identified in the ES include moderate adverse effects on recreational cyclists and walkers between J4 of the A55 and the Park and Ride, and the Tour de Mon race.
- 6.4.296 Paragraph 5.10.24 of EN-1 [RD4] requires appropriate mitigation measures to address adverse effects on PRowWs. Whilst the assessed effect remains moderately adverse, an alternative route to PRow 178/018/1 would be provided that would run along the existing A5025 carriageway. Users of PRow 27/020/1 would be required to cross the A5025 at grade and the approach to this crossing location would involve a short diversion. It is considered that this diversion is the most appropriate means to mitigate the adverse effect of closing PRow 18/018/1, as there are no such other reasonable or practicable alternatives.
- 6.4.297 Conversely, moderate beneficial effects are predicted during operation as a result of the provision of a new shared use footway/cycleway along the A5025 within section 5 of the proposed scheme.
- 6.4.298 In discussions with IACC with regard to the proposed funding (as set out in the planning obligations heads of terms in chapter 7) to improve PRowWs, emphasis would be placed on improving PRowWs that are in close proximity to the WNDA or adjoin the A5025 between Valley and Treglele or on sections of the Wales Coast Path at any location on Anglesey. This funding would be in place prior to the commencement of construction.
- 6.4.299 With the mitigation measures proposed, the Wylfa Newydd DCO Project is compliant with paragraphs 5.10.16 and 5.10.24 of EN-1 and the principles of Policy PS 4 of the JLDP [RD27] and GP 5 in the Wylfa SPG [RD28].

Soils and geology

Policy context

National Policy Statements

- 6.4.300 Paragraph 5.10.8 of EN-1 [RD4] states that development should seek to minimise impacts on “best and most versatile” agricultural land and preferably use land in areas of poorer quality except where this would be inconsistent with other sustainability considerations. Paragraph 5.10.8 states that applicants should also identify any effects and seek to minimise impacts on soil quality taking into account any mitigation measures proposed. For developments on previously developed land, applicants should ensure that they have considered the risk posed by land contamination.
- 6.4.301 Paragraph 5.10.15 of EN-1 [RD4] states that the decision maker should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. Paragraph 5.10.15 continues to state that decision makers should give little weight to the loss of poorer quality agricultural land (in grades 3b, 4 and 5).
- 6.4.302 EN-1 [RD4] states at paragraph 5.3.3 that, where the development is subject to EIA, the applicant should ensure that the ES clearly sets out any effects on

internationally, nationally and locally designated sites of geological conservation importance.

6.4.303 EN-1 [RD4] states at paragraph 5.3.4 that the applicant should also show how the project has taken advantage of opportunities to conserve and enhance geological conservation interests. Paragraph 5.3.7 in EN-1 [RD4] states that developments should aim to avoid significant harm to geological conservation interests, including through mitigation and consideration of reasonable alternatives. Where significant harm cannot be avoided, then appropriate compensation measures should be sought.

6.4.304 Paragraph 5.3.13 of EN-1 [RD4] emphasises the fundamental role of RIGS in meeting overall national biodiversity targets, contributing to the quality of life and the well-being of the community, and in supporting research and education. The decision maker should therefore give due consideration to such designations. However, given the need for new infrastructure, these designations should not be used in themselves to refuse development consent.

6.4.305 EN-6 [RD5] states at paragraph 3.7.8 that “the contamination of water resources can be mitigated through the EIA process and managed through the possible implementation of Environmental Management Plans”.

Welsh national and local policy

6.4.306 PPW [RD8] states at paragraph 13.7.1 that planning decisions need to take into account:

- the potential hazard that contamination presents to the development itself, its occupants and the local environment; and
- the results of a specialist investigation and assessment by the developer to determine the contamination of the ground and to identify any remedial measures required to deal with any contamination.

6.4.307 PPW states at paragraph 13.7.2 that where acceptable remedial measures can overcome contamination, permission may be granted subject to requirements specifying the necessary measures.

6.4.308 PPW states at paragraph 4.10.1 that the best and most versatile agricultural land (Grades 1, 2 and 3a) should be conserved as a finite resource for the future and that considerable weight should be given to protecting such land from development, because of its special importance. This paragraph also clarifies that the best and most versatile agricultural land should only be developed if there is an overriding need for the development, and either previously developed land or land in lower agricultural grades is unavailable, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations. Paragraph 4.10.1 in PPW [RD8] also states that if the best and most versatile agricultural land does need to be developed, and there is a choice between sites of different grades, development should be directed to land of the lowest grade.

- 6.4.309 Strategic Policy PS 6 in the JLDP [RD27] states that proposals will only be permitted where it is demonstrated with appropriate evidence that the applicant has fully taken account of and responded to the need to safeguarding the best and most versatile agricultural land.
- 6.4.310 JLDP Policy PS 19 states that proposals that have a significant adverse effect on the areas distinctive natural environment, countryside and coastline will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area. This policy also clarifies that consideration should be given to safeguarding the geology of the area.
- 6.4.311 Policy AMG 3 in the JLDP confirms that proposals will be granted provided that they do not have a significant adverse impact upon features and qualities which are unique to the local landscape in terms of visual, historic, geological, ecological or cultural aspects.
- 6.4.312 Policy AMG 6 in the JLDP states that proposals likely to cause direct or indirect significant harm to RIGS will be refused unless it can be proven that there is an overriding social, environmental and/or economic need for the development, and that there is no other suitable site that would avoid having a detrimental impact on sites of local nature conservation value or local geological importance.
- 6.4.313 GP 20 of the Wylfa SPG [RD28] states that SSSIs, RIGS and the Geopark status of Anglesey should not be subjected to significant adverse impacts, or if they are, sufficient mitigation should be implemented. GP20 also advocates the remediation of contaminated land at GP 20.
- 6.4.314 GP 26 of the Wylfa SPG [RD28] highlights that agricultural land should be reinstated where development is temporary.
- 6.4.315 Relevant national and local planning policy is also set out at appendix A in relation to the WNDA, and at appendices B to F of this Planning Statement in relation to the Off-Site Power Station Facilities and Associated Development sites.

Assessment

- 6.4.316 As concluded at appendix A in relation to the WNDA, whilst the development results in a loss of “best and most versatile” agricultural land, this equates to only 7.6% of the total WNDA. The loss of this land cannot be practicably avoided as it is an important area for landscape mitigation through mounding. It is therefore considered that losses have been minimised and justified in accordance with paragraphs 5.10.8 and 5.10.15 of NPS EN-1 [RD3], as well as paragraph 4.10.1 of PPW [RD5] and Strategic Policy PS6 of the JLDP.
- 6.4.317 Appendix A also explains that the CW outfall would, for operational reasons, involve the destruction of part of the Porth Wnal Dolerite RIGS. The design has, however, been refined to seek to avoid the key feature of the RIGS. Appendix A of this Planning Statement outlines the benefits of the chosen location over alternative options, which would all result in adverse effects as a result of construction and habitat loss

- 6.4.318 The applicant has therefore given due consideration to RIGS designations in accordance with paragraph 5.3.13 of NPS EN-1 [RD3]. A significant (moderate) adverse effect is nonetheless identified for the Port Wnal Dolerite RIGS for the reasons identified above, however it is noted in paragraph 5.3.13 that these designations should not be used in themselves to refuse development consent.
- 6.4.319 There would be no significant adverse effects during either the operational or decommissioning phases for the development within the WNDA.
- 6.4.320 Neither the Off-Site Power Station Facilities nor the Associated Developments will result in any significant residual adverse effects on geology, in accordance with Strategic Policy PS 19 and policies AMG 2 and AMG 6 in the JLDP [RD27] and GP 20 of the Wylfa SPG [RD28].
- 6.4.321 As noted at the start of this chapter, the remediation of contaminated land across the WNDA, represents a major beneficial effect of the Wylfa Newydd DCO Project.
- 6.4.322 In summary, it can be concluded that the Wylfa Newydd DCO Project is compliant with the policies of EN-1 and the relevant national and local policy.

Noise and vibration

Policy context

National Policy Statements

- 6.4.323 Paragraph 5.11.1 of EN-1 [RD4] states that excessive noise can have wide-ranging impacts on the quality of human life, health (for example owing to annoyance or sleep disturbance) and use and enjoyment of areas of value such as quiet places and areas with high landscape quality. Similar considerations apply to vibration, which can also cause damage to buildings.
- 6.4.324 Paragraph 5.11.2 in EN-1 states that noise resulting from a proposed development can also have adverse impacts on wildlife and biodiversity, which should be assessed by the decision maker in accordance with the 'biodiversity and geological conservation' section of EN-1.
- 6.4.325 Paragraph 5.11.8 of EN-1 states that the Project should demonstrate good design through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.
- 6.4.326 Paragraph 5.11.9 of EN-1 states that:

"the decision maker should not grant development consent unless it is satisfied that the proposals will meet the following aims:

- *avoid significant adverse impacts on health and quality of life from noise;*
- *mitigate and minimise other adverse impacts on health and quality of life from noise; and*

- *where possible, contribute to improvements to health and quality of life through the effective management and control of noise”.*

6.4.327 Paragraph 5.11.11 of EN-1 states that the decision maker should consider whether mitigation measures are needed both for operational and construction noise over and above any which may form part of the project application.

6.4.328 Paragraph 5.11.12 of EN-1 states that mitigation measures may include one or more of the following:

- engineering: reduction of noise at point of generation and containment of noise generated;
- lay-out: adequate distance between source and noise-sensitive receptors; incorporating good design to minimise noise transmission through screening by natural barriers, or other buildings; and
- administrative: restricting activities allowed on the site; specifying acceptable noise limits; and taking into account seasonality of wildlife in nearby designated sites.

6.4.329 Paragraph 5.11.13 of EN-1 confirms that in certain situations, and only when all other forms of noise mitigation have been exhausted, it may be appropriate for the decision maker to consider requiring noise mitigation through improved sound insulation to dwellings.

6.4.330 In EN-6 [RD5], paragraph 3.12.3 states the following.

“The operation of a new nuclear power station is unlikely to be associated with significant noise, vibration or air quality impacts (although there may be local impacts from transport and associated activities during construction; and if cooling towers are required, particularly forced draught towers, the potential noise impact may be greater). With appropriate mitigation, the subsequent effect of these potential impacts on human health is unlikely to be significant”.

Welsh national and local policy

6.4.331 Paragraph 13.15.1 in PPW [RD8] confirms that noise can be a material planning consideration. Paragraph 13.15.2 in PPW also states that special consideration is required where noise-generating development is likely to affect a protected species, or is proposed in or near statutorily designated areas, including urban ‘quiet areas’ designated in Noise Action Plans. It continues to state that the effect of noise on the enjoyment of other areas of landscape, wildlife and historic value should also be taken into account.

6.4.332 Policy PCYFF 2 in the JLDP [RD27] addresses the effects of noise and vibration from proposed developments and is considered at the site specific level in the relevant appendices. In addition, Policy AMG 4 [RD27] states that proposals on the coast should not cause unacceptable harm to the area’s biodiversity interests due to noise.

6.4.333 The Wylfa SPG [RD28] at GP 7 states that the applicant should work with IACC and the identify of any potentially significant health impacts and

appropriate mitigation measures. GP 7 also states that Associated Developments should not be proposed where construction activities would give rise to unacceptable impacts on air quality, noise/vibration and light pollution and the amenity of the existing residents, visitors, businesses and construction workers.

Assessment

- 6.4.334 The assessment of non-traffic related noise and vibration for development within the WNDAs is set out in chapter D6 of the ES (Application Reference Number: 6.4.6) and assessed against the above policy framework at appendix A of the Planning Statement.
- 6.4.335 The proposed development, through the inclusion of widespread embedded mitigation and good practice measures as described at appendix A, has sought to avoid significant adverse impacts from construction noise and vibration on health and quality of life in accordance with paragraph 5.11.9 of NPS EN-1 and GP 7 of the Wylfa SPG. The HIA Report (Application Document Reference 8.19) concludes that the residual significance of construction noise on potential health and well-being effects is considered to be minor adverse for the majority of people near the WNDAs. It concludes, however, that for particularly sensitive groups within the affected population, the residual effect in relation to health outcomes could range up to moderate adverse.
- 6.4.336 There are no significant residual adverse effects during the operational phase from non-traffic related noise and vibration once embedded mitigation, good practice measures and additional mitigation are taken into account. Mitigation would be proposed in order to reduce adverse effects during the decommissioning phase, which are likely to be less than during the construction phase.
- 6.4.337 Appendix D and E confirm that no significant adverse non-traffic noise and vibration effects are anticipated during the construction, operation or decommissioning of the Park and Ride or Logistics Centre.
- 6.4.338 Appendix F confirms that despite the embedded and additional mitigation measures, during construction some significant adverse residual noise and vibration effects are anticipated as a result of the A5025 Off-line Highways Improvements. However, the applicant has minimised adverse impacts on health and quality of life from noise as far possible.
- 6.4.339 Appendix B identifies that there would be no significant adverse effects during the operation of the Off-Site Power Station Facilities. During construction measures are proposed to avoid significant adverse impacts from construction noise and vibration. Where residual significant noise effects remain, these will be typically short term and unlikely to occur continuously over the duration of the construction period.
- 6.4.340 The noise and vibration effects of traffic are considered separately at chapter C5 of the ES (Application Reference Number: 6.3.5). Both adverse and beneficial significant effects are predicted for each geographical area

assessed, having taken into account the embedded, good practice and additional mitigation. The HIA Report concludes that the residual significance of potential health and well-being effects (of traffic noise) is considered to be negligible for the general population near the local road network. For particularly sensitive groups within the affected population, the residual effect could range up to minor adverse. The additional mitigation, in the form of noise insulation treatments to buildings [1] where the existing day-time and night-time road traffic noise levels are already high, would provide the means to avoid occupants being subject to further increased indoor noise levels and noise-induced health risks (including sleep disturbance).

6.4.341 The noise effects associated with construction would typically be short term and unlikely to occur continuously over the duration of the construction period.

6.4.342 The proposed development meets the aims set out in national policy in NPS EN-1, paragraph 5.11.9 as follows:

- Horizon has sought as far as possible to minimise noise to less than significant levels through:
 - the provision of a comprehensive package of on-site mitigation (as set out in the Mitigation Route Map) which includes the provision of substantial earth mounds on the WNDA, surfacing of haul roads with appropriate material, restrictions in relation to sensitive evening, weekend and night-time working for certain noisier activities, the use of localised noise screens where practicable and the provision of noise abatement equipment on plant;
 - commitment to a voluntary Local Noise Mitigation Strategy (LNMS) which offers site-specific mitigation to properties within the LNMS boundary area for the main site and along the A5025;
 - Restrictions in relation to construction working hours in relation to the A5025 Off-Line Highway works to between 07.00 and 18.00 Monday to Friday and 07.00 and 13.00 on Saturdays, with no working on Sundays or Bank Holidays, unless specifically applied for and justified;
 - commitment to specific mitigation to address the significant adverse noise effects identified at the Cemaes Primary School and Eglwys Sant Padrig Church; and
 - Establishing a Community Liaison Group to, amongst other things, allow the community to raise concerns in relation to noise.
- This mitigation would be subject the thresholds set out in the Wylfa Newydd CoCP and relevant sub CoCPs and accompanied by an

^[1] Horizon have committed to implementing a voluntary Local Noise Monitoring Strategy (LNMS) which would enable those worst affected by construction noise to benefit from sound insulation measures to dwellings.

effective monitoring programme. The effectiveness of mitigation would be measured through an appropriate monitoring strategy which would include a continuous noise monitoring scheme and the installation of monitoring equipment at up to six residential properties at a time.

- All major construction activities would be controlled under Section 61 of the Control of Pollution Act 1974 (s61) which would establish/require that the best practicable means have been established to control noise emissions.

6.4.343 For the reasons set out above, the proposed development meets the requirements of NPS EN-1 and the relevant national and local policy.

6.4.344 In summary it can be concluded that with the measures to mitigate and minimise adverse impacts on health and quality of life from noise, the Wylfa Newydd DCO Project is compliant with paragraphs 5.11.8 and 5.11.9 of NPS EN-, PCYFF 2 in the JLDP [RD27] and GP 7 of the Wylfa SPG [RD28].

Socio-economics

6.4.345 Socio-economics is identified as a Generic Impact in EN-1 [RD4] and a Nuclear Impact in EN-6 [RD5].

Policy context

National Policy Statements

6.4.346 EN-1 [RD4] states that where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake an assessment of these impacts as part of the ES (paragraph 5.12.2). Relevant socio-economic impacts are listed at paragraph 5.12.3 in EN-1 [RD4] and include, for example, the creation of jobs and training opportunities and the provision of additional local services and improvements to local infrastructure. Paragraph 5.12.9 in EN-1 [RD4] states that the decision maker should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development.

6.4.347 Paragraph 5.12.6 of EN-1 [RD4] states that the decision maker should have regard to the potential socio-economic impacts of new energy infrastructure identified by the applicant and from any other sources that the decision maker considers to be both relevant and important to its decision.

6.4.348 Paragraph 5.12.8 of EN-1 [RD4] states that the decision maker should consider any relevant positive provisions the developer has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts.

6.4.349 Paragraph 5.12.9 of EN-1 [RD4] states that the decision maker should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development.

- 6.4.350 EN-6 [RD5] then refers to policy specific to nuclear power stations. Paragraph 3.11.4 of in EN-1 [RD4] states that “the assessment of socio-economic impacts should demonstrate that the applicant has taken account of, amongst other things, potential pressures on local and regional resources, demographic change and economic benefits”.
- 6.4.351 It notes that as nuclear power stations involve large scale construction projects “...there are likely to be positive effects of local economic significance, although these are less significant at the regional scale...There may also be negative effects,” (paragraph 3.11.2, EN-1 [RD4]).
- 6.4.352 The Strategic Siting Assessment at annex C of EN-6 [RD5] makes some comments on socio-economic effects. It states that some consultees argued that socio-economic considerations should be a factor in deciding whether a site was potentially suitable, and that it was stated that “...*unemployment in Anglesey is high and that the benefits a new nuclear power station would bring should be a key factor in the decision whether to list the site on the Nuclear NPS,*” (paragraph C.9.110, EN-1 [RD4]). It then clarifies that potential socio-economic effects of development should be considered when assessing development consent applications at a point where it is clearer how many workers would be required for a development, or what proportion would come from outside the local area (paragraph C.9.111, EN-1 [RD4]).

Welsh national and local policy

- 6.4.353 PPW [RD8] includes planning policies, to promote quality, lasting, environmentally sound and flexible employment opportunities for a low carbon economy, and to protect and, where possible, improve people’s health and well-being. Chapter 4 (planning for sustainability) of PPW [RD8] sets out the Welsh government’s objectives for achieving sustainable development and chapter 7 (economic development) confirms the Welsh government’s objectives for economic development, i.e. development of land and buildings for activities that generate wealth, jobs and incomes.
- 6.4.354 TAN 23 [RD25] highlights that the geographical distribution of economic benefits associated with development may be far beyond the area where the development is located.
- 6.4.355 *Economic Renewal: A New Direction (Welsh Government, 2010)* [RD51] clarifies the role the Welsh Government can play in providing the best conditions and framework to enable the private sector to grow and flourish.
- 6.4.356 Several policies within the JLDP [RD27] require proposals to accord with a number of criteria relating to socio-economic impacts. Policy PS 5 in the JLDP [RD27] states that development will be supported where it is demonstrated to be consistent with the principles of sustainable development. It clarifies that proposed developments should; give priority to effective use of land and protect, support and promote the use of Welsh language.
- 6.4.357 Policy PS 9 specifically requires consideration to be given to the nature, scale, range and possible impact of any development. It confirms that local economic and community benefits need to be maximized, where feasible,

through agreement of strategies for procurement, employment, education, training and recruitment with the Councils at an early stage of project development.

6.4.358 The Guiding Principles in the Wylfa SPG [RD28] are considered relevant to the socio-economic assessment and include the following principles.

- GP1: IACC will require the Wylfa Newydd Project promoter to support the delivery of the Energy Island Programme and Anglesey Enterprise Zone, maximising the economic opportunities available to the Island's local communities.
- GP2: Local job creation and skills development through the implementation of an Employment and Skills Strategy, which should include the maximisation of local labour provision.
- GP5: Supporting the visitor economy and ensuring that the construction and operation of the Power Station and any associated developments do not adversely affect the value and importance of tourism to the Island. One of the key elements of the island's tourism offer being the quality and diversity of its natural and historic environments. This includes the 125 mile coastline and the numerous beaches linked by the Wales Coast Path.
- GP6: Maintaining and enhancing community facilities and services, including education, healthcare and leisure facilities.

Assessment

6.4.359 The project-wide socio-economic effects are addressed in volume C of the ES (Application Reference Number: 6.3.1).

6.4.360 The socio-economic topics, which would be affected by the Project as a whole, are skills and local labour; accommodation and spatial distribution of the workforce; public services; tourism; and business and supply chain (addressing each of the relevant socio-economic impacts identified at paragraph 5.12.2 of EN-1).

6.4.361 Volume C, chapter 1 of the ES (Application Reference Number: 6.3.2) identifies the various embedded and good practice mitigation measures that would be relevant to these topics. The provision of the Site Campus and the facilities within it, for example, during construction, provides embedded mitigation to reduce adverse effects on the local housing market and public service facilities during construction. The embedded mitigation in relation to traffic and transport, public access and recreation, landscape, air quality and noise also provide mitigation of socio-economic effects as it serves to remove or reduce effects on people, be they local residents or visitors.

6.4.362 With these embedded and good practice mitigation measures in place, the ES examines the effects of the Wylfa Newydd DCO Project on skills and local labour; accommodation and spatial distribution of workforce; public services; tourism; and business and supply chain.

- 6.4.363 The assessment concludes that there are no significant adverse mitigated effects on any of the receptors or groups of receptors. As set out at the start of this chapter there would be major beneficial effects on the labour market in the DCCZ during construction.
- 6.4.364 Additionally, during the construction phase the local economy in north Wales is predicted to experience investment made within the local economy (north Wales) resulting in a significant beneficial effect. It is estimated that up to 4% of the total £10 billion construction value of the Wylfa Newydd Project could be spent within north Wales.
- 6.4.365 During operation there would be major beneficial effects on the labour market on Anglesey resulting from changes to employment on Anglesey with the creation of 850 permanent positions at the Power Station. It is also predicted that there would be a moderate beneficial effects on the local economy arising from an annual average direct, indirect and induced increase in income of around £20 million on Anglesey from staff costs at the Power Station, equivalent to an increase of 2.1% over baseline levels.
- 6.4.366 The project-wide assessment in the ES (Application Reference Number: 6.1.1) satisfies and is supported by the requirements of EN-1 [RD4] and EN-6 [RD5] to assess socio-economic considerations, including effects on jobs and training, local services, tourism and the influx of workers.
- 6.4.367 Localised effects, which specifically relate to one of the individual components of the Wylfa Newydd DCO Project are assessed within socio-economics chapters in the volumes D to H and summarised in the site specific appendices to this Planning Statement. Cumulative effects are assessed in volume I of the ES (Application Reference Number: 6.9.1). These are addressed at appendices A to G of the Planning Statement.
- 6.4.368 In relation to the cost of housing, the WAMS would provide a mechanism to monitor the effects of the Wylfa Newydd DCO Project on the supply and demand for accommodation and housing as a result of the inflow of non-home-based construction workers and their families.
- 6.4.369 The applicant is also proposing to provide a Housing Fund which will mitigate impact that cannot be managed through the WAMS. The Housing Fund will be flexible and would be used to incentivise provision of new housing, especially affordable housing, bring vacant properties back into use, encourage provision of more latent accommodation; fund measures to improve the function of the housing market and fund officer time to deal with any increase in homelessness.
- 6.4.370 Further information regarding these planning obligations is provided in section 7.4 of this Planning Statement.
- 6.4.371 The assessment of socio economic effects within the ES complies with the requirements of 5.12.2 and 5.12.3 of NPS EN-1 and the conclusions should be considered by the decision maker in considering paragraph 5.12.8 of NPS EN-1 [RD3]. The significant beneficial effects of the Wylfa Newydd DCO Project on the labour market and the local economy during construction and

operation, are in accordance with PPW, TAN 23, Policy PS 9 of the JLDP and the Wylfa SPG.

Traffic and transport

6.4.372 Traffic and transport is identified as both a Generic Impact in EN-1 [RD4] and a Nuclear Impact in EN-6 [RD5].

Policy context

National Policy Statements

6.4.373 EN-1 [RD4] states that “the consideration and mitigation of transport impacts is an essential part of Government’s wider policy objectives for sustainable development...” (paragraph 5.13.2).

6.4.374 EN-1 [RD4] advises that “the transport of materials, goods and personnel to and from a development during all project phases can have a variety of impacts on the surrounding transport infrastructure and potentially on connecting transport networks, for example through increased congestion” (paragraph 5.13.1). Paragraph 5.13.1 of EN-1 [RD4] notes that impacts may involve economic, social and environmental effects (including noise and emissions).

6.4.375 Paragraph 5.13.3 of EN-1 [RD4] requires a Transport Assessment where a project is likely to have significant transport implications. Paragraph 5.13.4 in EN-1 [RD4] confirms that, where appropriate, the applicant should prepare a travel plan including demand management measures to mitigate transport impacts. With specific regard to nuclear power, the Flags for Local Consideration to be considered by the decision maker includes impacts on “*significant infrastructure and resources*” (paragraph 3.5.2 of EN-6 [RD5]), which include motorways and major highways.

6.4.376 With regard to decision making, EN-1 [RD4] recognises that a new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure and that the decision maker should therefore ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development (paragraph 5.13.6). It requires that these impacts are mitigated in order to “...*reduce the impact on transport infrastructure to acceptable levels...*”, and that providing the applicant “...*is willing to enter into planning obligations or requirements can be imposed to mitigate transport impacts ... then development consent should not be withheld, and appropriately limited weight should be applied to residual effects on the surrounding transport infrastructure,*” (paragraph 5.13.7, EN-1 [RD4]).

6.4.377 An important principle established by EN-1 [RD4] is, therefore, that there is no need for the development to demonstrate “no impact”. There is recognition that it is likely that there will be some residual transport impacts from a new NSIP. The requirement is therefore to determine what mitigation is required to reduce impacts to “*acceptable levels*” in accordance with paragraph 5.13.6 in EN-1 [RD4].

6.4.378 EN-6 [RD5] advises at paragraph 3.15.2 that applications should demonstrate that the proposed development would not have an unacceptable adverse impact on significant infrastructure. It also clarifies that the decision maker should take into account any local authority impact report, advice from the relevant Nuclear Regulators and relevant policy in NPSs in assessing impacts on significant infrastructure and resources.

6.4.379 Paragraph 3.15.3 of EN-6 [RD4] then notes that there may be adverse effects during the construction and decommissioning phases on regional transport networks that may already be under stress.

6.4.380 EN-1 [RD4] (paragraphs 5.13.8 – 5.13.12) provides guidance on the transport strategies that should seek to reduce and mitigate impacts, including:

- demand management measures;
- the cost-effectiveness of demand management measures compared to new transport infrastructure;
- aims to secure more sustainable patterns of transport development;
- preference for water borne or rail transport over road transport where cost effective;
- requirements to control the number of HGV vehicle movements; and
- ensure satisfactory arrangements for reasonably foreseeable abnormal disruption.

6.4.381 The *UK MPS (2011)* [RD16] seeks to:

- promote sustainable economic development;
- promote a sustainable marine environment;
- help the UK move towards a low carbon economy; and
- contribute to the societal benefits of the local marine area.

Welsh national and local policy

6.4.382 Paragraph 8.5.3 of PPW [RD8] states that wherever possible decision-makers should promote the carriage of freight by water or pipeline rather than by road. Paragraph 8.5.6 of PPW [RD8] states that decision makers should seek to promote the use of ports and inland waterways by protection or provision of access to them and by the retention or provision of appropriate facilities, weighing the benefits alongside environmental considerations.

6.4.383 Paragraph 8.5.7 of PPW [RD8] states that great care should be taken to minimise the adverse impacts of new transport infrastructure, or improvements to existing infrastructure, on the natural, historic and built environment and on local communities, where neighbourhood severance should especially be avoided. It clarifies that routes should make the best use of existing landforms and other landscape features to reduce noise and visual effects, subject to safety and other environmental considerations. Paragraph 8.5.7 of PPW [RD8] states that where no other alternative routes or options

are practicable, transport infrastructure schemes should provide mitigation measures to minimise the impacts caused by their construction and operation.

- 6.4.384 PPW [RD8] also promotes a sustainable and efficient transport system and states that, *inter alia*, the impacts of development on travel demand, transport infrastructure, traffic management measures, safety and user convenience should be considered (paragraph 8.7). PPW [RD8] requires the impacts on travel demand, the level and nature of public transport provision, accessibility to a range of transport modes and opportunities to promote active travel to be taken into account (paragraph 8.7.1).
- 6.4.385 Policy TRA 4 in the JLDP [RD27] states that proposals should be planned and designed in a manner that promotes the most sustainable modes of transport. Policy TRA 4 also states that proposals that would cause unacceptable harm to the safe and efficient operation of the highway, public transport and other movement networks including pedestrian and cycle routes, public rights of way and bridle routes, will be refused.
- 6.4.386 Strategic Policy PS 4 in the JLDP [RD27] confirms that IACC will support improvements that maximise accessibility for all modes of transport, but particularly by foot, cycle and public transport.
- 6.4.387 Strategic Policy PS 5 in the JLDP [RD27] states that all proposals should be consistent with its sustainable development principles. Proposals should reduce the need to travel and encourage opportunities for all users to use alternative modes.
- 6.4.388 In order to alleviate the effects of climate change, Policy PS 6 in the JLDP [RD27] states that proposals will only be permitted where it is demonstrated with appropriate evidence that they have fully taken account of, *inter alia*, reducing greenhouse gas emissions, helping to reduce waste and encouraging travel other than by car.
- 6.4.389 Strategic Policy PS 9 in the JLDP [RD27] is specific for the Wylfa Newydd Project Associated Developments and requires highways and transport proposals to form part of an Integrated Traffic and Transport Strategy that has regard to Strategic Policy PS 4 and other relevant policies. Strategic Policy PS 4 states that adverse transport impacts should be minimised to an acceptable level at all project stages. It continues to state that proposals should where feasible make a positive contribution to transportation policy objectives in the locality, and should include multi-modal solutions and investment that encourages travel by public transport, walking and cycling and other sustainable forms of transport. Strategic Policy PS 9 also states that IACC will seek the provision of community infrastructure, including park and ride facilities.
- 6.4.390 GP 14 of the Wylfa SPG [RD28] confirms that the use of rail and waterborne modes should be prioritised in accordance with national planning policy and the need for road transport minimised. It also states that where the use of road transport is required, the applicant should assess the potential impacts on road infrastructure and seek to ensure highway improvements are provided

where appropriate to minimise congestion, ensure safety and minimise environmental impacts.

Assessment

- 6.4.391 The traffic modelling assumptions and methodology are explained in detail in the Transport Assessment in volume C of the ES (Application Reference Number: 6.3.14). The traffic assessments were undertaken for the 2016 baseline and then for three years with and without the Project:
- the opening year of the A5025 Off-line Highway Improvements (2020);
 - the peak construction (2023); and
 - the peak operation (2033).
- 6.4.392 The methodology has been developed in consultation with Welsh Government, the IACC and GCC (as addressed in the Consultation Report Application Reference Number 5.1).
- 6.4.393 This approach means that the impacts of the Project on traffic flows and delays have been determined during peak years of activity.
- 6.4.394 Changes in traffic flows at 38 junctions on the main routes to and from the Wylfa Newydd Development Area were assessed. Potential congestion issues were identified at ten junctions which were then examined using detailed models of the operation of each junction. These detailed assessments demonstrated that there would be no forecasted congestion problems at these junctions associated with the implementation of the Wylfa Newydd DCO Project. Much of the additional traffic flows on the Britannia Bridge related to the Wylfa Newydd DCO Project are forecast to avoid the most congested times of day due to the scheduling of shift start and end times. Some additional traffic delays are forecast but these are considered to be within an 'acceptable' level with regard to the requirements of NPS EN-1 [RD4] and EN-6 [RD5].
- 6.4.395 Traffic flows are forecast to increase substantially on the A5025 during periods of peak construction activity and three bypasses are proposed (as part of the A5025 Off-line Highway Improvements) to reduce traffic impacts on local villages.
- 6.4.396 No significant transport impacts are forecast during the operational phase of the Wylfa Newydd Project.
- 6.4.397 The Transport Assessment process has not identified the need for further mitigation beyond those embedded measures identified in the Transport Assessment (for example, the MOLF, Logistics Centre, Park and Ride, car sharing) which will be secured through the DCO 'control documents' as described in section 7.2 of this Planning Statement.
- 6.4.398 All of the construction activities will be controlled through the Wylfa Newydd CoCP (Application Reference Number: 8.6). This will include guidelines on the management of travel to the Wylfa Newydd DCO Project including management of traffic incidents and construction traffic management. Similarly, during the operation of the Power Station there will be a Wylfa

Newydd CoOP (Application Reference Number: 8.13). This will include a travel plan and operational service plan which will also require a regular review and refinement of travel arrangements to meet objectives and targets.

- 6.4.399 With the embedded mitigation measures proposed, the impacts of the Project are therefore considered acceptable in the context of EN-1 [RD4] and EN-6 [RD5].
- 6.4.400 EN-1 [RD4] acknowledges that a new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure (paragraph 5.13.6). The mitigation of the traffic and transport impacts associated with the construction and operation of the Project has been carefully considered to ensure that there are no unacceptable adverse residual effects, in accordance with EN-1 [RD4] (paragraph 5.13.6 and 5.13.7) and EN-6 [RD5] (paragraph 3.15.12).
- 6.4.401 Whilst the NPSs take precedence over national and local policy and it is not necessary to demonstrate 'compliance' with specific national or development plan policies, the objective of reducing the amount of vehicular traffic through the embedded mitigation and location of facilities are also consistent with policy set out in the Wales Transport Strategy [RD25]; PPW [RD8]; the JLDP [RD27]; and Wylfa SPG [RD28].

Environmental effects of traffic

- 6.4.402 Chapter C2 of the ES (Application Reference Number: 6.3.3) assesses the project-wide traffic and transport effects on users of the existing transport network during the three assessment years outlined above. It also specifically assesses the project-wide impact of traffic and transport on public access and recreation, air quality and noise and vibration.
- 6.4.403 A summary of the assessments in relation to public access and recreation, air quality and noise and vibration is provided above.
- 6.4.404 With regard to traffic and transport, the assessment of potential environmental effects of traffic addresses the effects on drivers, public transport users, pedestrians, cyclists and equestrians who travel on the existing transport network.
- 6.4.405 Measures have been incorporated into the design in the form of good practice and embedded mitigation to reduce the potential for adverse impacts arising from the Wylfa Newydd DCO Project. No additional mitigation has been identified for traffic and transport receptors for either the peak construction and peak operation scenarios assessed. For the Opening year of the A5025 Off-line Highway Improvements scenario, bilingual signage would be erected on the Lôn Trefnath as it approaches the site entrance (in both directions), on the highway at the site entrance and at the site exit to warn pedestrians, cyclists and drivers of the zebra crossing and potential conflicts as traffic moves in and out of the Logistics Centre. This would serve to mitigate for the effects on on-shore recreation and active travel in respect of the increased traffic flows.

6.4.406 Whilst residual effects on motorised and public transport users would remain, the mitigation selected ensures these have been reduced to 'acceptable levels' in accordance with EN-1 [RD4] (paragraph 5.13.7) and EN-6 [RD5] (paragraph 3.15.2).

Waste management

Policy context

National Policy Statements

6.4.407 Section 5.14 of EN-1 [RD4] deals with waste management, stating in paragraph 5.14.1 that Government policy is intended to protect human health and the environment by producing less waste and by using it as a resource where possible. Paragraph 5.14.2 states that waste management is implemented through the waste hierarchy.

6.4.408 Paragraph 5.14.4 of EN-1 [RD4] recognises that "*all large infrastructure projects are likely to generate hazardous and non-hazardous waste*". It requires applications to set out the arrangements that are proposed for managing any waste produced and prepare a Site Waste Management Plan (paragraph 5.14.6, EN-1 [RD4]).

Welsh national and local policy

6.4.409 Paragraph 12.7.1 of PPW [RD8] states that:

"Decisions on waste management proposals should be determined in accordance with the relevant development plan for an area. The extent to which a proposal demonstrates a contribution to the waste management objectives, policy, targets and assessments contained in national waste policy will be a material planning consideration".

6.4.410 Paragraph 12.7.3 of PPW requires that adequate facilities and space for the collection, composting and recycling of waste materials should be incorporated into the design of any development and waste prevention efforts at the design, construction and demolition stage should be made by developers. This paragraph also clarifies that all opportunities should be explored to incorporate re-used or recyclable materials or products into a new building or structure.

6.4.411 The *National Waste Strategy Towards Zero Waste – One Wales: One Planet, 2010* [RD48] is the overarching waste strategy document for Wales and provides a framework for the management of all types of waste, with the overall aim of reducing residual waste to zero by 2050.

6.4.412 The *Collections, Infrastructure and Markets (CIM) Sector Plan, 2012* [RD49] describes the waste management framework considered to provide the best solutions to meet environmental, social and economic needs to 2050. The plan looks to create the conditions to enable as much waste as possible to be managed in Wales and for as much as possible of the recycle generated in Wales to be used in Wales.

- 6.4.413 Section 2.7 in TAN 21 (2014) [RD24] describes the waste hierarchy principle and states that when taking planning decisions, it is expected that the waste hierarchy be applied as a priority order, unless, for specific waste streams departing from this hierarchy is justified by lifecycle thinking on the overall impacts of the generation and management of such waste.
- 6.4.414 Paragraph 4.6 in TAN 21 [RD24] confirms that the waste hierarchy principle should be set alongside other relevant social, economic and environmental factors, including the amenity of adjacent uses and communities, before the appropriateness of potential developments can be determined.
- 6.4.415 Section 4 in TAN 21, annex C of that document and a supplementary document to TAN 21 entitled Waste Planning Practice Guide provides supplementary guidance as to how the waste management principles should be applied in development management.
- 6.4.416 Strategic Policy PS 5 in the JLDP [RD27] requires that proposals reduce the effect on local resources, avoiding pollution and incorporating sustainable building principles in order to contribute to energy conservation and efficiency; using renewable energy; reducing/recycling waste; using materials from sustainable sources; and protecting soil quality. This policy also prioritises the reuse of previously developed land where possible and also requires proposals to reduce the amount of water used and wasted.
- 6.4.417 In order to alleviate the effects of climate change, Policy PS 6 in the JLDP states that proposals will only be permitted where it is demonstrated that they have fully taken account of, *inter alia*, reducing greenhouse gas emissions, help to reduce waste and encourage travel other than by car.
- 6.4.418 Strategic Policy PS 9 in the JLDP states that where future or legacy uses for any temporary development associated with the Wylfa Newydd Project are not feasible, the Council shall require that temporary buildings are removed and that all waste disposal facilities, roads, parking areas and drainage facilities are permanently removed from the site. The land must then be reverted to its original state in accordance with a scheme of work submitted to and approved by the Local Planning Authority.
- 6.4.419 Strategic Policy PS 21 in the JLDP confirms that the Councils will seek to ensure an adequate availability of land in appropriate locations for an integrated network of waste facilities to meet regional and local obligations in accordance with the requirements of the current relevant national/regional policy/guidance.
- 6.4.420 Policy PCYFF 2 in the JLDP confirms that proposals should include the provision for storing, recycling and waste management during the construction period and occupancy period, and where applicable, include provision for the appropriate management and eradication of invasive species. Policy PCYFF 3 in the JLDP [RD27] also requires that proposals utilise materials appropriate to their surroundings.
- 6.4.421 Policy PCYFF 5 in the JLDP states that proposals will need to demonstrate how the energy hierarchy set out in Policy PS 6 has been applied and how the

contribution from renewable or low carbon energy to satisfy the proposals need for energy and waste has been maximised.

6.4.422 Policy GWA 3 in the JLDP states that facilities for the storage and/or management of radioactive waste generated within the nuclear licensed area at Wylfa/Wylfa Newydd will be granted, provided that all the following criteria can be met:

- it is consistent with the national strategies and policies for managing radioactive waste and discharges;
- the outcome of social economic and environmental health assessments justify it being dealt with at the proposed location; and
- facilities are sited and designed in order to minimise adverse impacts on the environment and appropriate environmental restoration measures are available.

6.4.423 Policy GP 18 in the Wylfa SPG [RD28] also outlines the Council's support for developments which re-use materials and facilitate the recycling of waste. Policy GP 26 suggests that the management of waste should be undertaken in accordance with the waste hierarchy and encourages the use of sustainable, locally sourced construction materials. In addition, GP 26 advocates the use of water efficient products and design and energy efficient measures in the layout and design of new buildings.

Assessment

6.4.424 The potential project-wide waste and materials effects are assessed in chapter V6 of the ES (Application Reference Number: 6.3.6). This sets out the embedded and good practice mitigation for the construction, operational and decommissioning phases, as required.

6.4.425 During construction, this includes the incorporation of efficient design solutions and modular construction of temporary buildings where possible, manufactured off-site which delivers a number of efficiency benefits.

6.4.426 Waste management arrangements would be in accordance with the management strategy set out in the Overarching Code of Construction Practice (CoCP) (Application Reference Number: 8.6), which sets out materials and waste minimisation measures in line with Horizon's waste hierarchy. The Sub-CoCPs (Application Reference Numbers: 8.7-8.12) set out more specific measures for each individual development site.

6.4.427 During operation, the inclusion of dedicated waste handling and treatment facility forms an embedded mitigation measure. All conventional wastes generated at the Power Station Site would be handled at the waste and recycling facility which will be located on the Power Station Site.

6.4.428 All waste generated during the operation of the Power Station would be managed in accordance with the management strategy set out in the Code of Operational Practise (CoOP) (Application Reference Number: 8.13). This sets out Horizon's framework for the management of waste and materials. The

document provides the approach to waste and materials management across the lifetime of the project.

- 6.4.429 All waste generated during the decommissioning of the Power Station would be managed in accordance with an appropriate management strategy to be developed as part of the decommissioning plan. The strategy would include controls similar to those set out in the CoCP and the CoOP, the waste hierarchy and the proximity principle. Given the Power Station will have a lifespan of circa 60 years, future technologies would potentially allow for more efficient and sustainable methods of management of waste.
- 6.4.430 The ES identifies no significant adverse effects for waste and materials management. Some minor adverse effects are identified, including for example, from off-site disposal of non-hazardous waste generated during the construction and from the off-site disposal of hazardous waste during operation. Minor adverse effects would also result from the off-site disposal of non-hazardous waste associated with the Associated Development sites.
- 6.4.431 The ES concludes that if a number of other projects came forward it would have the potential to impact on non hazardous and hazardous waste facilities in the north west of England, which would result in a residual inter-project effect of minor adverse or higher.
- 6.4.432 Waste and materials arising from the decommissioning phase of the Power Station and Off-Site Power Station Facilities would be segregated and stored ready for final treatment and/or disposal at the dedicated handling facilities. All wastes would be sent off-site for recycling or disposal as appropriate. An assessment on the capacities of the receiving waste management facilities during decommissioning of the Power Station and Off-Site Power Station Facilities would be made at the appropriate time.
- 6.4.433 The measures for site waste management set out in the CoCPs and CoOP comply with the requirements of paragraph 5.14.6 of NPS EN-1 and the relevant national and local policies referred to above.

Water quality and resources

Policy context

National Policy Statements

- 6.4.434 Paragraph 5.15.2 of EN-1 [RD4] states that where a project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and impacts of the proposed project on, water quality, water resources and physical characteristics of the water environment as part of the ES.
- 6.4.435 Paragraph 5.15.5 of EN-1 states that the decision maker will generally need to give impacts on the water environment more weight where a project would have an adverse effect on the achievement of the environmental objectives established under the WFD. The *WFD (2000/60/EC)* is European water

legislation with the overarching objective of all water bodies in Europe attaining Good or High Ecological Status or Potential by 2027.

- 6.4.436 Paragraph 5.15.6 of EN-1 states that the decision maker should satisfy itself that a proposal "...has regard to the River Basin Management Plans and meets the requirements of the Water Framework Directive (including Article 4.7) and its daughter directives, including those on priority substances and groundwater".
- 6.4.437 Paragraph 5.15.9 in EN-1 states that the risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution control practice. Additionally, paragraph 5.15.10 of EN-1 confirms that the impact on local water resources can be minimised through planning and design for the efficient use of water, including water recycling.
- 6.4.438 Paragraph 4.10.8 in EN-1 states that the decision maker should not refuse consent on the basis of pollution impacts unless it has good reason to believe that any relevant necessary operational pollution control permits or licences or other consents will not subsequently be granted.
- 6.4.439 As a general principle, paragraph 5.3.7 in EN-1 states that development should aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives; where significant harm cannot be avoided, then appropriate compensation measures should be sought.
- 6.4.440 Paragraph 5.3.11 in EN-1 states that where a proposed development on land within or outside an SSSI is likely to have an adverse effect on an SSSI, development consent should not normally be granted. Paragraph 5.3.11 continues to state that where an adverse effect, after mitigation, on the site's notified special interest features is likely, an exception should only be made where the benefits (including need) of the development at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs. Paragraph 5.3.11 in EN-1 states that the decision should use requirements and/or planning obligations to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest.
- 6.4.441 EN-6 [RD5] states at paragraph 3.9.3 that applicants should consider the effects of the construction of a new Power Station on the groundwater regime and its effects on terrestrial/coastal habitats. Paragraph 3.9.6 in EN-6 [RD5] states that potential mitigation measures could include variations to the building layout to avoid ecologically sensitive areas and on-site measures to protect habitats and species and to avoid or minimise pollution and the disturbance of wildlife.
- 6.4.442 Paragraph 3.7.6 of EN-6 states that in designing any direct cooling system the locations of the intake and outfall should be sited to avoid or minimise adverse impacts on legitimate commercial and recreational uses of the receiving waters, including their ecology. Paragraph 3.7.6 continues to state that there should also be specific measures to minimise impact to fish and aquatic biota

by entrainment or by excessive heat or biocidal chemicals from discharges to receiving waters.

- 6.4.443 EN-6 [RD5] states that contamination of water resources "...can be mitigated through the EIA process and managed through the possible implementation of Environmental Management Plans," (paragraph 3.7.8).

Welsh national and local policy

- 6.4.444 Strategic Policy PS 5 in the JLDP [RD27] states that proposals should adapt to the unavoidable impacts of climate change, avoiding pollution and reducing the amount of water used and wasted and reducing the effect on water resources and quality.
- 6.4.445 Policy PCYFF 2 in the JLDP [RD27] states that proposals would be refused where they would have an unacceptable adverse impact on the quality of ground or surface water.
- 6.4.446 Policy PCYFF 6 in the JLDP [RD27] requires development to incorporate water conservation measures where practicable, including Sustainable Drainage Systems.
- 6.4.447 GP 20 of the Wylfa SPG [RD28] states that the release of potentially polluting substances to air, water or land should be minimised. GP 21 states that the Wylfa Newydd Project should include measures to control surface water runoff where the potential for adverse impacts is identified.

Assessment

- 6.4.448 The EIA of development within the WNDA on surface water and groundwater is set out in chapter D8 of the ES (Application Reference Number: 6.4.8). This sets out the management measures proposed during construction and operational stages to mitigate against activities that would affect the hydrological system of the Tre'r Gof SSSI, as well as water catchment areas and local water courses.
- 6.4.449 It concludes that the natural water catchment area of Tre'r Gof SSSI would change as a result of landscape mounding, which could alter the rainfall/runoff rates and base flow from groundwater, leading to changes to water availability at the SSSI. Increased suspended sediments in runoff from landscape mounding could also potentially affect water quality for the Cemlyn Catchment and Cemlyn Bay SSSI.
- 6.4.450 These are assessed against the above policy context in appendix A of this Planning Statement.
- 6.4.451 Appendix A in this Planning Statement explains that there is insufficient certainty that significant harm to Tre'r Gof SSSI can be avoided and therefore appropriate compensation measures would be provided in accordance with paragraph 5.3.7 of NPS EN-1. These would comprise wetland habitat creation and enhancement works at the following sites:
- Tŷ Du– located between Cemaes and Bull Bay, approximately 2.7km east of the WNDA;

- Cors Gwawr – located approximately 250m east of Talwrn; and,
- Cae Canol-dydd – located approximately 1.3km west of Talwrn.

6.4.452 Paragraph 5.3.7 of EN-1 also states that reasonable alternatives should be considered. EN-6 states that as a result of the Strategic Siting Assessment and Alternative Sites Study, UK Government does not believe that there are any sites in England and Wales other than the eight selected that are suitable for the development of new nuclear power stations in the time specified.

6.4.453 NPS EN-6 states that as a result of the Strategic Siting Assessment and Alternative Sites Study, UK Government does not believe that there are any sites in England and Wales other than the eight selected that are suitable for the development of new nuclear power stations in the time specified.

6.4.454 In terms of alternative layouts within the WNDA, the scheme seeks to reduce the potential for adverse effects by increasing the size of the WNDA to enable laydown areas to be located in areas that avoid encroachment onto the SSSI. The Power Station has also been designed to maintain a suitable distance from the SSSI, allowing for buffer zones to be provided.

6.4.455 Alternative layouts are set out and considered in volume 2 of the Site Selection Report (Application Reference Number: 8.24.2). The document entitled Water Framework Directive Information to Support Article 4(7) Derogation (Application Reference Number: 8.27) also sets out how all reasonable alternatives were considered to avoid significant harm to biodiversity interests in including Tre'r Gof SSSI.

6.4.456 The potential significant harm identified is necessary to achieve the substantial public benefits of delivering the Power Station, by helping to meet the identified urgent need for new nuclear power. It is considered that no alternative locations are available for the reasons identified above and in more detail at Appendix A. The significant benefits of the Wylfa Newydd DCO Project are significant and sufficient to represent an exception which, in accordance with the 5.3.11 of NPS EN-1 outweigh the impacts.

6.4.457 The environmental impact assessment of the Off-Site Power Station Facilities, Park and Ride, Logistics Centre and A5025 Off-line Highways Improvements on surface water, groundwater are set out in chapters E8, F8, G8 and H8 of the ES (Application Reference Number: 6.5.8 – 6.). This is assessed at Appendix B of this Planning Statement, which concludes that no significant adverse effects were identified for surface water and groundwater, in compliance with Paragraph 5.15.2 of NPS EN-1 [RD4] and Strategic Policy PS 5 and policy PCYFF2 in the JLDP [RD27]. The implementation of a swale at the Reduction in flood risk due to the implementation of a swale at the Off-Site Power Station Facilities site would result in a beneficial residual effect.

6.4.458 Appendices A-F of the Planning Statement also provides a summary of the compliance with the WFD requirements in accordance with paragraph 5.15.5 and 5.15.16 of NPS EN-1. Further detail is provided in the WFD Compliance Assessment (Application Reference Number: 8.26) which covers all project elements in relation to the objectives set out in the WFD.

6.4.459 With the exception of the Ynys Môn Secondary groundwater body and The Skerries coastal water body, the WFD Compliance Assessment determined that the Wylfa Newydd Project would not cause deterioration in WFD water bodies on a non-temporary basis and would not prevent WFD water bodies from attaining Good Ecological Status or Potential. The exceptions are reported in Appendix A. The WFD Compliance Assessment concludes that there is a requirement to develop a case to support an application for derogation under Article 4.7 of the WFD, which makes provision for a situation where the objectives of the WFD cannot be met. This case will cover both the Ynys Môn Secondary groundwater and The Skerries coastal water body.

Horizon will provide the necessary information to support an application for derogation under Article 4.7 and discuss the timing for submission of such a report with the Planning Inspectorate and NRW in their respective roles in relation to the Development Consent Order, Marine Licence and Environmental Permit applications.

Welsh language impact

Policy context

National Policy Statements

6.4.460 Welsh language impact is not a Generic or Nuclear Impact. Volume 2 of EN-6 [RD5] provides site assessments which set out why the sites included in EN-6 [RD5] have been found potentially suitable for providing nuclear power. Paragraph C.9.110 of EN-6 [RD5] does however advise that some responses from consultees to the draft NPS expressed concerns that an influx of workers into the area could be damaging to its language, culture and welfare. EN-1 [RD4] and EN-6 [RD5] do not however otherwise provide specific guidance in respect of Welsh language and culture.

Welsh national and local policy

6.4.461 PPW [RD8] and TAN 20 [RD23] identify the Welsh language as being a part of cultural and social fabric of Wales and that the Welsh Government is committed to ensuring the Welsh language is supported and encouraged to flourish. PPW [RD8] states that Welsh language should be supported by the planning system and that considerations related to the use of Welsh language may be taken into account by decision makers so far as they are material to applications for planning permission (paragraph 4.13.5).

6.4.462 Part B of the TAN 20 [RD23] provides Practice Guidance on planning and the Welsh language and states:

"The planning system can contribute to the future well being of the Welsh language, by establishing the conditions to allow sustainable communities to thrive. For example, creating conditions for well-paid employment opportunities and a range of quality housing options are integral to planning for sustainable communities," (paragraph 1.7.3, TAN 20 [RD23]).

6.4.463 Furthermore, TAN 20 [RD23] confirms that where the use of Welsh language is a significant part of the social fabric of a community, the interest and needs of the Welsh language should be taken into account. Paragraph 3.1.2 in TAN 20 [RD21] confirms:

“...in determining individual planning applications and appeals, considerations relating to the use of the Welsh language may be taken into account so far as they are material. Section 70(2) TCPA does not give any additional weight to the Welsh language above any other material consideration and decisions on all applications for planning permission must be based on planning grounds only and be reasonable”.

6.4.464 Planning policy continues the strong support for promoting the Welsh language. Strategic Policy PS 1 of the JLDP [RD27] confirms that the IACC will promote and support the use of the Welsh language in the area and require a Welsh Language Impact Assessment (WLIA) (Application Reference Number: 8.22) to be submitted as part of the application to show how the proposed development would protect, promote and enhance the Welsh language. Strategic Policy PS 1 also states that proposals will be refused which would cause significant harm to the character and language balance of a community that cannot be avoided or suitably mitigated by appropriate planning mechanisms.

6.4.465 Strategic Policy PS 5 in the JLDP [RD27] states that all proposals should protect, support and promote the use of the Welsh language in accordance with Strategic Policy PS 1.

6.4.466 Policy GP13 of the Wylfa SPG [RD28] similarly confirms that Welsh language and culture should be maintained and where possible strengthened and that all planning applications for Associated Development will be expected to demonstrate how a Welsh language strategy will be delivered by the proposed development. It also clarifies that a Welsh Language Impact Assessment should be undertaken. GP 13 also sets out several measures which could be deployed to mitigate potential adverse impacts on, and strengthen, Welsh language and culture.

6.4.467 Whilst Associated Development can now be included within the DCO application (rather than separate TCPA applications) the principles of protecting and promoting the Welsh language through all proposals are relevant.

6.4.468 *Cymraeg 2050: Welsh language strategy (2017)* [RD50] sets out a goal of having a million Welsh speakers by 2050 and that it is used in everyday life. The themes for realising this goal include increasing the use of Welsh in the workplace and creating favourable conditions through infrastructure.

6.4.469 The WLIA provides a detailed assessment of the effects of the Project on Welsh language and culture.

Assessment

6.4.470 The effect of the Project on Welsh language and culture is largely dependent on the number of workers required during construction and their geographical

distribution. The effects on communities, Welsh language and culture will vary in different locations.

- 6.4.471 Due to the interdependencies between effects on Welsh language and culture and socio-economic effects, the geographical areas used in the WLIA are based on those used for the socio-economic assessment.
- 6.4.472 Horizon appointed language planners to provide specialist input relating to Welsh language planning and Welsh language initiatives to feed into the development of mitigation and enhancement measures.
- 6.4.473 The WLIA (Application Reference Number: 8.21) has identified the need for various enhancement and mitigation measures to be secured through the Welsh Language and Culture Mitigation and Enhancement Strategy (WLCMES). The mitigation measures in the WLCMES will be secured through planning obligations, are outlined in chapter 7 of this report.
- 6.4.474 The proposed measures follow four key themes, namely workforce, children and young people, community and accountability. The full range of measures proposed are set out in volume A and B of the WLIA.
- 6.4.475 A Welsh Language and Culture Coordinator would be appointed to focus on the development and implementation of Welsh language and culture mitigation and enhancement measures during construction and operation of the Project.
- 6.4.476 In relation to workforce, Horizon propose to mitigate potential adverse effects relating to construction and operational workforce by undertaking the following activities.
- Appointing a Welsh Language and Culture Co-ordinator to focus on the development and implementation of Welsh language and culture mitigation and enhancement measures during construction and operation of the Wylfa Newydd DCO Project.
 - Assessing the Welsh language skills requirements for job roles when developing construction and operational job profiles at Wylfa Newydd.
 - Ensuring a Welsh-speaking member of staff is included on interview panels for jobs where candidates are required to have Welsh language skills so that the candidate's linguistic skills can be properly assessed.
 - Providing language awareness training to all construction and operational staff to demonstrate linguistic courtesy and awareness of Horizon's corporate Welsh Language Policy.
 - Developing and circulating welcome packs to all families of the Wylfa Newydd DCO Project's workers who move to the Key socio-economic study area (KSA) to raise awareness of Welsh language and culture including information on the status and use of the language in the local education services and the wider community.
 - Collecting aggregate and anonymised data on partners and children moving to the KSA with construction and operational workers and sharing

this data with local authorities. This will take account of data protection considerations but, where possible, include numbers of children, ages and Welsh language skill levels to provide information for education and early years planners. This process may be linked to the Worker Accommodation Management Service (WAMS) being developed to help monitor the inflow of workers and their families.

- Continuing to distribute, on a regular basis, information on career opportunities at Wylfa Newydd to local communities and young people including the bilingual Wylfa Newydd 'Career Route Maps' and Job Profiles.
- Ensuring all available job opportunities are advertised through recruitment channels that target a Welsh-speaking audience, as part of Horizon's recruitment strategy. This will include the Wylfa Newydd Employment & Skills Service as well as other local and national partners that engage with a Welsh-speaking audience. All job advertisements will be posted in English and Welsh.
- Updating Horizon's Welsh Language Policy on an annual basis to include details on what types of internal communications will be made available bilingually.
- Ensuring permanent and temporary public signs relating to the Project will be fully bilingual.
- Developing and adopting a Welsh language skills competency framework and a Welsh language skills assessment tool for recruitment processes.
- Distributing information to contractors and all personnel on the Welsh language and culture as part of recruitment materials.
- Including Welsh Language information requirements as an agenda item for all contractor meetings. Horizon will provide information on their Welsh language capacity, Horizon's Welsh Language Policy and obligations, and how contractors will adhere to Horizon's Welsh Language Policy (i.e. through recruitment processes and internal and external communications).
- Ensuring Menter Newydd and contractors in all tiers are provided with information on, and encouraged to use, local suppliers. Contractors will be provided with the business database being developed by IACC, other local authorities, North Wales Economic Ambitions Board and Welsh Government.

6.4.477 In relation to children and young people, measures include:

- Developing and providing bilingual educational support for primary and secondary pupils as well as Further Education students.
- Maintaining the Wylfa Newydd DCO Project apprenticeship scheme and continue to provide the 'Work Insight Week', or an equivalent scheme, to young people.

- Funding a peripatetic teacher service that would support current immersion education capacity on Anglesey (and potentially Gwynedd if required) across primary and secondary schools.
- Developing and circulating welcome packs to all families of the Wylfa Newydd DCO Project's workers who move to the KSA. These will draw on information in the Welsh Government's planned Welcome Packs and will provide information on local services and the community.

6.4.478 Mitigation and enhancement measures relating to community and local services include the following.

- Funding provision of community language services (including the development of appropriate training materials) to support the integration of newcomers and develop Welsh language-speaking capacity in the local community. This would be linked to the role of the CIO.
- Facilitating ongoing dialogue with the IACC, Gwynedd Council, Mudiad Meithrin and Menter Iaith Môn to discuss the inflow of pre-school age children and mitigate the effect on local Welsh-medium provision. The level of mitigation agreed would be proportionate to the number of workers that would bring their families.
- Helping fund a community translation service.

6.4.479 In relation to the cost of housing, Horizon would seek to mitigate the potential adverse effects by establishing a Wylfa Newydd WAMS. This service and its oversight group (which would include local authorities) would provide a mechanism to monitor the effects of the Wylfa Newydd DCO Project on the supply and demand for accommodation and housing as a result of the inflow of non-home-based construction workers and their families.

6.4.480 Mitigation and enhancement measures relating to accountability include the following:

- Establishing a management group which will have oversight of and be accountable for the delivery of this Welsh Language and Culture Mitigation and Enhancement Strategy as well as Horizon's Corporate Welsh Language Policy.
- Establishing and chairing an external stakeholder group (Welsh Language and Culture Coordinator) to monitor the implementation of the Strategy and provide advice on its delivery.
- Completing an evaluation of the impact of the Project on the Welsh language in the KSA overseen by the external monitoring group.
- Implementing the Welsh Language and Culture Mitigation and Enhancement Strategy throughout the construction period of the Project.

6.4.481 On a site specific level mitigation identified within the landscape and visual, air quality, and noise assessments for example provide mitigation which all have indirect effects on Welsh language, when considering quality of life.

- 6.4.482 Section B.7 of the WLIA summarises the potential residual project-wide effects following the implementation of mitigation and enhancement measures. The WLCMES recognises (as demonstrated in the commitments regarding accountability) that ongoing monitoring, during and following, the construction of the Project would be required to quantify the residual effects of the project.
- 6.4.483 The potential project-wide impacts on the Welsh language and culture have been carefully assessed through the WLIA. As a result of embedded mitigation and good practice mitigation, the potential for significant residual project-wide effects on Welsh language and cultural associated with the Wylfa Newydd DCO Project have been reduced to avoid any unacceptable adverse impact. The relevant NPSs do not provide specific guidance in respect of Welsh language and culture. The measures proposed to support and enhance the Welsh language and culture as part of the Wylfa Newydd DCO Project comply with the principles of the various national and local policies relating to the strengthening of the Welsh language.

6.5 Flags for local consideration

- 6.5.1 Further to the assessment of the Wylfa Newydd DCO Project against the Generic and Nuclear impacts above, this section addresses the 'Flags for local consideration' identified in NPS EN-6 [RD5].

Proximity to civil aircraft movements

- 6.5.2 As introduced in section 6.4 of this Planning Statement in relation to the requirements of section 5.4 of NPS EN-1 [RD4], paragraph 3.13.2 of NPS EN-6 [RD5] states that *the application should assess the proximity of aircraft movements to the proposed site*".
- 6.5.3 The SSA concluded that on the basis of the advice of Civil Aviation Authority "it is reasonable to conclude that any likely power station development within the site boundary can be protected against risks from civil aircraft movement, and that the effects on air traffic and aerodromes can be potentially mitigated" (paragraph C.8.48, NPS EN-6 [RD5]).
- 6.5.4 As noted above in section 6.4 of this Planning Statement, civil and military aviation and defence interests were scoped out of the EIA on the basis that no likely significant effects are anticipated.

Access to transmission networks

- 6.5.5 Paragraph 3.14.2 of NPS EN-6 [RD5] states that when considering a development consent application pursuant to this NPS, the decision maker should refer to section 4.9 of NPS EN-1 [RD4] in respect of the grid connection. Section 4.9 of EN-1 is addressed earlier in this Planning Statement at section 6.3.
- 6.5.6 The Electricity Grid Connection Statement (Application Document Reference: 7.1) provides further details on the grid connection.

Impact on significant infrastructure and resources

- 6.5.7 Paragraph 3.15.2 of NPS EN-6 [RD5] states that applications should demonstrate that the proposed development would not have an unacceptable adverse impact on significant infrastructure (as listed at paragraph 3.15.1)
- 6.5.8 Paragraph 3.15.3 then notes that there may be adverse effects during the construction and decommissioning phases on regional transport networks that may already be under stress [RD5]. The effects of the Wylfa Newydd DCO Project on transport networks are considered at section 6.4 of this Planning Statement having regard to the policy set out in section 5.13 of NPS EN-1 [RD5].
- 6.5.9 With regard to motorways and major highways NPS EN-1 acknowledges that a new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure (paragraph 5.13.6 [RD4]). The mitigation of the traffic and transport impacts has been carefully considered to ensure that there are no unacceptable adverse residual effects, in accordance with NPS EN-1 (paragraph 5.13.6 and 5.13.7 [RD4]) and NPS EN-6 (paragraph 3.15.12 [RD5]).
- 6.5.10 With regard to the strategic rail network, the Transport Assessment (Application Reference Number: 6.3.14) concludes that demand for some rail, services will increase, particularly at weekends when some workers will travel to their permanent home. Sufficient capacity is available to accommodate this increase in the early years of construction and monitoring will be required to ensure there is sufficient capacity to accommodate the additional rail passengers during periods of peak construction activity.
- 6.5.11 Anglesey Airport is located at Llanfair Yn Neubwll around 22km south of the Power Station Site. The public airport forms part of the RAF Valley teaching station and comprises a single storey building with a single check-in desk, departure lounge and baggage handling area. Access to the runways is shared with the RAF training centre. This results in restricted time periods for use of the runway for non-RAF activities and therefore limits the potential to significantly increase the number and frequency of flights in and out of the airport.
- 6.5.12 The increase in vehicle and foot passengers on the Holyhead-Dublin ferry represents 3% of the total daily vehicle capacity and 2% of the total available foot passenger capacity which is unlikely to cause any noticeable impacts.
- 6.5.13 With regard to the gas transmission and electricity transmission networks, Horizon are working with the providers to ensure that impacts on the networks are avoided where practicable, or that appropriate diversions are secured.

Size of site to accommodate construction and decommissioning

- 6.5.14 Paragraph 3.16.1 of NPS EN-6 [RD5] states that some activities associated with the proposed development may take place outside of the boundaries of the “listed site” (the Wylfa NPS Site), for example construction and decommissioning activities. In considering an application for development consent, the decision maker should assess all impacts of the proposed

development that it considers relevant and important to the application in accordance with the Planning Act 2008, the policy set out in NPS EN-1 and NPS EN-6 [RD5].

- 6.5.15 Paragraph 2.3.5 of NPS EN-6 [RD5] states that the Government expects the key operational elements of the power station, and in particular the infrastructure that has the potential to directly cause a radiological hazard such as the reactor building (including the associated turbine hall), spent fuel and intermediate level waste stores, to be located within the boundary of the site that was assessed by the SSA (the Wylfa NPS Site). However, the Government recognises that flexibility is required to accommodate detailed local level considerations.
- 6.5.16 The text below identifies how the Project is in accordance with national and local policy, including NPS EN-1 and NPS EN-6, in relation to the size of the site to accommodate construction and decommissioning. The WNDA boundary has developed from the Wylfa NPS Site but is larger (407 hectares compared to 236 hectares respectively), as it includes areas to be used during construction, including marine working areas. The larger area also allows for the construction laydown areas to be located adjacent to the east and west of the Power Station Site, thereby avoiding encroachment onto the Tre'r Gof SSSI.
- 6.5.17 This is consistent with paragraph 2.3.5 of NPS EN-6 [RD5], which states that although the government expects the key operational elements of the Power Station to be located within the Wylfa NPS Site, it is also recognised that additional land may be needed for other elements.
- 6.5.18 Sufficient land would be available to accommodate construction and decommissioning activities and these areas have been factored into the assessment in accordance with paragraph 3.16.1 of NPS EN-6 [RD5]

6.6 Conclusions

- 6.6.1 The Wylfa Newydd DCO Project should be considered as a whole, as a single NSIP. Whilst it is anticipated that it will be deployed after 2025, the policies within NPS EN-1 and NPS EN-6 remain the primary basis for decision making.
- 6.6.2 The Wylfa Newydd DCO Project complies with each of the Assessment Principles set out in sections 4.2 – 4.15 of NPS EN-1 [RD4].
- 6.6.3 This chapter has also provided an assessment of each of the Generic and Nuclear Impacts in accordance with part 5 of NPS EN-1 and part 3 of NPS EN-6, for each element of the Wylfa Newydd DCO Project (with reference to the site specific appendices), also having regard to, to the extent that it is relevant, national and local policy.
- 6.6.4 This has shown that the Wylfa Newydd DCO Project will lead to both some potentially significant adverse impacts and some significant beneficial impacts; both will need to be weighted in the overall planning balance, as required by paragraph 4.1.3 of NPS EN-1.

- 6.6.5 Chapter 8 considers this in the context of the planning balance, having regard to the substantial weight that should be given to the contribution the Wylfa Newydd DCO Project would make towards satisfying the “*urgent need*” identified in paragraph 3.5.1 of NPS EN-1 [RD4], and when the decision maker starts with a policy presumption in favour of granting consent (subject to the provisions of the Planning Act 2008 and unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused) in accordance with paragraph 4.1.2 of NPS EN-1.

7 Requirements and securing mitigation

7.1 Introduction

7.1.1 This section outlines how the mitigation identified in the ES and other assessments would be secured and provided.

7.1.2 Schedule 3 of the draft Order (Application Reference Number: 3.1-3.3) sets out all the requirements that Horizon must comply with in undertaking the construction, operation and maintenance of the Wylfa Newydd Project. The DCO Requirements in schedule 3 of the draft Order are structured as follows:

- Project-wide requirements: these are overarching requirements that apply to all works packages that comprise the authorised development such as time limits for commencement and overall phasing of the Wylfa Newydd DCO Project; and
- Works-specific requirements: these are requirements that apply to a specific works package(s) within the Wylfa Newydd DCO Project (e.g. requirements relating only to Parc Cybi).

7.1.3 The way in which the Wylfa Newydd DCO Project is brought forward, and mitigation is delivered, is controlled through the DCO Requirements, which:

- Identify various parameters – which place controls on the location of certain buildings, structures and works (i.e. they can only be located in a defined zone) as well as imposing maximum and minimum dimensions (such as heights) of certain elements of the authorised development). The approach to parameters is introduced at chapter 4 above and set out in the DAS (Application Reference Numbers: 8.2.1 to 8.2.3).
- Require construction and operation to be undertaken in accordance with the control documents (see below).
- Control identified issues or works through requirements attached to the DCO (e.g. time limit around commencement of the Wylfa Newydd DCO Project or ecological mitigation).

7.1.4 In addition the DCO Requirements, certain mitigation identified in the ES will be secured through planning obligations. These obligations will require Horizon to provide either a financial contribution towards the provision of mitigation or to secure the provision of certain services or works.

7.2 Control documents

7.2.1 The DCO Requirements provide that Horizon would comply with a number of control documents in carrying out the Wylfa Newydd Project.

As described in table 7-1, the control documents establish the framework for the construction, operation and maintenance of the Wylfa Newydd DCO Project, and would be certified by the SoS upon grant of the DCO.

Table 7-1 Control Documents

Document Title	Document Description
Construction Method Statement (CMS)	The CMS sets out the construction methodologies, works, and machinery required for works on the Power Station Main Site. The methodologies identified in the CMS have been used for the basis of the EIA assessment. The construction of the Power Station Main Site will be undertaken in general accordance with the CMS and Horizon will be able to change the methodologies used from those identified in the CMS provided there are no materially new or different effects from those assessed in the ES.
Phasing Strategy	The Phasing Strategy identify when key mitigation (such as the Site Campus and Park and Ride facility) will be sequenced and operational. This is to ensure that key mitigation, which Horizon will have authorisation to build under schedule 1 of the DCO, is secured and will be brought forward. The DCO Requirements provide that the construction of the Wylfa Newydd DCO Project will be undertaken in accordance with the phasing outlined in the Phasing Strategy.
DAS	The DAS sets out the 'design principles' that will guide how Horizon will construct the authorised development, and illustrative design concepts which demonstrate how the Wylfa Newydd DCO Project could be brought forward in accordance with those principles. For the Main Site, the DAS sets out the building design principles and landscape principles are set out in the LHMS. For all other works, the DAS contains landscape and building design principles and the Requirements require detailed building and/or landscape design to be submitted and approved in accordance with the design principles in the relevant volume of the DAS (depending on the location) The DCO Requirements require detailed building design (including any revisions) to be submitted and approved in accordance with the design and landscape principles in the relevant volume of the DAS.
The Wylfa Newydd CoCP and sub-CoCPs	The Wylfa Newydd CoCP, together with location-specific sub-CoCPs, sets out how construction activities will be managed and controlled in order to deliver the mitigation commitments set out in the ES as well as other

Document Title	Document Description
	assessment processes undertaken (e.g. Habitat Regulations Assessment). Sub-CoCPs are provided for the Main Site, Marine Works, Off-Site Power Station Facilities, the Logistics Centre, the Park and Ride Facility and the A5025 Off-line Highway Improvements. These sub-CoCPs set out specific controls relevant to those locations which are not adequately covered under the Wylfa Newydd CoCP. Each chapter in the CoCP and sub-CoCP relates to a strategy to control general and topic-specific environmental effects. The CoCP and sub-CoCPs will be certified documents, compliance of which will be secured through the Requirements.
The Wylfa Newydd CoOP	Similar to the CoCPs, the Wylfa Newydd CoOP sets out the controls that will apply during the operation of the Project (e.g. operating hours). The CoOP will be a certified document and Horizon will be required to comply with it under the Requirements. At this stage, there are no location-specific sub-CoOPs; however, the DCO Requirements provide the opportunity for Horizon to prepare and submit a sub-CoOP for approval at a later stage if required.
Workforce Management Strategy	The Workforce Management Strategy sets out the principles which Horizon and its partners will follow to manage and control the workforce. Horizon will be required to develop a Code of Conduct with its partners in accordance with the principles set out in the Workforce Management Strategy for the management of workforce and contractor conduct, as well as specific protocols of those residing at the Site Campus. Contractors and Workers will then be required to comply with the resulting Code of Conduct during the Construction of the authorised development.
LHMS	The LHMS sets out how key landscape elements and habitats within the WNDA will be created and managed in order to mitigate the adverse ecological effects identified in the ES. It will include the illustrative reference point drawings (formerly the Landscape and Ecology Management Plan) as an appendix. The LHMS is a standalone strategy; rather than forming part of one of the CoCPs.

- 7.2.2 These documents, will deliver the majority of commitments identified in the ES and other assessments and ensure that Horizon retain control over the mitigation it is tied to.

7.3 Commitments in other documents

7.3.1 In addition to the approved control documents, Horizon has identified additional commitments in other strategies that will be secured through planning obligations. These include:

- Jobs and Skills Strategy (Application Reference Number: 8.3);
- Workforce Accommodation Strategy (Application Reference Number: 8.4);
- Welsh Language and Culture Mitigation Enhancement Strategy;
- Other measures that are proposed in other assessments, including:
 - the HIA Report (Application Reference Number: 8.19);
 - WLIA (Application Reference Number: 8.21);
 - Sustainability Statement (Application Reference Number: 8.17);
 - WFD Compliance Assessment (Application Reference Number: 8.26); and
 - the Integrated Traffic and Transport Strategy (Application Reference Number: 6.3.20).

7.3.2 A Mitigation Route Map ('the MRM') (Application Reference 8.14) is submitted with the DCO application, which sets out all of the mitigation identified in the ES as well as other non-environmental mitigation proposed by Horizon, together with its securing mechanism. This document does not form part of the DCO application itself but is submitted to assist the decision maker and interested parties to understand how the mitigation relied on by Horizon is secured.

7.4 Planning obligations

7.4.1 A number of mitigation measures (set out in the MRM) require a contribution through a planning obligation under section 106 of the Town and Country Planning Act – also known as a 'development consent obligation' – in order to make the development acceptable in planning terms. These have been informed through discussions with stakeholders in focus groups and one-to-one sessions through the Statement of Common Ground process. A Statement of Common Ground Position statement is provided as part of the DCO submission (Application Reference Number: 8.25) and further details of informal consultation carried out with IACC and other key stakeholders is provided at chapter 8 of the Consultation Report (Application Reference Number: 5.1).

Relationship with SPC application

7.4.2 The SPC planning application will be subject to its own planning obligation in relation to the specific impacts of that development. At the time of writing this Planning Statement, the SPC application is still being considered by IACC.

- 7.4.3 The draft Heads of Terms for the planning obligation in respect of the SPC application include, for example, early measures to ensure that any perceived impacts on local tourism can be moderated using positive mechanisms to develop existing and new forms of tourism. This ties in with mitigation proposals for the wider Wylfa Newydd DCO Project as set out below.
- 7.4.4 The planning obligation for the SPC Proposals is also likely to include some measures that are unlikely to be justified in planning terms for the SPC works alone (and therefore cannot therefore be taken into account by the IACC in reaching its decision on whether or not to grant planning permission) though are included as precursors to measures that will be included in the Heads of Terms for the DCO planning obligation.
- 7.4.5 For example, it is proposed that the trial period of the Wylfa Newydd Employment and Skills Service (WNESS) is extended beyond the initially agreed period in relation to supply chain positions based at Wylfa Newydd.
- 7.4.6 The WLIA for the SPC proposals identified no likely significant effects on Welsh language and culture. However, to secure enhancement measures that ensure that Horizon's contractors support and demonstrate respect towards Welsh-speaking communities a Welsh Language Initiative will be implemented upon commencement of the development. This feeds into the process set out below for the Wylfa Newydd DCO Project.
- 7.4.7 It is also proposed that the WAMS would be trialled during the SPC works to establish its effectiveness in advance of the Wylfa Newydd DCO Project.

Proposed Heads of Terms for the DCO planning obligation

- 7.4.8 For the avoidance of doubt, the mitigation listed below includes only those that need to be secured through a planning obligation and are not indicative of the suite of mitigation measures proposed to address the impacts identified in the ES.
- 7.4.9 The terms of the proposed DCO obligations are explained below:

Historic Environment

- 7.4.10 As identified in chapter 4 of appendix A of this Planning Statement, the Wylfa Newydd DCO Project will result in the loss of some of the remains of the kitchen garden at Cestyll Gardens (as a result of the location of the construction laydown area).
- 7.4.11 In addition to other proposed mitigation, including additional off-site planting delivered through the Landscape and Habitat Management Strategy, Horizon will work with the landowners and other interested parties to consider appropriate enhancement measures such as greater interpretation including on-site interpretation boards at the valley garden, interpretation boards that are visible from the Wales Coast Path, enhanced public access to the valley garden, signage from the Wales Coast Path, regular maintenance and restoration of the valley garden. Horizon will agree with National Trust, Cadw and Gwynedd Archaeological Planning Service, the designs of appropriate

landscape measures to restore and/or enhance the former location of kitchen garden.

Construction Noise

- 7.4.12 As noted at appendix A of this Planning Statement, a potential significant residual effect has been identified on Eglwys Sant Padrig Church - resulting from construction noise from the main Power Station Site. Horizon is committed to identifying practical mitigation measures to reduce or manage these residual effects. These measures could include noise insulation to reduce noise levels within the church. Alternative measures, such as a speech amplification system, will also be considered. Funding will be made available through the Community Impact Fund (see below) to implement agreed mitigation measures.
- 7.4.13 The Cemaes Primary School has also been identified as having significant residual effects due to construction noise from the main Power Station site. Horizon is committed to liaising with the primary school to identify practical mitigation measures to reduce or manage these residual effects. These measures could include the installation of noise insulation measures to reduce noise levels within teaching spaces and/or the provision of additional teaching resources. Funding will again be made available through the Community Impact Fund to implement agreed mitigation measures.

Public Rights of Way

- 7.4.14 Horizon propose contributions to mitigate the identified effects of the construction of the Power Station on PRowS.
- 7.4.15 A payment would be made to IACC for them to spend on improving other PRow in the vicinity of the site as an overall improvement to the PRow network during construction (with a legacy benefit that these improvements will have been made). This would include payments to IACC for the purposes of improvements to the existing PRow network. In discussions with IACC, emphasis would be placed on improving PRowS that are in close proximity to the WNDA or adjoin the A5025 between Valley and Tregele or on sections of the Wales Coast Path at any location on Anglesey. This funding would be in place prior to the commencement of construction.
- 7.4.16 Horizon would also make a contribution to mitigate the closure of Cemlyn Road on the Copper Trail. This would include a payment to Sustrans for the purpose of updating the Copper Trail leaflet to reflect the permanent diversion of the route between Cemlyn Bay and Llanfechell. It is proposed that this contribution would also cover the cost of printing 500 updated Copper Trail leaflets for the purposes of replacing existing stocks and making the leaflet a downloadable pdf from the Sustrans website. A further contribution would be made to IACC for the purposes of erecting new road signage for the Copper Trail between Cemlyn Bay and Llanfechell along the new route. This would also include the removal of obsolete signage near Tregele.

Welsh Language

- 7.4.17 The WLIA (Application Reference Number: 8.21) has identified the need for various enhancement and mitigation measures to be secured through the Welsh Language and Culture Mitigation and Enhancement Strategy (WLCMES). This mitigation is proposed to be secured through the planning obligations.
- 7.4.18 In order to co-ordinate all the measures in the WLCMES, Horizon would, prior to construction, appoint a Welsh Language and Culture Co-Ordinator (WLCC) to focus on the development and implementation of Welsh language and culture mitigation and enhancement measures during construction and operation of Wylfa Newydd.
- 7.4.19 Horizon would establish a management group which would have oversight of and be accountable for the delivery of this WLCMES, as well as Horizon's Corporate Welsh language policy and Action Plan. This policy would be updated on an annual basis to include details on what types of internal communications will be made available bilingually.
- 7.4.20 Horizon will establish and chair an external stakeholder group (Welsh Language and Culture Coordinator) to monitor the implementation of the Welsh Language and Culture Mitigation and Enhancement Strategy and provide advice on its delivery
- 7.4.21 Horizon will complete an evaluation of the impact of Wylfa Newydd on the Welsh language in the KSA overseen by the external stakeholder group
- 7.4.22 Horizon will implement the Welsh Language and Culture Mitigation and Enhancement Strategy prior to and throughout the construction period of the Project. Horizon will monitor and report on compliance with the Welsh Language and Culture Mitigation and Enhancement Strategy every six months to the Management Group and the strategy will reviewed on an annual basis.
- 7.4.23 In order to ensure Welsh language workforce skills are considered and valued during the Wylfa Newydd project, Horizon would:
- assess the Welsh language skills requirements for job roles when developing construction and operational job profiles. This assessment will be based on a Welsh language skills competency framework and assessment tool to be developed by Horizon. The level of Welsh language skills required for each post will be recorded as part of the recruitment process and included within the job profile.
 - ensure a Welsh-speaking member of staff is included on interview panels for jobs where candidates are required to have Welsh language skills so that the candidate's linguistic skills can be properly assessed; and
 - develop and adopt a Welsh language skills competency framework and a Welsh language skills assessment tool for recruitment processes. Horizon would provide relevant recruitment managers with training to use tools to

determine the language requirements of construction and operational roles.

7.4.24 In order to increase the likelihood of Welsh speakers applying for posts at Wylfa Newydd, Horizon would:

- maintain the Wylfa Newydd apprenticeship scheme and continue to provide the established 'Work Insight Week', or an equivalent scheme, to young people;
- as part of its recruitment strategy, ensure all available job opportunities are advertised through recruitment channels that target a Welsh-speaking audience. This will include the Wylfa Newydd Employment & Skills Service (WNESS) as well as other local and national partners that engage with a Welsh-speaking audience. All job advertisements will be posted in English and Welsh;
- distribute, on a regular basis, information on career opportunities at Wylfa Newydd to local communities and young people including the bilingual Wylfa Newydd 'Career Route Maps' and Job Profiles. Horizon will develop role model activities and resources to encourage awareness of career opportunities within the community Welsh-speaking Horizon staff (including Welsh-learners) and local suppliers will be involved and front these 'role model' activities and resources such as case study video clips, written materials, presentations in schools; and
- continue to develop and provide bilingual educational support (e.g. classroom materials) for primary and secondary pupils as well as further education students during construction.

7.4.25 In order to increase the likelihood of Welsh speakers applying for posts at Wylfa Newydd Horizon would ensure Menter Newydd and suppliers in all tiers are provided with information on, and encouraged to use, local suppliers. Horizon's suppliers will be provided with the business database being developed by IACC, other local authorities, North Wales Economic Ambition Board and Welsh Government in order to raise awareness of local suppliers.

7.4.26 There is a need to mitigate the impact of non-Welsh speaking workers moving to the area and ensure that they are aware of the Welsh language and culture when applying for posts at Wylfa Newydd. There is also a need to enhance the positive impacts on employment by ensuring that Welsh speakers are aware that their linguistic skills will be valued by Horizon.

7.4.27 In order to mitigate the impact of non-Welsh speaking workers on local services, Horizon would fund a peripatetic teacher service to support current immersion education capacity on Anglesey (and potentially Gwynedd if required) across primary and secondary schools. The number of teachers funded will be proportionate to the number of workers that will bring their families and increase or decrease in response to demand. Horizon proposes to initially fund two teachers throughout the construction period.

- 7.4.28 Horizon will engage and facilitate ongoing dialogue with IACC, Gwynedd Council, Mudiad Meithrin (Welsh-medium early years representative body) and Menter Iaith Môn to discuss the inflow of pre-school age children and the impact on local Welsh-medium provision and measures to mitigate this impact. As part of this dialogue, Horizon will monitor, on an ongoing basis, the number of workers bringing families, including those of pre-school age. This data will be used to identify the appropriate mitigation required to mitigate the effect on Welsh-medium provision.
- 7.4.29 Horizon would also collect aggregate and anonymised data on partners and children moving to the area with workers and share this data with local authorities. This will take account of data protection considerations but, where possible, will include numbers of children, ages and Welsh language skill levels to provide information for education and early years planners. This process may be linked to the WAMS.
- 7.4.30 In order to ensure that non Welsh speakers are aware of the Welsh language and culture when applying for posts at Wylfa Newydd, Horizon would distribute information to contractors and all personnel on the Welsh language and culture as part of recruitment materials. This will include a general statement on the value Horizon places on Welsh language skills, the level of skills required for a post as well as background information on the Welsh language.
- 7.4.31 To ensure that suppliers are aware of the Welsh language and culture, and Horizon's Welsh language policy, Horizon would include Welsh Language information requirements as an agenda item for all contractor meetings. Horizon would provide information on their Welsh language capacity, Horizon's Welsh Language Policy and obligations, and how contractors will adhere to Horizon's Welsh language policy (i.e. through recruitment processes and internal and external communications).
- 7.4.32 Horizon would also provide language and culture awareness training to all construction and operational staff and require staff to demonstrate linguistic courtesy and awareness of Horizon's Welsh language corporate policy.
- 7.4.33 Horizon will also develop a programme of Welsh language training at different levels for Horizon Wylfa Newydd construction and operational staff where this is a relevant requirement within a post. Horizon will establish a Welsh language mentoring scheme for learners. Horizon will maintain their Welsh speaker 'badge' scheme as well as ensuring that Menter Newydd and suppliers in all tiers also operate such a scheme. Horizon will collect data on the Welsh language skills of its own workforce and update this on an annual basis. Horizon will encourage staff to take up Welsh language training opportunities.
- 7.4.34 To mitigate the impact of the inflow of partners and dependents with non-home-based workers from outside the KSA, Horizon would provide welcome packs, which would draw on information in the Welsh Government's planned Welcome Packs and will provide information on local services and the community.

- 7.4.35 Horizon would also fund provision of community language services (including the development of appropriate training materials) to support the integration of incomers and develop capacity in the local community. This would be linked to the role of the Community Involvement Officers (CIO), who would be a key interface between the local community, key stakeholders and Horizon management. The CIO would be involved with implementation of HIA measures as well as relevant ES, WLIA and Equality Impact Assessment mitigation.
- 7.4.36 Horizon will help fund, throughout the construction period, a community translation service (where relevant to Horizon Wylfa Newydd) to enable local organisations to provide simultaneous translation facilities for community groups. This will assist local community groups to effectively engage and discuss issues relating to the Wylfa Newydd Project. The details will be established pre-construction.
- 7.4.37 Horizon would provide a financial contribution to cover the cost of monitoring the WLCMES on an annual basis.

Health and Wellbeing

- 7.4.38 The HIA identifies various enhancement and mitigation measures that would be secured via a legal agreement in order to make the development acceptable in planning terms.
- 7.4.39 Horizon would establish, fund and chair an external Health and Well-being Engagement sub-group to improve governance and community confidence. This would include members of the health and emergency services to monitor the implementation of the HIA mitigation strategy and provide advice on its delivery. When appropriate Horizon would facilitate bespoke analysis of routinely collected public health data (existing indicators), relevant to the Wylfa Newydd Project. The information would inform discussion by the Health and Well-being Monitoring Group. If appropriate the Group will discuss the need for additional mitigation or follow-up investigation. To facilitate this process, a set of key topics and indicators will be agreed. The topics will be expected to include the following:
1. Access to community healthcare services;
 2. Respiratory health;
 3. Accident hotspots;
 4. Sleep disturbance;
 5. Housing market pressures;
 6. Recruitment rates from local communities;
 7. Safeguarding [with regard to vulnerable adults and children; and
 8. Community lifestyles, behaviour, including community cohesion, and physical activity levels.

7.4.40 As introduced above, Horizon will appoint bi-lingual CIO(s) to develop and implement many of the HIA mitigation measures during construction and operation of Wylfa Newydd. The CIOs will be a key interface between the local community, key stakeholders and Horizon management. The CIOs will be involved with implementation of HIA measures as well as relevant ES, WLIA and EqIA mitigation. Responsibilities will include the facilitation and implementation of mitigation in the following areas during construction and operation.

1. Health and wellbeing in the local community
2. Developing a sensitive lettings policy - incorporated in the Construction Worker Accommodation Management Service (CWAMS).

7.4.41 The CIO will also interface in related areas such as:

- i. Supporting cultural initiatives to enhance and celebrate local identity.
- ii. Promotion of education, upskilling, training and local employment opportunities, including support for young people from disadvantaged backgrounds.
- iii. Providing information about planned PROW diversions to local communities including the use of bi-lingual information boards.
- iv. Promoting local walking, cycling, public transport, car sharing, travel planning, leisure facilities and road safety initiatives.
- v. Management of local worker conduct issues.
- vi. Dissemination of information about construction and operational safety.
- vii. Providing support and a communication channel for people experiencing elevated levels of emissions or disturbance (nuisance).
- viii. Providing feedback to the management and monitoring groups.
- ix. Promoting community cohesion.
- x. Supporting the integration of incomers into host communities.

7.4.42 In order to plan for healthcare services for the construction workforce Horizon is committed to:

- Providing appropriate Occupational Health and Hygiene services for the construction and operational workforce. This would be completed in agreement with Betsi Cadwaladr University Health Board (BCUHB) and Public Health Wales (PHW).
- Making appropriate healthcare provision or contributions to meet the medical and healthcare needs of the construction workforce.

7.4.43 Horizon will prepare, in consultation with BCUHB, PHW, the Welsh Ambulance Service Trust (WAST) and the wider local health economy, a specification for health services (on- and off-site).

- 7.4.44 The final design of the Site Campus Medical Centre will be prepared in consultation with the local healthcare authorities / representatives and will be operated by a suitable healthcare service provider.
- 7.4.45 Horizon will deliver a health and welfare programme, and ensure access is provided, to all of its workers. This programme will ensure that local community health and welfare services and resources used by local residents are not adversely affected by the Wylfa Newydd Project.
- 7.4.46 As set out in more detail below, Horizon would make provision for emergency care both on-site, through the provision of one dedicated ambulance based in the WNDA emergency transfer on site, as well as a consideration of a package of additional funds for emergency services.
- 7.4.47 In order to mitigate the potential impact of light pollution during construction, Horizon will provide blackout blinds or alternative mitigation to residents who experience unforeseen cases of sleep disturbance.

Emergency services

- 7.4.48 Horizon is committed to providing appropriate provision of emergency services for the construction workforce. An appropriate financial contribution would be considered for the emergency services, for the needs of the construction workforce.
- Discussions will be initiated with the WAS to ensure that the Project's requirements are aligned with the expectations and capacity of the NHS ambulance service. Worker data would be monitored and service levels amended accordingly. The level of contribution will be proportionate to the number of workers and increase or decrease in response to demand. The demand expected throughout the construction period will be monitored and data shared with emergency service providers in order to establish likely demand levels.
 - Paramedic services would be provided in the WNDA. There would be competent emergency response for the main site, providing initial trauma care and minor injury treatment ahead of ambulance or helicopter transfer to hospital. Exact levels of staffing would be confirmed, but there would be at least one qualified paramedic across typical site working hours and this may be increased at peak times.
 - One ambulance would be based in the WNDA for dedicated use by the Wylfa Newydd Project for emergency transfer on-site only. The ambulance would be located so as to ensure timely access to the whole of the construction site. It is anticipated that any transfer to hospital for emergency treatment would be by NHS emergency ambulance services.
- 7.4.49 Following ongoing discussions with public service providers, it is expected that a package of additional funds would be agreed to enable adequate resources to be provided as required for emergency services. It is therefore

expected that detailed service planning would be conducted to facilitate the identification of detailed criteria under which mitigation is requested and funds released.

Education and Skills

- 7.4.50 Prior to construction, Horizon would establish, fund and maintain online a Supply Chain Portal to demonstrate the ability to engage with the local supply chain and maximise opportunities for local people.
- 7.4.51 The Supply Chain Portal will be part of the Supply Chain Service, which will oversee the delivery of a Supply Chain Action Plan, setting out strategic objectives and desired outcomes into the detailed actions and processes required to deliver Horizon's goals. It can also determine how Horizon will monitor these aspirations and commitments.
- 7.4.52 Horizon will establish, fund and maintain an Employment and Skills Service. The service is a collaboration between Horizon and key stakeholders with the aim of promoting and sourcing local employment opportunities for Wylfa Newydd, thereby demonstrating Horizon's commitment to optimising local recruitment and be a potential key mitigation against displacement effects.
- 7.4.53 Horizon will establish and maintain an Employment and Skills Portal, a web based procurement platform as part of the Employment and Skills Service to allow people to gain employment on the Wylfa Newydd Project. It will capture vacancies with the project's contractors.
- 7.4.54 Horizon will seek to incorporate provisions into contracts, where appropriate, to offer training and employment opportunities for local communities and to address under-representation of particular groups in particular sectors, and the need for providing skills and opportunities for people experiencing long-term unemployment. Horizon will work with its suppliers to ensure that wherever appropriate employment opportunities arising from Horizon's contracts are communicated to local communities.
- 7.4.55 Horizon will undertake measures to understand the impact its procurement activities have on local communities. Horizon will encourage a positive contribution from its suppliers to the local communities in which they work on our behalf. Horizon will fully explore the opportunities for developing appropriate contractual provisions to deliver specific community benefits.
- 7.4.56 School enrolment will be monitored by IACC and would be linked to the WAMS dataset where possible. Should localised issues arise where applications are made for places in schools at capacity, and IACC can demonstrate the nature of the resulting effect (e.g. temporary short-fall in funding, additional costs for appeals processes etc), Horizon will provide funding to address this via the Community Impact Fund (see below).
- 7.4.57 In order to enhance local employment opportunities, Horizon will establish a fund to support a range of education, training and employment initiatives relating to both the construction and operational phases of the project. This will be a flexible Skills Fund that can support:

- training capacity related to key skill requirements needed across the Wylfa Newydd Project;
- development of training courses related to key skill requirements needed across the Wylfa Newydd Project;
- operation of the WNESS (including outreach, work readiness training etc);
- communication routes (including social media platforms) within the local community to enhance awareness of training and employment opportunities;
- initiatives for upskilling of existing construction workers in the local area; and
- educational activity (especially focused around STEM subjects) to promote, in particular, skills for and interest in the nuclear and construction industries. This could include capital spending to support the curriculum but excludes spending on boosting school place numbers which is covered by the Community Impact Fund.

7.4.58 Horizon will support IACC, BCUHB, WAST, NWP and NWFRS in the development of their own workforce strategy (to mitigate labour churn within the health and social care sector). Horizon will support the development of these Workforce Strategies through sharing of workforce information, assisting in carrying out any required monitoring, and the provision of an appropriate financial contribution and/or support to the IACC and BCUHB for officer time within those organisations.

Accommodation

7.4.59 As outlined in the Workforce Accommodation Strategy (Application Reference Number: 8.4) Horizon will establish a WAMS to demonstrate that the impact on existing housing and tourist accommodation is acceptable. This will be funded throughout the construction period. The Code of Conduct will require construction workers, as part of their orientation, to register with the WAMS.

7.4.60 Horizon is proposing a flexible Housing Fund that can be used to mitigate a range of effects and to boost the supply of housing, including increasing availability of existing stock and funding council officers' time relating to additional housing matters (such as enforcement or dealing with residents' housing needs). The Housing Fund would be able to prioritise spending on measures that can boost supply quickly such as expanding existing empty homes programmes to boost supply or putting more resources into measures that make better use of existing stock or that help local residents retain or secure appropriate housing and so avoid wider housing impacts. The Housing Fund would seek to support:

- Bringing empty homes back into use over a four to five year period in the lead up to peak construction;

- New-build permanent housing, including affordable housing;
- Social-rented sector through the provision of assistance to existing tenants;
- Smaller interventions to stimulate the supply of latent accommodation;
- Support to IACC for provision of additional housing officer capacity.

Tourism

- 7.4.61 Horizon will provide a Tourism Fund to address any material effects which could arise on the sector as a result of the Wylfa Newydd DCO Project. As set out above, initially, Horizon are committed to providing a Tourism Fund as part of the SPC Proposals. This fund will seek to ensure that the perceived impacts on the local tourism sector can be moderated using positive mechanism to develop existing and new forms of tourism. This will be delivered as part of the s106 agreement for that planning application under the TCPA [RD2].
- 7.4.62 The Accommodation and Tourism Services would stay in place for the first two years of operation, in order to monitor and manage effects on visitor numbers, should they arise, as a result of the operation of the Power Station. This will ensure that for the first two years after operation effects on visitor numbers are monitored and that there is a mechanism in place to address any adverse effects should they arise.
- 7.4.63 Horizon will support the tourism sector during and for 2 years post the construction period by:
- Sponsorship of events; annual and owned locally.
 - Charity race events to encourage use of re-routed paths and routes, which will potentially include marathons, sponsored walks and cycling.
 - Supporting the promotion of local produce.
 - Supporting a Tourism Ambassador Scheme similar to STEM ambassadors in schools to promote the tourism sectors in schools etc.
 - Potentially supporting funding to gain DBS clearance for participants. Funds could also support the administration of this.
- 7.4.64 Under the Tourism Fund, Horizon will provide support to local surveys for:
- Visit Wales visitors survey.
 - Visit Wales Business Barometer.
 - Accommodation Assessment.
- 7.4.65 Funding would be required to support the data gathering on the accommodation survey. These surveys will be used to monitor key effects of the Project and link them to mitigation triggers to be defined by the administration of the Tourism Fund.

Community Impact

- 7.4.66 Horizon would make a Community Impact Fund available, which might be used to deal with unforeseen non-significant effects of the Project during its construction and operation.
- 7.4.67 The remit of the Community Impact Fund could include potential effects on education facilities, effects arising to local recreational resources and open spaces, and for unforeseen effects arising as a result of the presence of the workforce in the area, including effects on people/groups with protected characteristics. The fund will be managed by a committee consisting of representatives from Horizon, IACC, Welsh Government and the emergency services.
- 7.4.68 Demand for access to leisure centres is a key local concern. While no significant effect has been identified on leisure centres as a result of the Wylfa Newydd DCO Project, it is proposed that a mechanism is included within the remit of Community Impact Fund to provide funding for leisure services should monitoring by providers identify significant additional demand that is not already funded via other mechanisms (for example through council tax provision).

Horizon's Corporate Sustainability

- 7.4.69 Horizon's Corporate Sustainability function supports the sustainability direction of the company including, objectives and targets, and monitors progress. The principle governing Corporate Sustainability's way of working is that responsibility for promoting sustainability should, as far as possible, lie with the relevant function or team in the Wylfa Newydd Project. The Corporate Sustainability function then acts in a complementary fashion; supporting the development of particular aspects of the Wylfa Newydd Project, tracking progress and highlighting gaps and opportunities in the consideration of sustainability matters as and when they arise. This approach is designed to ensure the consideration of sustainability and the roll out of behaviours, key themes and topics of the Corporate Sustainability Strategy permeate across the whole of the Horizon business to encourage integration, rather than sitting apart as a separate review and advisor function.
- 7.4.70 The role of the Corporate Sustainability function is:
- monitoring for external developments relevant to Horizon (e.g. changes in corporate reporting requirements, emerging non-government organisation campaigns, activity among peer companies);
 - setting and maintaining the Corporate Sustainability Strategy on behalf of the Board;
 - overseeing the setting of annual Corporate Sustainability Objectives in line with the Corporate Sustainability Strategy and to complement the Sustainability Assessment Objectives for the Project.

- 7.4.71 In setting objectives, the Corporate Sustainability function will review those already set, challenge if required and propose objectives to fill gaps;
- monitoring progress against Corporate Sustainability Objectives and reporting to the Board;
 - liaison with other teams and functions within Horizon to provide advice and expertise, for example, attending Environment Group meetings and participating in design review activities;
 - leading internal and external sustainability communications including supplying content to other individuals and teams in Horizon who own key stakeholder relationships; and
 - defining and collating company sustainability indicators for internal and external reporting.
- 7.4.72 Corporate Sustainability is accountable to the Horizon's Board via a process of periodic reporting. The role of the Board is as follows:
- the periodic approval of the Corporate Sustainability Strategy, Objectives and Annual Targets;
 - commitment to implement agreed targets in own areas of responsibility; and
 - agreement to liaise openly with Corporate Sustainability, for example, through issuing invitation to meetings and supplying information on request.

Horizon's Supply Chain Charter

- 7.4.73 Horizon will comply with its Supply Chain Charter, which establishes the strategic principles and headline expectations that will apply to the conduct of Horizon, Menter Newydd and all members of the supply chain for the Project.
- 7.4.74 A Supply Chain Action Plan will set out strategic objectives and desired outcomes into the detailed actions and processes required to deliver Horizon's goals. It can also determine how Horizon will monitor these aspirations and commitments. The principles for the Supply Chain Action Plan would be agreed with IACC, Welsh Government, NWEAB and Menter Newydd.
- 7.4.75 A Supply Chain Service will oversee the delivery of the Action Plan and is jointly formed of stakeholders and key delivery partners from the Wylfa Newydd Supply Chain.
- 7.4.76 Horizon is committed to fostering sustainable procurement by promoting opportunities for all and ensuring that expectations in key performance areas including safety, security, quality, human rights, environment and Welsh language and culture are understood and implemented where appropriate throughout the supply chain.

- 7.4.77 To clarify what Horizon expect from its suppliers, Horizon has developed a Supplier Code of Conduct to supplement the Supply Chain Charter and clearly specify what behaviours, practices and regulations it expects to see demonstrated and complied with.
- 7.4.78 Horizon's will continue to review procurement processes to ensure they remain transparent and open to the whole of the supplier community.
- 7.4.79 Horizon's suppliers will make provision for the health, safety and welfare of their people, visitors and contractors and those in the community who may be affected by their activities.
- 7.4.80 Horizon will seek to promote the benefits of adopting fair employment practices through the supply chain to its partner organisations, suppliers and the market.
- 7.4.81 Horizon's ongoing programme of contract review will seek to ensure that, wherever appropriate, the contract terms require Horizon's suppliers to make provision for the welfare of their workforce.
- 7.4.82 Horizon's Sustainable Procurement Codes and Standards will promote ethical sourcing practices and environmental sustainability.
- 7.4.83 Suppliers will keep documentation to demonstrate compliance with Horizon Nuclear Power Suppliers Code of Conduct, and demonstrate to Horizon a commitment to Horizon's procurement requirements and practices.

Service Level Agreement

- 7.4.84 Horizon will extend the funding provided to IACC through the Planning Performance Agreement to fund officer time to support monitoring and enforcement of the Wylfa Newydd Project, discharge of conditions post-DCO.

Scale of Contributions

- 7.4.85 Discussions are ongoing with IACC, Welsh Government and other relevant stakeholders regarding the appropriate scale for the above contributions. On this basis, at this stage this document does not set out the proposed size of any of the funds. This will be confirmed following further discussions with the relevant stakeholders.

Relationship to Monitoring Framework

- 7.4.86 Further details on the proposed approach to monitoring of the impacts of the Wylfa Newydd Project, including how monitoring will be used to inform the release of s106 funds is set out in the Wylfa Newydd CoCP (Application Reference Number: 8.6).

7.5 Summary

- 7.5.1 This chapter has set out how the mitigation identified in the ES and other assessments would be secured and provided through the DCO Requirements and the use of planning obligations.

- 7.5.2 The DCO Requirements provide that Horizon would comply with a number of control documents, which establish the framework for the construction, operation and maintenance of the Wylfa Newydd DCO Project, and would be certified by the SoS upon grant of the DCO.
- 7.5.3 In addition to the approved control documents, Horizon has identified additional commitments in other strategies that will be secured through planning obligations, as summarised in this chapter.
- 7.5.4 The Mitigation Route Map (Application Reference 8.14) sets out all of the mitigation identified in the ES as well as other non-environmental mitigation proposed by Horizon, together with its securing mechanism.

8 Planning balance

- 8.1.1 NPSs EN-1 and NPS EN-6 remain important and relevant matters which should carry significant weight in the determination of nuclear energy NSIPs that will deploy after 2025. They continue to represent the primary policy basis for a decision made by the SoS on this application for an order for development consent for the Wylfa Newydd DCO Project.
- 8.1.2 The ministerial statement in December 2017 [RD3] is clear that the significant weight attaching to NPSs EN-1 and EN-6 includes statements in those policy documents concerning the need for nuclear power. Chapter 5 of this Planning Statement addresses this in detail and concludes that the need for nuclear power is now, if anything, even more urgent than when assessed under NPS EN-6 in 2011.
- 8.1.3 As set out in section 5, given the level and urgency of need, paragraph 4.1.2 of NPS EN-1 states that the decision maker should “*start with a presumption in favour of granting consent to applications for energy NSIPs*” [RD4].
- 8.1.4 Paragraph 4.1.3 of NPS EN-1 [RD4] states that in considering any proposed NSIP the decision maker should take into account:
- its potential benefits, including in addition to its contribution to meeting the need for energy, its contribution to job creation and any long term or wider benefits; and
 - its potential adverse impacts, including any long term and cumulative adverse impacts as well as any measures to avoid, reduce or compensate for any adverse impacts.
- 8.1.5 Paragraph 4.1.4 of NPS EN-1 provides additional policy on decision making and states that the decision maker should take into account “*environmental, social and economic benefits and adverse impacts, at national, regional and local levels*” [RD4].
- 8.1.6 Appendices A to F of this Planning Statement provide an assessment of the potential benefits and potential adverse impacts of each component part of the Wylfa Newydd DCO Project.
- 8.1.7 Whilst relevant and contributory to the overall planning balance, Appendices B – F demonstrate that the proposals for the Associated Development and Off-Site Power Station Facilities are appropriate in planning terms in their own right, when considered against NPS EN-1 and EN-6 and relevant national and local planning policy.

Potential benefits

- 8.1.8 The planning benefits of the Wylfa Newydd Project are set out at chapter 6 of this Planning Statement.
- 8.1.9 The contribution that the Wylfa Newydd Project will make to meeting the need for energy is significant and should be given considerable weight. Furthermore, Wylfa Newydd benefits from the policy presumption in favour of granting development consent to applications for energy NSIPs.

- 8.1.10 The analysis summarised at chapter 4 of this Planning Statement demonstrates that since NPS EN-6 [RD5] was published in 2011 (which specifically highlighted the urgent need for new nuclear energy) the need has, if anything, become even more pressing.
- 8.1.11 By 2035, at least 31GW of additional capacity over and above the existing resources is needed to meet the minimum generating capacity required in 2035. Given that 64GW of existing capacity is expected to retire, this adds up to a capacity requirement of at least 95GW by 2035.
- 8.1.12 This shortfall, in combination with the apparent lack of proven low-carbon alternatives to new nuclear, and given the UK's emissions targets, creates a substantial need for new nuclear plant.
- 8.1.13 The employment generation during the construction and operational periods are significant, delivering economic benefits for local residents and associated beneficial effects on health and well-being as well as Welsh language and culture.
- 8.1.14 The estimated investment of between £200 million and £400 million within north Wales over the construction period represents a significant benefit to the local economy in Wales.
- 8.1.15 The annual average direct, indirect and induced increase in income of around £20 million on Anglesey from staff costs at the Power Station would represent a beneficial effect on the local economy on Anglesey.
- 8.1.16 Other long term and wider benefits, as set out at chapter 6, include improvements to infrastructure, the establishment of the Tourism Fund, the measures set out in the Jobs and Skills Strategy, the Housing Fund, improvements to recreation and PRow and the remediation of land.

Potential adverse impacts

- 8.1.17 Horizon would take all reasonable steps to limit the adverse effects of the Wylfa Newydd DCO Project as far as possible. Mitigation and good practice measures are proposed in order to avoid, reduce or compensate for adverse impacts where possible.
- 8.1.18 The way in which the Wylfa Newydd DCO Project is brought forward and mitigation is delivered is controlled is set out earlier in this document.
- 8.1.19 Even with mitigation in place the Wylfa Newydd DCO Project is, however, likely to result in some residual adverse effects.
- 8.1.20 This Planning Statement provides an assessment of these potential adverse effects for each of the components of the Wylfa Newydd DCO Project and for those topics considered at a project wide level. This analysis follows the assessment principles and generic and nuclear considerations in NPS EN-1 and NPS EN-6, and national and local policy where relevant. It demonstrates that these works do not cause any potential adverse effects that, considered individually, cumulatively or as a whole, are so severe that the decision maker should refuse the application.

- 8.1.21 The full list of residual effects of the Wylfa Newydd DCO Project, including cumulative effects where applicable, is set out at chapter J2 of the Environmental Statement (Application Reference Number: 6.10.2).
- 8.1.22 Where adverse effects have been identified, this Planning Statement has demonstrated that there would be no conflict with relevant NPS policy or other relevant national or local policy.

Summary

- 8.1.23 In summary, the Wylfa Newydd DCO Project will deliver significant benefits including a major contribution to meeting the pressing, and increasing, need for nuclear power by 2035 and significant benefits to the local economy.
- 8.1.24 Whilst potential adverse impacts arise from the Wylfa Newydd DCO Project subject to appropriate mitigation, it would not have impacts on the local or the wider area which are sufficient to override the overall presumption in favour, as to warrant refusal of DCO.
- 8.1.25 The Wylfa Newydd DCO Project would deliver significant benefits, including both the contribution it would make towards satisfying the urgent need identified in paragraph 3.5.1 of NPS EN-1, which should be given “substantial weight”, and other substantial benefits arising in terms of job creation, upskilling the local workforce and to the local economy, that weigh significantly in its favour. It is considered that the significant benefits delivered by the Wylfa Newydd DCO Project would outweigh the residual adverse impacts identified following mitigation and, together with the policy presumption in favour of granting consent in accordance with paragraph 4.1.2 of NPS EN-1, demonstrate a clear and compelling case in favour of the Order being made.

9 Conclusion

- 9.1.1 The principle of the need for new nuclear power stations, and that this need is urgent, is firmly established in NPS EN-1 [RD4] and NPS EN-6 [RD5]. The policies included in the Overarching NPS for Energy (EN-1) and NPS EN-6 are important and relevant matters in the context of decisions under section 105 of the Planning Act 2008 [RD1].
- 9.1.2 The UK Government have concluded that Wylfa is potentially suitable for the deployment of a new nuclear power station.
- 9.1.3 Paragraph 3.1.3 of NPS EN-1 states that the decision maker “should assess all applications for development consent for the types of infrastructure covered by the energy NPSs on the basis that the Government has demonstrated that there is a need for those types of infrastructure and that the scale and urgency of that need is as described for each of them in this Part” [RD4].
- 9.1.4 Paragraph 3.5.1 of NPS EN-1 confirms that “there is an urgent need for new electricity generation plant, including new nuclear power” [RD4].
- 9.1.5 In accordance with paragraph 3.1.4 of NPS EN-1, the decision maker should “give substantial weight to the contribution which projects would make towards satisfying this need” [RD4].
- 9.1.6 Paragraph 4.1.3 of NPS EN-1 states that the decision maker should take into account the potential benefits (including meeting the urgent need) and potential adverse impacts, as well as measures to avoid, reduce or compensate for any adverse impacts.
- 9.1.7 The Wylfa Newydd Project would build on the long-established history of safe nuclear power generation on Anglesey, creating significant employment opportunities and injecting many millions of pounds per year into the economies of Anglesey and North Wales.
- 9.1.8 Horizon has taken all reasonable steps to limit the effects of the Wylfa Newydd DCO Project as far as possible. When considered in the planning balance, the national and local benefits, including the urgent need identified in paragraph 3.5.1 of NPS EN-1, outweigh any residual adverse impacts. This, together with the policy presumption in favour of granting consent in accordance with paragraph 4.1.2 of NPS EN-1, demonstrate a clear and compelling case in the public interest for the Order for the Wylfa Newydd DCO Project being made.

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RD52	Welsh Government, 2017. <i>Technical Advice Note 15: Development and Flood Risk</i> [Online]. [Accessed 2 February 2018]. Available from: https://gov.wales/topics/planning/policy/tans/tan15/?lang=en

Appendix A Wylfa Newydd Power Station Planning Statement

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Contents

1	Appendix A Wylfa Newydd Power Station	1
1.1	Introduction	1
2	Wylfa Newydd Power Station.....	2
2.1	Description of development	2
	<i>Power Station detailed description.....</i>	<i>3</i>
2.2	Design, layout and scale.....	3
2.3	Ecological mitigation and compensation sites	4
3	The site and surrounding area	5
3.1	Introduction	5
3.2	Existing context.....	6
	<i>Air quality.....</i>	<i>6</i>
	<i>Biodiversity</i>	<i>6</i>
	<i>Coastal change and marine environment</i>	<i>7</i>
	<i>Flood risk.....</i>	<i>7</i>
	<i>Historic environment.....</i>	<i>8</i>
	<i>Landscape and visual.....</i>	<i>8</i>
	<i>Public access and recreation</i>	<i>9</i>
	<i>Noise and vibration</i>	<i>10</i>
	<i>Socio-economic</i>	<i>10</i>
	<i>Soils and geology</i>	<i>11</i>
	<i>Shipping and navigation</i>	<i>11</i>
	<i>Water quality and resources</i>	<i>12</i>
3.3	Planning history	12
	<i>Existing Power Station.....</i>	<i>12</i>
	<i>Site preparation and clearance.....</i>	<i>12</i>
4	Principal planning analysis	14
4.1	Principal planning analysis	14
4.2	Site-specific assessment	14
	<i>Air quality and emissions.....</i>	<i>15</i>
	<i>Coastal change and marine environment.....</i>	<i>18</i>
	<i>Flood risk.....</i>	<i>24</i>
	<i>Historic environment.....</i>	<i>28</i>
	<i>Landscape and visual.....</i>	<i>33</i>
	<i>Public access and recreation</i>	<i>46</i>
	<i>Noise and vibration</i>	<i>50</i>
	<i>Socio-economic</i>	<i>54</i>
	<i>Soils and geology</i>	<i>57</i>
	<i>Traffic and transport.....</i>	<i>61</i>
	<i>Water quality and resources</i>	<i>64</i>
	<i>Biodiversity</i>	<i>72</i>
	<i>Human health and well-being</i>	<i>79</i>
5	Planning Balance	81
6	Conclusion	85

List of Figures

Figure 2-1 Illustrative site layout..... 3

Figure 3-1 Wylfa Newydd Development Area location plan..... 5

1 Appendix A Wylfa Newydd Power Station

1.1 Introduction

- 1.1.1 The purpose of this appendix is to consider the site-specific planning issues relevant to the elements of the Wylfa Newydd DCO Project that are located within the Wylfa Newydd Development Area (WNDA), excluding the Site Campus. These are namely the Power Station, other on-site development and the Marine Works.
- 1.1.2 The WNDA is the indicative area of land and sea including the Power Station Site and the surrounding areas that would be used for the construction and operation of the WNDA Development. The term WNDA includes the Site Campus, although the Planning Statement (Application Reference Number: 8.1) considers the site-specific planning issues relevant to the Site Campus at Appendix C.
- 1.1.3 Where combined environmental effects occur between the Site Campus and the Power Station, Marine Works and/or other on-site development, they are assessed jointly within this appendix.
- 1.1.4 Project-wide considerations and those related to other sites are considered elsewhere in the Planning Statement.
- 1.1.5 This appendix is structured as follows:
- section 2 – provides a description of the Power Station, Marine Works and other on-site development;
 - section 3 – provides a description of the WNDA;
 - section 4 – provides the planning analysis;
 - section 5 – sets out the planning balance; and
 - section 6 – provides the conclusion to this appendix.

2 Wylfa Newydd Power Station

2.1 Description of development

2.1.1 The WNDA comprises the following buildings and structures.

- **Power Station:** the proposed new nuclear power station at Wylfa, including two United Kingdom Advanced Boiling Water Reactors (UK ABWRs), the Cooling Water System, supporting facilities, buildings, plant and structures, radioactive waste and spent fuel storage buildings and the Grid Connection (apparatus to transfer electrical energy to the National Grid high voltage electricity transmission network).
- **Marine Works:** comprising:
 - Permanent Marine Works: the Cooling Water System, the Marine Off-Loading Facility (MOLF), breakwater structures, shore protection works, surface water drainage outfalls, waste water effluent outfall (and associated drainage of surface water and waste water effluent to the sea), fish recovery and return system, fish deterrent system, navigation aids and Dredging; and
 - Temporary Marine Works: temporary cofferdams, a temporary access ramp, temporary navigation aids, temporary outfalls and a temporary barge berth.
- Other on-site development including:
 - landscape works and planting;
 - drainage / surface water management systems;
 - public access works including temporary and permanent closures and diversions of Public Rights of Way (PRoWs);
 - new Power Station Access Road and internal site roads;
 - car parking;
 - construction compounds and temporary parking areas;
 - laydown areas;
 - working areas and temporary works and structures;
 - temporary construction viewing area;
 - diversion of utilities, electricity connections; and
 - perimeter and construction fencing.

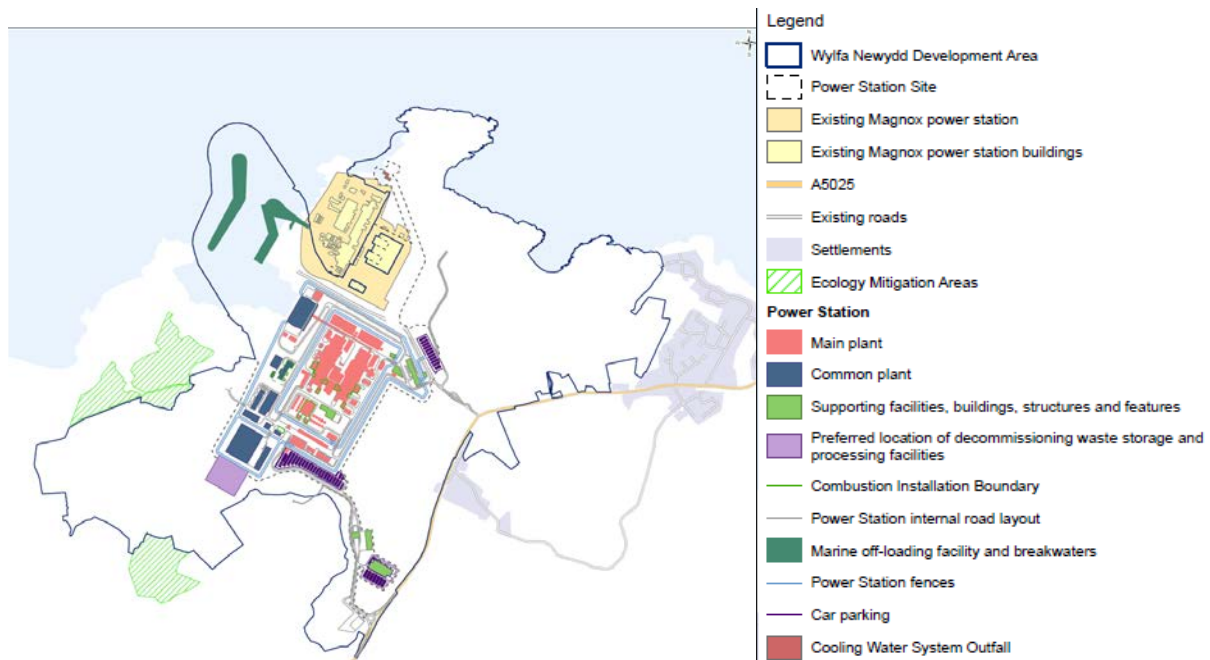
2.1.2 For the purposes of this appendix only, the above description is collectively referred to as the “Proposed Development”.

2.1.3 The Proposed Development would provide an electricity generating station with a nominal gross electrical capacity of up to 3.1GWe (3,100MWe) power generated by two nuclear reactor units enough to power 5.5 million homes.

Power Station detailed description

- 2.1.4 The Power Station would comprise a range of buildings, structures, facilities and features including:
- **Main plant** – buildings that are located in and around the single power island and contain the plant that is particularly important for safe generation of electricity.
 - **Common plant** – comprising those parts of the Power Station that support the process of generation of power and are shared between the two UK ABWRs.
 - **Supporting facilities, buildings, structures and features** – including those parts of the Power Station necessary to support the operation and maintenance of the Power Station, including offices and security facilities.
 - **Grid Connection** – apparatus to transfer electrical energy to the National Grid high voltage electricity transmission network.
- 2.1.5 Further details of the Power Station components are located in chapter D1 of the Environmental Statement (Application Reference Number: 6.4.1).
- 2.1.6 The illustrative locations of these components of the Power Station are shown in figure 2-1:

Figure 2-1 Illustrative site layout



2.2 Design, layout and scale

- 2.2.1 Whilst the Proposed Development has been subject to an extensive process of design development and consultation, Horizon will have a continuing need to refine the Proposed Development. Flexibility is required in the DCO to

reduce the potential need for non-material changes post consent for minor amendments.

- 2.2.2 The approach to flexibility sought in the DCO is set out in the main report of the Planning Statement and in the Design and Access Statement (DAS) (Application Reference Number: 8.2.1). For the Proposed Development, this involves a parameter based approach.

2.3 Ecological mitigation and compensation sites

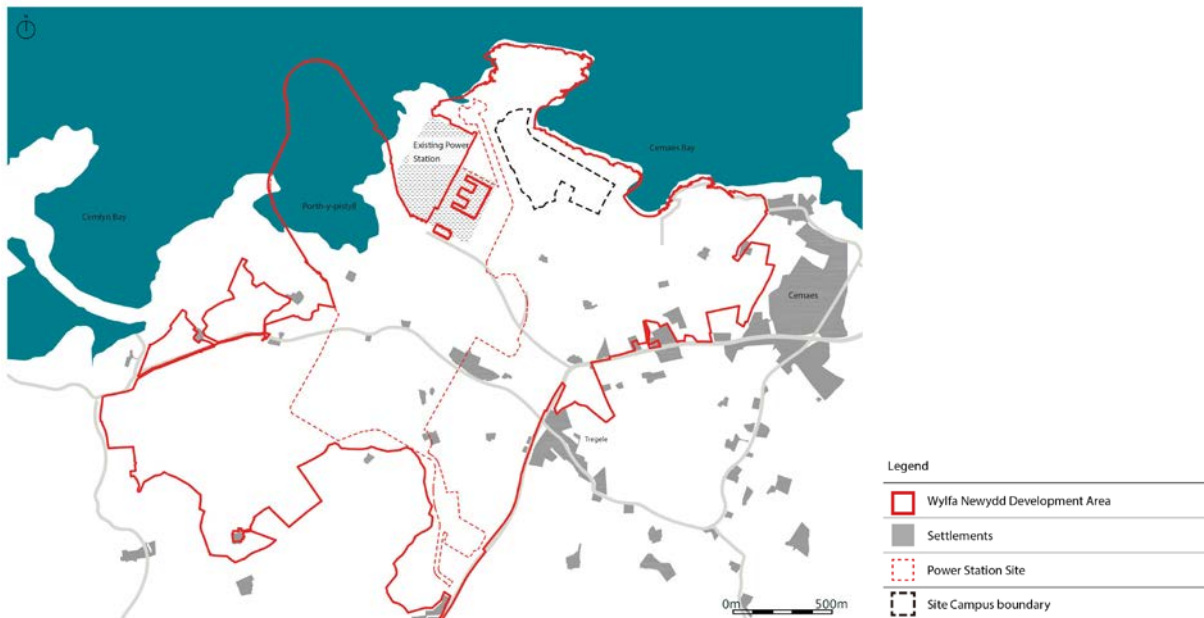
- 2.3.1 Reference is also made in this appendix to the provision of ecology mitigation areas and the creation or enhancement of compensatory habitat at three sites on Anglesey to offset potential adverse ecological effects on the Tre'r Gof SSSI, which is located within the WNDAs.
- 2.3.2 The ecology mitigation areas are identified below and further details are contained within chapter D9 of the Environmental Statement (Application Reference Number: 6.4.9).
- Reptile receptor site – 5ha of land at Mynydd Ithel where habitats have been enhanced to provide capacity for common lizards and adders displaced and translocated during Site Preparation and Clearance.
 - Notable wildlife enhancement site – 15ha of land at Pen Carreg which has been enhanced to provide alternative habitats for a variety of notable species displaced during Site Preparation and Clearance and facilitate their dispersal into the wider landscape.
- 2.3.3 The compensation package comprises three Ecological Compensation Sites where habitat creation and enhancement works are proposed to offset potential adverse effects of Tre'r Gof SSSI.
- Cae Canol-dydd – 20.9ha site adjacent to and containing part of Caeau Talwrn SSSI (part of Anglesey Fens SAC), with the potential for 7.7ha of rich fen habitat creation and a further 4.8ha of rich fen habitat enhancement.
 - Cors Gwawr – 20.5ha site located between Cors Bodeilio SSSI (part of Anglesey Fens SAC) and Caeau Talwrn SSSI, with the potential for 6.1ha of rich fen habitat creation and a further 8.2ha of rich fen habitat enhancement.
 - Tŷ Du – 8.1ha site with the potential for 7ha of mire habitat enhancement.

3 The site and surrounding area

3.1 Introduction

- 3.1.1 The WNDA covers an area of 463 hectares and is located on the boundary of two electoral wards, namely Llanbadrig and Mechell in the County of Anglesey. The population of these electoral wards in 2011 was 1,357 and 1,545 respectively.
- 3.1.2 The WNDA stretches over 3km from west to east. From the coast, it extends southwards up to 3km from Wylfa Head, occupying an undulating lowland landform ranging from sea level at Porth-y-pistyll, up to approximately 42m Above Ordinance Datum (AOD) south of Cemlyn Road.
- 3.1.3 The Existing Power Station bordering the WNDA to the north, along with the associated overhead lines and pylons, comprise an important component of the existing local landscape context.

Figure 3-1 Wylfa Newydd Development Area location plan



- 3.1.4 The extent of the WNDA is shown on figure 3-1. To the north, it adjoins the Existing Power Station on two sides and encompasses Wylfa Head and the coastal cliffs that extend eastwards towards Cemaes, which define part of the northern boundary of the WNDA. South-west of the Existing Power Station, the northern boundary of the WNDA adjoins the small bay at Porth-y-pistyll. At Porth-y-pistyll, part of the WNDA boundary extends inland, and west alongside Cemlyn Road. To the east of the WNDA lies the village of Cemaes, separated from it by a narrow band of agricultural land. The A5025 follows much of the boundary of the WNDA to the south-east, except where interspersed by residential properties between the Existing Power Station access road and Cemaes. The small settlement of Tregale lies on the east side of the A5025 adjoining the WNDA. The south-western boundary of the

WNDA adjoins agricultural land and Cae Gwyn Site of Special Scientific Interest (SSSI).

3.2 Existing context

Air quality

- 3.2.2 Existing background air quality on Anglesey is good, with concentrations of air pollutants generally well within the relevant UK Air Quality Objectives.
- 3.2.3 Sensitive human receptors for changes in air quality include people living in Cemaes, Tregele, and other properties close by, along the A5025 between Cemaes and Tregele, as well as users of the PRow network.
- 3.2.4 There are several sensitive ecological sites either within or close to the WNDA, which are sensitive to changes in air quality, including:
- Tre'r Gof SSSI which lies within the WNDA;
 - Cae Gwyn SSSI which lies adjacent to the WNDA southern boundary;
 - Cemlyn Bay SSSI, Special Area of Conservation (SAC) and Anglesey Terns Special Protection Area (SPA), which lie 110m west of the WNDA boundary; and
 - Llyn Llygeirian SSSI which lies approximately 1.5km to the south.

Biodiversity

- 3.2.5 There are several designated sites in the area, including Bae Cemlyn/Cemlyn Bay SSSI and SAC; Tre'r Gof SSSI, Cae Gwyn SSSI, Llyn Llygeirian SSSI, Beddmanarch-Cymyran SSSI, and Malltraeth Marsh SSSI.
- 3.2.6 Other designated sites of interest are several Wildlife Sites¹. Additional Ramsar, SPA and SAC sites are located further afield.
- 3.2.7 Sensitive habitats and protected species found in the WNDA include:
- ancient woodland, comprising two areas of ancient semi-natural woodland and one restored ancient woodland site within the WNDA;
 - amphibians including common frog, common toad, palmate newt and great crested newt;
 - reptiles including adder and common lizard;
 - breeding birds (notably chough) and over-wintering and migrating birds; and
 - mammals including bats, otter, water vole, red squirrel, and other notable mammal species including brown hare, hedgehog and polecat.

¹ Trwyn Pencarreg Wildlife Site; Afon Wygyr Wildlife Site; Cors Cromlech Wildlife Site; Arfordir Trwyn y Buarth – Porth Wen Wildlife Site; Cors Cae-Owen Wildlife Site; Rhostir Mynydd Mechell Wildlife Site; Tir Gwlyb Teilia Neuadd Wildlife Site; Cors Mynachdy Wildlife Site.

Coastal change and marine environment

- 3.2.8 The Anglesey coastline is predominantly composed of exposed hard rock and is therefore resistant to erosion. However, locally it is extremely varied as a result of the different rates of erosion of the many solid and drift rock types that occur. The local coastal landscape is made up mainly of relatively low hard rock cliffs with pocket sandy bays. Significant coastal processes occur at a local scale and the coast is considered to be affected far more by waves approaching from the north-west, than those from the predominant south-easterly wave direction.
- 3.2.9 The coast around the WNDA comprises diverse habitats characteristic of a moderately exposed, western UK rocky coastline, dominated by seaweeds. Offshore, the seabed comprises a mix of solid rock, boulders, cobbles and sediments. The open coast of north Anglesey is characterised by strong tidal flows.
- 3.2.10 The main features of the marine environment that could be affected include phytoplankton and zooplankton; marine benthic (bottom dwelling) habitats and species; marine fish; marine mammals and seabirds.
- 3.2.11 There are three designated marine-based nature conservation sites close to the WNDA as set out below.
- Bae Cemlyn / Cemlyn Bay SAC and SSSI, primarily designated for its saline lagoon.
 - North Anglesey Marine/ Gogledd Môn Forol is a candidate SAC, designated for the protection of harbour porpoise. Candidate SAC means it passed through public consultation as a possible SAC, and was submitted to the European Commission (January 2017).
 - Anglesey Terns SPA, primarily designated for four species of tern.
- 3.2.12 These three sites lie immediately to the west and close to Porth-y-pistyll where the breakwaters and MOLF are to be constructed.

Flood risk

- 3.2.13 The WNDA is split into various water catchment areas, which generally extend beyond the WNDA boundary. They are considered in turn below.
- The Power Station Catchment is predominantly at low risk from fluvial and coastal flooding (Zone A), with only the low-lying areas inland of Porth-y-pistyll in Zone C2, where extreme sea levels result in inland flooding.
 - The Afon Cafnan Catchment is predominantly at low risk from fluvial and coastal flooding (Zone A). Only two areas are shown to be at risk of flooding:
 - low-lying areas inland of Porth-y-pistyll as noted above; and
 - along the majority of the Afon Cafnan, and the lower reaches of Nant Caerdegog Isaf (Zone C).

- The Cemaes Catchment is predominantly at low risk from fluvial and coastal flooding (Zone A), with only one small area in the upper reaches of a tributary of Nant Cemaes within Flood Zone B.
- The Cemlyn Catchment is predominantly at low risk from fluvial and coastal flooding (Zone A), with only the lower reaches of Nant Cemlyn within fluvial Flood Zone C.
- The area between the Cemlyn Catchment and Cemlyn Bay is predominantly at high risk from coastal flooding (Zone C2). The flood risk area is largely confined to Cemlyn Lagoon; however, sections of the road leading down to Bryn Aber property and Bryn Aber itself are located within the floodplain.
- The Existing Power Station is entirely located within Flood Zone A, and at low risk of fluvial and coastal flooding.

Historic environment

- 3.2.14 The study area for the historic environment comprises the WNDA and a 6km buffer around it as well as an offshore area that extends 1.2km north of Wylfa Head, bounded to the west by the western side of Cemlyn Bay and to the east by the eastern side of Cemaes Bay.
- 3.2.15 Within this area a total of 515 terrestrial archaeological remains have been identified, of which 24 are considered to be of high value and 119 are considered to be of medium value. In addition, 99 marine archaeological remains, 302 historic buildings, and 17 Historic Landscape Types (HLTs) have been identified within the study area.
- 3.2.16 Felin Cafnan Corn Mill (Porth-y-Felin) is a Grade II* Listed Building located immediately to the west of the WNDA. It is adjoined by an associated corn drying house and mill house, which are both Grade II Listed Buildings. They are themselves adjoined by Cestyll Garden, which is a Grade II Registered Historic Park and Garden. The cluster was originally associated with Cestyll House; however, the main house was demolished in 1991. Cafnan House and outbuildings is a Grade II Listed Building that is located opposite to Felin Cafnan and is therefore also close to the WNDA.

Landscape and visual

- 3.2.17 The WNDA mainly comprises agricultural pasture with sparse tree cover. Landscape elements subject to change within this area include rock outcrops, shoreline features, watercourses, trees, field boundaries, hedgerows, dry-stone walls and cloddiau (stone-faced earth banks). The Existing Power Station has become a dominant feature of the landscape in some views.
- 3.2.18 Key landscape designations and features that could be affected by the development of the Power Station Site include:
- the Anglesey AONB, concentrated on the coast and extending into the western part of the WNDA, including the Porth-y-pistyll shoreline;

- North Anglesey Heritage Coast, which closely relates to the Anglesey AONB in the vicinity of the WNDA;
 - Cestyll Garden (a Grade II Registered Park and Garden) which lies adjacent to the western boundary, with the associated kitchen garden lying within the WNDA; and
 - landscaped mounding and woodland designed by Dame Sylvia Crowe located near to the Existing Power Station.
- 3.2.19 The AONB Management Plan notes that "the sense of peace and tranquillity" is a special nature of the AONB. It should be noted that the AONB extends across much of the rural parts of Anglesey and in this location the character of the AONB is significantly influenced by the semi-industrialised setting of the Existing Power Station, as well as the associated overhead power lines and pylons that cross the WNDA and the A5025 on the south and east boundary. The AONB abuts coastline that is designated as part of the North Anglesey Heritage Coast, which comprises the coastal setting of the AONB.
- 3.2.20 The North Anglesey Heritage Coast comprises the coastal setting of the AONB and is designated at the local and national level. The designation includes the majority of the marine elements of the WNDA in Porth-y-pistyll and extends beyond the WNDA to the west including Cemlyn Bay.
- 3.2.21 Wylfa Head is a rocky area of headland which forms the northern extent of the WNDA. This area is rural in nature and provides views of the Irish Sea and views across the headland towards Llanbadrig Point. While the area is highly attractive and has elements of tranquillity it is influenced by the presence of the Existing Power Station, which is located to the south.

Public access and recreation

- 3.2.22 The Wales Coast Path (WCP) is an important resource for the county, both for local residents and tourists. Some sections of the WCP route divert inland where access along the coast is restricted, as is the case where the path runs inland of the Existing Power Station within the WNDA.
- 3.2.23 There are 40 PROWs plus 6 permissive paths within the WNDA (inclusive of those which form part of the WCP), which cover a total distance of over 10km, and link to other recreational features, such as beaches and Wylfa Head. There are also permissive routes providing informal access to a viewing point with coastal views to Wylfa Head and the Irish Sea; to the former Wylfa Information Centre; to Porth yr Ogof down the cliff via metal steps; and to Porth Wylfa.
- 3.2.24 The Copper Trail (part of NCN Route 566) includes a link between Cemlyn Bay and Llanfechell, via Tregele using Cemlyn Road through the area.
- 3.2.25 Wylfa Head is a rocky area of headland which forms the northern extent of the WNDA. This rural area provides views of the Irish Sea and views across the headland towards Llanbadrig Point. While the area is highly attractive and has elements of tranquillity, it is influenced by the presence of the Existing Power Station, which is located to the south.

- 3.2.26 The Anglesey AONB covers most of Anglesey's coastline, part of which lies within the WNDA. There is National Trust land to the east and west of the WNDA, providing access to the coastline and including a permissive section of the WCP between Cemlyn Bay and Cestyll Garden. A small section of this land near Cemlyn Bay is also open access land. Further afield, to the west of Cemlyn Bay and at Llanbadrig Point, are two additional areas of National Trust land.
- 3.2.27 The Isle of Anglesey is a designated European Geopark (the GeoMôn Geopark) and a UNESCO Global Geopark due to its outstanding geodiversity and geological heritage.
- 3.2.28 Beaches and coves used for recreational purposes in the WNDA include Porth Wylfa and Porth yr Ogof. There are larger beaches beyond this area at Cemlyn Bay and Cemaes Bay along with numerous smaller coves.
- 3.2.29 Fisherman's car park is the closest car park to Wylfa Head, Porth yr Ogof and Porth Wylfa and provides access to the WCP and the wider PRow network.
- 3.2.30 The road to the Existing Power Station provides access to the former Magnox visitor centre and associated car park, outdoor café and picnic and play area. There are playing fields to the south of the Existing Power Station, within the WNDA.

Noise and vibration

- 3.2.31 Sensitive receptors for noise and vibration include people living in Cemaes, Treglele, and other properties close to the WNDA, and along the A5025 between Cemaes and Treglele, as well as users of the PRow network.

Socio-economic

- 3.2.32 The WNDA is located on the boundary of two electoral wards, namely Llanbadrig and Mechell in the County of Isle of Anglesey. The population of these electoral wards in 2011 was 1,357 and 1,545 respectively.
- 3.2.33 Cemaes and Treglele are the nearest communities to the WNDA; where both communities are located within 100m of the site boundary, as shown on Figure 2-20. Both settlements predominantly consist of residential properties and also possess a range of commercial, community and amenity facilities, such as a heritage centre, Post Office, and community centre. Ysgol Gynradd Cemaes is located approximately 470m to the east of the site.
- 3.2.34 The village of Llanfechell is located approximately 2km to the south-east of the WNDA. The village is predominantly residential in nature, possessing a limited range of facilities including schools, churches and commercial units.
- 3.2.35 For the wards of Llanbadrig and Mechell, 57.1% of the population (aged 3 and over) were able to speak Welsh in 2011, which is similar to the percentage for Anglesey. Variation is seen in the percentage of Welsh speakers between the wards of Llanbadrig and Mechell with a higher percentage of Welsh speakers living within the ward of Mechell (61.1%) compared to Llanbadrig (52.4%) in 2011.

Soils and geology

- 3.2.36 The Isle of Anglesey is designated as a UNESCO Global Geopark, named GeoMôn Geopark, due to its outstanding geodiversity and geological heritage.
- 3.2.37 There are three Regionally Important Geodiversity Sites (RIGS) within the WNDA: Porth Wnal Dolerite RIGS; Porth Wnal Granite RIGS; and, Cemaes Bay RIGS. These are non-statutory listed sites that are designated for their scientific, research, educational, historical or aesthetic importance.
- 3.2.38 Most of the agricultural land within the WNDA is classified as moderate quality, with some large areas of very poor quality, and smaller areas of good and very good quality, as shown in table 3-1.

Table 3-1 Agricultural Land Classification grades – spatial coverage

Grade/ Subgrade	Description	WNDA		Anglesey	
		Area (ha)	Percentage (%)	Area (ha)	Percentage (%)
1	Excellent quality	0	0	0	0
2	Very good quality	6.5	2.0	1,117	1.6
3a	Good quality	18.0	5.6	27,559	38.6
3b	Moderate quality	224.3	69.5		
4	Poor quality	0.1	<0.1	27,214	38.1
5	Very poor quality	38.0	11.8	10,398	14.6
-	Non-agricultural	35.8	11.1	5,073	7.1

Shipping and navigation

- 3.2.39 Porth-y-pistyll is not currently used by large vessels, which typically pass at least four nautical miles from the coastline. Holyhead is the largest port in the area.
- 3.2.40 Harbours at Cemaes Bay and Amlwch are mainly used by small recreational and fishing vessels. Holyhead Marina has 350 berths. The bays and inlets of the local coast, including the WNDA, provide sheltered anchorages, which are used by kayakers and other small craft. Vessels operating out of Cemaes and Amlwch harbour regularly fish in Cemlyn Bay, including within the WNDA.
- 3.2.41 There is currently no Statutory Harbour Authority covering the marine environment of the WNDA. Recreational vessels report to the coastguard station situated at Holyhead, and vessels navigating to or from Holyhead contact Holyhead Port Control. The Holyhead sailing club organises yacht

racing between April and October, with several of the races following the north coast of Anglesey. HM Coastguard and Royal National Lifeboat Institution have services located at Holyhead and Moelfe.

3.2.42 There is a jetty for the Existing Power Station located within the WNDA.

Water quality and resources

3.2.43 There are five surface water catchments within the WNDA: Tre'r Gof Catchment (including Tre'r Gof SSSI); Afon Cefnau Catchment (including Cae Gwyn SSSI); Cemaes Catchment; Power Station Catchment; and Cemlyn Catchment (including Cemlyn Bay SSSI and SAC).

3.2.44 Groundwater close to the surface is known to be critical in maintaining the wetland conditions of the Tre'r Gof and Cae Gwyn SSSIs, and supporting flows in surface watercourses.

3.2.45 An aquifer capable of supporting water supplies at a local level (Secondary A aquifer) lies beneath Tre'r Gof SSSI and the bedrock beneath the WNDA is an aquifer that supports limited amounts of groundwater (Secondary B aquifer).

3.2.46 The Ynys Môn Secondary groundwater body is designated under the Water Framework Directive and protected as a Groundwater Drinking Water Protected Area. It covers a large part of Anglesey, including the WNDA. There are also coastal water bodies designated under the Water Framework Directive at The Skerries, Anglesey North and Cemlyn Lagoon.

3.3 Planning history

Existing Power Station

3.3.2 Immediately to the north of the majority of the Power Station Site is the existing Magnox Power Station ('Existing Power Station'). Construction of the Existing Power Station began in 1963 and commercial operations began in 1971.

3.3.3 The Existing Power Station is owned by the Nuclear Decommissioning Authority and is currently undergoing decommissioning. It is no longer operational.

Site preparation and clearance

3.3.4 A planning application was submitted within the WNDA to Isle of Anglesey County Council (IACC) on 10 November 2017 for the following.

- Site clearance works – including the removal of existing structures, boundaries, vegetation and other above ground features.
- Site establishment works – including new and formalised crossing points of existing roads and construction features (such as:
 - fencing;
 - laydown areas;
 - material storage areas;

- compounds;
 - temporary office/welfare buildings;
 - car parks;
 - fuel store;
 - drainage; and
 - security features).
 - Ground improvement works – including the excavation and treatment of soils likely to be contaminated.
 - Diversion of a watercourse – comprising the realignment of a tributary (Nant Porth-y-pistyll) to the Afon Cafnan with associated landscaping.
 - Temporary diversion and / or temporary closure of Cemlyn Road; and other associated works.
- 3.3.5 The application seeks permission for those aspects of the Site Preparation and Clearance Works that can reasonably be undertaken before development consent is obtained for the construction of the nuclear power station itself.
- 3.3.6 In the event that the DCO is not granted or the Wylfa Newydd Project does not proceed, a scheme of restoration would be implemented to return the Site Preparation and Clearance application site to an acceptable condition.

4 Principal planning analysis

4.1 Principal planning analysis

- 4.1.1 The purpose of this section is to assess all generic and nuclear impacts identified within NPS EN-1 [RD4] and NPS EN-6 [RD5] for the WNDAs, excluding the Site Campus. The exception to this is “civil and military aviation and defence interests”, which is considered in the main report of the Planning Statement.
- 4.1.2 Given that the temporary Site Campus is also located within the WNDAs, the environmental effects are considered holistically in the Environmental Statement (Application Reference Number: 6.1.1) alongside all development within the WNDAs. The planning analysis of the Site Campus is provided at Appendix C.
- 4.1.3 A detailed assessment of the likely effects of the construction, operation and decommissioning of the Proposed Development is set out in the Environmental Statement (Application Reference Number: 6.1.1) and Health Impact Assessment (Application Reference Number: 8.19).
- 4.1.4 Design principles and parameters for the Power Station, Marine Works and other on-site development are set out in the DAS Volume 2 (Application Reference Number: 8.2.2), alongside details of how the design of the scheme has evolved during pre-application discussions. Details for the WNDAs are considered in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16).
- 4.1.5 Details of the need for the Wylfa Newydd DCO Project and the effect of the Statement on Energy Infrastructure (7 December 2017) on the decision making process are identified in the Planning Statement main report.
- 4.1.6 This concludes that NPS EN-1 and NPS EN-6 remain important and relevant matters which would carry significant weight in the determination of projects that will deploy after 2025. They continue to represent the primary policy basis for a decision made by the SoS on this application for development consent for the Wylfa Newydd DCO Project.
- 4.1.7 Alternative locations for the principal elements within the WNDAs have been considered and are set out in volume 2 of the Site Selection Report (Application Reference Number: 8.24.2). Further details on alternatives are provided later in this section of the appendix where it is relevant to compliance with policy.

4.2 Site-specific assessment

- 4.2.1 For the Power Station, part C.9 of NPS EN-6 [RD5] outlined certain areas of particular significance that requires further consideration at application stage.
 - Potential negative effects on four national and internationally protected nature conservation sites, namely Cemlyn Bay Special Area of Conservation, the Ynys Feurig, Cemlyn Bay and the Skerries SPA.

- The site is predominantly located on higher ground with hard bedrock. The risks from coastal flooding, sea level rise and erosion are therefore considered to be low although further assessment is required to determine the need for additional defences over the lifetime of a new Power Station.
 - Coastal water conditions are considered generally favourable for the dispersion of the heated water that would be released after cooling.
 - Development of a new nuclear power station will have a negative visual impact on the local and sub-regional landscape, particularly the Anglesey AONB and North Anglesey Heritage Coast. Some adverse impact, which may not be fully mitigatable, is anticipated.
 - Potential for significant adverse effects at Tre'r Gof SSSI, Cemlyn Bay SSSI and Cae Gwyn SSSI. Tre'r Gof SSSI could suffer direct or indirect effects associated with changes to water quality or quantity. The potential for the mitigation of biodiversity effects on sites of national conservation importance are highlighted, including the creation of replacement habitat. The possibility to avoid or mitigate impacts to an extent is therefore highlighted, however the proximity of Tre'r Gof SSSI means that it is possible direct or indirect effects could remain.
 - Potential for long term positive effects associated with enhanced employment and long term prosperity for communities at the local level.
- 4.2.2 Overall the Government concluded that none of the above factors were sufficient to prevent the site from being considered potentially suitable (para C.9.118). These topics are included in the planning analysis below.
- 4.2.3 The site specific assessment of all generic and nuclear impacts identified within NPS EN-1 [RD4] and NPS EN-6 [RD5], excluding “civil and military aviation and defence interests”, is set out below.

Air quality and emissions

Policy context

National Policy Statements

- 4.2.4 EN-1 [RD4] advises that infrastructure development can have adverse effects on air quality (paragraph 5.2.1). Paragraph 5.2.2 of EN-1 [RD4] recognises that CO₂ emissions are a significant adverse impact from some types of energy infrastructure which cannot be totally avoided, (even with the full deployment of carbon capture and storage technology). However, paragraph 5.2.2, EN-1 [RD4] confirms that:

“Government has determined that CO₂ emissions are not reasons to prohibit the consenting of projects which use these technologies or to impose more restrictions on them in the planning policy framework than are set out in the energy NPSs (e.g. the Carbon Capture Readiness and, for coal, Carbon Capture and Storage requirements)”.

- 4.2.5 EN-1 [RD4] states at paragraph 5.2.9 that the decision maker should generally give air quality considerations substantial weight where a project would lead to a deterioration in air quality in an area, or lead to a new area where air quality breaches any national air quality limits. Further, paragraph 5.2.9 in EN-1 [RD4] confirms that air quality considerations will also be important where substantial changes in air quality levels are expected, even if this does not lead to any breaches of national air quality limits.
- 4.2.6 Where a project is likely to lead to a breach of national air quality limits, paragraph 5.2.9 in EN-1 [RD4] provides that the applicant should work with the relevant local authorities to secure appropriate mitigation measures to allow the proposal to proceed. In the event that a project will lead to non-compliance with a statutory limit the decision maker should refuse consent (paragraph 5.2.10, EN-1 [RD4]).
- 4.2.7 Paragraph 5.2.11 of EN-1 [RD4] advises that the decision maker should consider “*whether mitigation measures are needed both for operational and construction emissions over and above any which may form part of the project application*”.
- 4.2.8 Paragraph 4.13.5 of EN-1 [RD4] states that generally, those aspects of energy infrastructure which are most likely have a significantly detrimental impact on health are subject to separate regulation (for example, for air pollution) which will constitute effective mitigation of them, so that it is unlikely that health concerns will either constitute a reason to refuse consents or require specific mitigation under the *Planning Act 2008* [RD1].
- 4.2.9 Paragraph 3.12.3 of EN-6 [RD5] recognises that the operation of a new nuclear power station is unlikely to be associated with significant air quality impacts, although there may be local impacts from transport and associated activities during construction.

Welsh national and local policy

- 4.2.10 PPW [RD8] sets out at chapter 13 (Minimising and Managing Environmental Risks and Pollution) that while planning authorities should not seek to control through planning measures, matters that are the proper concern of the pollution control authority, where pollution considerations affect the use and development of land, they can be material planning considerations.
- 4.2.11 Policy PCYFF 2 in the JLDP [RD27] states that planning permission will be refused where the proposed development would have an unacceptable adverse impact on:
- “...the health, safety or amenity of occupiers of local residences, other land and property uses or characteristics of the locality due to increased activity, disturbance, vibration, noise, dust, fumes, litter, drainage, light pollution, or other forms of pollution or nuisance”.
- 4.2.12 The Wylfa SPG [RD28] at GP 7 states that the applicant should work with IACC and the Betsi Cadwaladr University Health Board to identify any potentially significant health impacts and appropriate mitigation measures.

- 4.2.13 GP 26 of the Wylfa SPG [RD28] states that IACC expect the applicant to assess measures to reduce disturbance-related impacts such as emissions to air from construction activity and HGV movements.
- 4.2.14 The IACC Local Air Quality Management report states that air quality in the vicinity of the WNDA is good and concentrations of air pollutants are within the relevant statutory air quality limits.

Planning assessment

Environmental assessment

- 4.2.15 The Environmental Impact Assessment (EIA) of development within the WNDA on air quality matters is set out in chapter D5 of the Environmental Statement (Application Reference Number: 6.4.5).
- 4.2.16 During construction, the assessment identified that there is likely to be emissions to air of nitrogen oxides (NO_x) from construction plant and machinery during peak earthworks and Marine Works.

Mitigation

- 4.2.17 Mitigation measures to reduce effects during construction would include a comprehensive air quality management, monitoring and reporting scheme, which would be developed in discussion with the IACC and Natural Resources Wales to control NO_x emissions.
- 4.2.18 During operation, ultra-low sulphur diesel would be used in the combustion plant and stack heights would ensure dispersal of air emissions.
- 4.2.19 During decommissioning, it is expected that mitigation measures similar to or better than those employed during construction would minimise air quality effects.

Residual effects

- 4.2.20 With the mitigation identified, no significant residual effects on air quality are anticipated during construction, operation or decommissioning.

Assessment against policy

Construction

- 4.2.21 The Proposed Development is in accordance with paragraph 5.2.10 of NPS EN-1 [RD4] as construction would not lead to a breach in national air quality limits. Adverse effects on air quality are not significant and therefore paragraph 5.2.9 of EN-1 [RD4] does not apply because there would be no “substantial changes in air quality levels”.
- 4.2.22 To reach this position, mitigation would be used including those described above in accordance with paragraph 5.2.11 of NPS EN-1 [RD4].
- 4.2.23 Adverse air quality effects are in accordance with paragraph 3.12.3 of NPS EN-6 [RD5] as they are not significant. Paragraph 3.12.3 recognises that some local impacts may occur during construction.

- 4.2.24 Construction would not have a significant adverse impact on health, safety or amenity in terms of air quality in accordance with Policy PCYFF 2 of the JLDP.
- 4.2.25 The Environmental Statement (Application Reference 6.1) assesses the impacts of air quality in accordance with GP 26 of the Wylfa SPG.

Operation

- 4.2.26 The Proposed Development continues to be in accordance with paragraphs 5.2.9, 5.2.10 and 5.2.11 of NPS EN-1 [RD4], as well as Policy PCYFF 2 of the JLDP and GP 26 of the Wylfa SPG. The Proposed Development also accords with paragraph 3.12.3 of EN-6 [RD5] as the operation of the Power Station is unlikely to be associated with significant air quality impacts.

Decommissioning

- 4.2.27 No significant effects are identified at the decommissioning stage and the Proposed Development continues to be in accordance with paragraphs 5.2.9 and 5.2.10 of NPS EN-1 [RD4] for the reasons set out above.

Conclusion

- 4.2.28 The text above shows that the Proposed Development is in accordance with national and local policy, including NPS EN-1 [RD4] and EN-6 [RD5], in relation to air quality. Emissions from traffic are considered in the Planning Statement main report.

Coastal change and marine environment

- 4.2.29 Coastal change is identified as both a Generic Impact in section 5.5 of EN-1 [RD4] and a Nuclear Impact in EN-6 [RD5]. For ease of reference, the marine environment is also covered here.

Policy context

National Policy Statements

- 4.2.30 Paragraph 4.1.6 of EN-1 [RD4] confirms that the *Marine and Coastal Access Act 2009* (MCAA) [RD12] provides for the preparation of a Marine Policy Statement (MPS) and a number of marine plans. It states that the decision maker must have regard to the MPS and applicable marine plans in taking any decision which relates to the exercise of any function capable of affecting the whole or any part of the United Kingdom (UK) marine area. In the event of a conflict between any of these marine planning documents and an NPS, paragraph 4.1.6 of EN-1 confirms that the NPS prevails for purposes of decision making given the national significance of the infrastructure.
- 4.2.31 Paragraph 5.3.4 of EN-1 states that the applicant should show how the proposals have taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.
- 4.2.32 Paragraph 5.3.7 EN-1 states that as a general principle, and subject to other paragraphs in EN-1, development should aim to avoid significant harm to biodiversity interests, including through mitigation and consideration of

reasonable alternatives; where significant harm cannot be avoided, then appropriate compensation measures should be sought.

- 4.2.33 Paragraph 5.5.10 of EN-1 states that the decision maker should be satisfied that the proposed development will be resilient to coastal erosion and deposition, taking account of climate change, during the Project's operational life and any decommissioning period.
- 4.2.34 Paragraph 5.5.11 of EN-1 states that the decision maker should not normally consent new development in areas of dynamic shorelines where the proposal could inhibit sediment flow or have an adverse impact on coastal processes at other locations. Impacts on coastal processes must be managed to minimise adverse impacts on other parts of the coast. Where such proposals are brought forward consent should only be granted where the decision maker is satisfied that the benefits (including need) of the development outweigh the adverse impacts.
- 4.2.35 Paragraph 5.5.12 of EN-1 states that the decision maker should ensure that applicants have restoration plans for areas of foreshore disturbed by direct works and will undertake pre- and post- construction coastal monitoring arrangements with defined triggers for intervention and restoration.
- 4.2.36 Paragraph 5.5.15 of EN-1 states that the decision maker must have regard to the appropriate marine policy documents, as provided for in the MCAA, 2009 [RD12].
- 4.2.37 Paragraph 5.5.17 of EN-1 confirms that applicants should propose appropriate mitigation measures to address adverse physical changes to the coast in consultation with stakeholders. Where this is not the case, the decision maker should consider what appropriate mitigation requirements might be attached to any grant of development consent.
- 4.2.38 EN-6 [RD5] states at paragraph 2.10.3 that the ES should take into account how the proposal will take account of the projected impacts of climate change in accordance with section 4.8 of EN-1, which includes climate change adaptation.
- 4.2.39 Paragraph 3.9.3 of EN-6 states that in carrying out an assessment in accordance with section 5.3 of EN-1, applicants should also consider the effects of the construction of a new nuclear power station on the groundwater regime and its effects on terrestrial/coastal habitats.

Welsh national and local policy

- 4.2.40 In March 2011, the Welsh Government adopted the UK MPS [RD16] through which they are committed to develop and implement a Marine Plan for Wales. The MPS [RD16] contains objectives including the following in respect of the marine environment.
- Biodiversity is protected, conserved and where appropriate recovered and loss has been halted.
 - Healthy marine and coastal habitats occur across their natural range and are able to support strong, biodiverse biological communities and the functioning of healthy, resilient and adaptable marine ecosystems.

- Oceans support viable populations of representative, rare, vulnerable, and valued species.
- 4.2.41 The National Marine Plan for Wales is currently being drafted, drawing upon the framework and high level objectives for marine planning outlined in the MPS [RD16]. The purpose of the plan is to manage marine activities in a sustainable way, taking into account economic, social and environmental priorities.
- 4.2.42 Policy AMG 4 of the JLDP [RD27] states that proposals on the coast are only acceptable, if the nature of the development requires them to be located on the coast and there is an overriding economic and social benefit from the development. The policy also seeks no unacceptable harm to water quality, public accessibility, local character and biodiversity.
- 4.2.43 Strategic Policy PS 19 in the JLDP confirms the Councils will have regard to the relative significance of international, national or local designations in considering weight to be attached to acknowledged interests. Proposals that have a significant adverse effect on the area's distinctive natural environment, countryside and coastline will be refused, unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protections for that site or area.
- 4.2.44 The Wylfa SPG [RD28] states that the proposals should conserve and enhance Anglesey's distinctive environment, taking into account climate change. GP 20 in the Wylfa SPG confirms that it is anticipated that this will be achieved for the water environment by:
- conserving the integrity of sites on or near Anglesey designated at a European, national or local level for their nature conservation value;
 - minimising the release of potentially polluting substances to water; and
 - implementing measures to mitigate potential adverse impacts.

Planning assessment

- 4.2.45 The topic of coastal change is considered in the following two subsections:
- coastal processes and coastal geomorphology; and
 - marine environment.

Coastal processes and coastal geomorphology

- 4.2.46 The EIA of development within the WNDA on coastal processes and coastal geomorphology is set out in chapter D12 of the Environmental Statement (Application Reference Number: 6.4.12).

Environmental assessment

- 4.2.47 During construction, coastal processes and coastal geomorphology effects are not likely to be significant as the MOLF, breakwaters, CW intake, CW outfall structures and dredging activities have all been designed to reduce changes to coastal and marine processes and effects on coastal geomorphology receptors that may otherwise have occurred.

- 4.2.48 The designs include reduced footprints and construction timescales as far as is practical. The CW intake velocity has also been designed to minimise localised erosion and scour as far as practicable inside the inner harbour area.
- 4.2.49 In addition, the western breakwater has been designed to provide a gap between it and the land to enable continued throughput and flushing of water and sediment. The western breakwater will comprise interlocking concrete armour, which would increase surface roughness on the west and north-west facing perimeter increasing the absorption of incident wave energy thus reducing the reflection of that energy.

Mitigation

- 4.2.50 During construction, methods would be applied to manage and limit the discharge of sediment into the sea as part of the construction drainage system.
- 4.2.51 For the operation phase, management strategies would be created to outline how targets, which would be agreed with regulators, would reduce the effects of operation on coastal processes.
- 4.2.52 During decommissioning, mitigation would be based upon standard best practice applicable at that time.

Residual effects

- 4.2.53 No significant residual effects have been identified on coastal processes and coastal geomorphology for the construction, operational or decommissioning phases.

Assessment against policy

- 4.2.54 The text below identifies how the Proposed Development is in accordance with national and local policy, including NPS EN-1 and EN-6, in relation to coastal processes and coastal geomorphology.

Construction

- 4.2.55 As a result of the design outlined above, no significant residual adverse effects on coastal change have been identified as likely, in accordance with paragraphs 5.5.10 and 5.5.11 of NPS EN-1, Strategic Policy PS 19 in the JLDP [RD27], and GP 20 in the Wylfa SPF [RD28].
- 4.2.56 The EIA takes account of climate change in accordance with paragraph 5.5.10 of NPS EN-1 and paragraph 2.10.3 of NPS EN-6. The modelling that has informed the assessment in the future baseline scenario (year 2087) reflects precautionary values for climate change conditions of sea level rise and increases in storm events, as recommended within the most up-to-date UKCP09 (formerly UK Climate Impacts Programme) and Government guidance.

Operation

- 4.2.57 The Proposed Development would continue to accord with policy as noted above.

Decommissioning

- 4.2.58 The Proposed Development would continue to accord with policy as noted above.

Marine environment

Environmental assessment

- 4.2.59 The EIA of development within the WNDA on the marine environment is set out in chapter D13 of the Environmental Statement (Application Reference Number: 6.4.13).
- 4.2.60 During construction, there would be direct loss of habitat under the footprint of the Marine Works although the design seeks to minimise the extent of the construction footprint. In addition, there is a risk that non-native species might be introduced, which could potentially out-compete native species.
- 4.2.61 During operation, the CW intake could potentially have an effect on river lamprey, European eel and Atlantic salmon. In addition, ichthyoplankton (the eggs and larvae of fish) of commercial and conservation importance could potentially be affected.

Additional mitigation

- 4.2.62 During construction, specific measures proposed to reduce adverse effects include.
- The management of surface water run-off and suspended solids through the use of sustainable drainage systems (SuDS) in conjunction with other measures.
 - The provision of marine ecological enhancement measures in suitable locations, to include pre-cast ecological units and modification of permanent artificial structures, which would encourage colonisation by native marine species.
 - The use of 'fish-friendly' pumps for dewatering, which aims to transfer fish or eels into other waters without harming them.
 - Regular noise monitoring would be undertaken during the tern nesting period (and the period where nesting colonies are established) to identify disturbance caused by attributable noise. If observed, then alternative methods of working or additional constraints would be applied.
 - Best practice would be followed to minimise the risk of injury to marine mammals from piling noise.
- 4.2.63 The construction of the breakwater will also introduce new hard surfaces, which could potentially have the capacity to function as an artificial rocky reef providing a new colonisation surface for species. The development of habitats and species on the breakwater structures could also potentially provide habitat, food and refuge resources for seabirds.

- 4.2.64 During operation, a monitoring programme for non-native species would be undertaken, to include observational surveys, which would allow corrective action to be taken if necessary.
- 4.2.65 A monitoring programme for entrapment associated with the CW intake system during the operation phase would assess the effectiveness of fish protection measures.

Residual effects

- 4.2.66 With the mitigation identified no significant residual effects on the marine environment are anticipated during operation, construction or decommissioning.

Assessment against policy

Construction

- 4.2.67 In accordance with paragraph 5.3.4 of NPS EN-1, opportunities to help conserve biodiversity interests have been taken through embedded mitigation measures within the design, including those described above.
- 4.2.68 In accordance with paragraph 5.3.7 of NPS EN-1, residual significant impacts are not predicted to occur during the construction stage following the introduction of additional mitigation.
- 4.2.69 The applicant has also had regard to the appropriate marine policy documents in accordance with paragraph 5.5.15 of EN-1.
- 4.2.70 The applicant has consulted with stakeholders including Natural Resources Wales and the National Trust to identify potential mitigation measures in accordance with paragraph 5.5.17 of NPS EN-1.
- 4.2.71 No significant residual adverse effects on the marine environment have been identified as likely, in compliance with paragraphs 5.3.7 of NPS EN-1 [RD4], Strategic Policy PS 19 in the JLDP [RD27], and GP 20 in the Wylfa SPG [RD28].

Operation

- 4.2.72 No significant effects have been identified during the operation stage and the Proposed Development would continue to accord with policy as noted above.

Decommissioning

- 4.2.73 No significant effects have been identified during the decommissioning stage and the Proposed Development would continue to accord with policy as noted above.

Conclusion

- 4.2.74 The text above shows that the Proposed Development is in accordance with national and local policy including Strategic Policy PS 19 in the JLDP [RD27], and GP 20 in the Wylfa SPG [RD28] and NPS EN-1 and EN-6, in relation to the marine environment.

Flood risk

Policy context

National Policy Statements

- 4.2.75 Paragraph 5.15.9 and 5.15.10 of EN-1 [RD4] states that the risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution practice and impacts on local water resources can be minimised through planning and design for the efficient use of water, including water recycling.
- 4.2.76 EN-6 [RD5] states at paragraph 3.6.11 that applicants need to submit a flood risk assessment in accordance with section 5.7 of EN-1 [RD4]. Paragraph 3.6.16 in EN-6 [RD5] states that applicants should set out measures to mitigate the risk of flooding on or from individual sites that may result from the development.
- 4.2.77 Paragraph 5.7.9 of EN-1 [RD4] states that in determining an application for development consent, the decision maker should be satisfied that where relevant:
- the application is supported by an appropriate Flood Risk Assessment;
 - the Sequential Test has been applied as part of site selection;
 - a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;
 - the proposal is in line with any relevant national and local flood risk management strategy;
 - priority has been given to the use of Sustainable Drainage Systems; and
 - in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed over the lifetime of the development.
- 4.2.78 Paragraph 5.7.12 in EN-1 [RD4] states that the decision makers should not consent development in Flood Zone 2 in England or Zone B in Wales unless it is satisfied that the sequential test requirements have been met. It should not consent development in Flood Zone 3 or Zone C unless it is satisfied that the Sequential and Exception Test requirements have been met. Paragraph 5.7.12 in EN-1 [RD4] continues to confirm that the technology-specific NPSS set out some exceptions to the application of the sequential test. However, when seeking development consent on a site allocated in a development plan through the application of the Sequential Test, informed by a strategic flood risk assessment, paragraph 5.7.12 in EN-1 [RD4] advises that applicants need not apply the Sequential Test, but should apply the sequential approach to locating development within the site.
- 4.2.79 Paragraph 5.7.13 in EN-1 [RD4] describes the Sequential Test, stating:

“Preference should be given to locating projects in Flood Zone 1 in England or Zone A in Wales. If there is no reasonably available site in Flood Zone 1 or Zone A, then projects can be located in Flood Zone 2 or Zone B. If there is no reasonably available site in Flood Zones 1 or 2 or Zones A & B, then nationally significant energy infrastructure projects can be located in Flood Zone 3 or Zone C subject to the Exception Test. Consideration of alternative sites should take account of the policy on alternatives set out in section 4.4 above”.

- 4.2.80 Paragraph 5.7.14 in EN-1 [RD4] then explains the approach to be taken where the Sequential Test cannot be met:

“If, following application of the sequential test, it is not possible, consistent with wider sustainability objectives, for the project to be located in zones of lower probability of flooding than Flood Zone 3 or Zone C, the Exception Test can be applied. The test provides a method of managing flood risk while still allowing necessary development to occur”.

- 4.2.81 Paragraph 5.7.16 in EN-1 [RD4] continues to state that:

“All three elements of the test will have to be passed for development to be consented. For the Exception Test to be passed:

- it must be demonstrated that the project provides wider sustainability benefits to the community that outweigh flood risk;
- the project should be on developable, previously developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously developed land subject to any exceptions set out in the technology-specific NPSs; and
- a Flood Risk Assessment must demonstrate that the project will be safe, without increasing flood risk elsewhere subject to the exception below and, where possible, will reduce flood risk overall”.

- 4.2.82 Paragraph 5.7.15 in EN-1 [RD4] clarifies that the Exception Test is only appropriate for use where the sequential test alone cannot deliver an acceptable site, taking into account the need for energy infrastructure to remain operational during floods.

- 4.2.83 Paragraph 3.6.9 of NPS EN-6 [RD5] states that the Sequential Test has been undertaken by the Government as part of the SSA. As a result, the Sequential Test is not required for any sites listed in NPS EN-6 as the Government has taken a sequential approach to the SSA by assessing all sites at a strategic level, including in relation to flooding, and by using the results of the Alternative Sites Assessment.

- 4.2.84 Paragraph 3.6.11 of NPS EN-6 [RD5] clarifies that the decision maker will still need to be satisfied that a sequential approach has been applied at the site level to ensure that, where possible, critical infrastructure is located in the lowest flood risk areas within the site.

- 4.2.85 Paragraph 3.6.12 of NPS EN-6 [RD5] states that the Exception Test is still required where the site is located in Flood Zone C. Paragraph 3.6.13 clarifies that the second limb of the Exception Test, as set out in paragraph 5.7.16 of NPS EN-1 does not apply to new nuclear development.

- 4.2.86 Paragraph 3.6.16 makes clear that applicants should set out measures to mitigate the risk of flooding on or from individual sites that may result from the development.

Welsh national and local policy

- 4.2.87 Sections 13.4 of PPW [RD8] sets out the Welsh Government's approach to flood risk and development in areas of high flood risk and dealing with contaminated land such that the development does not impact on the water environment.
- 4.2.88 Paragraph 13.4.2 of PPW [RD8] states that local planning authorities should ensure that development does not increase the risk of flooding elsewhere by loss of flood storage or flood flow route or increase the problem of surface water run-off. Paragraph 13.4.3 of PPW [RD8] confirms that flood risk is a material consideration in the determination of planning applications.
- 4.2.89 TAN 15 (2004) states that that flood risk is a material consideration in the determination of planning applications and provides a framework within which risks arising from both river and coastal flooding, and from additional runoff from development in any location, can be assessed.
- 4.2.90 Strategic Policy PS 5 in the JLDP [RD27] seeks developments that manage flood risk and maximise use of Sustainable Drainage Systems.
- 4.2.91 Strategic Policy PS 6 in the JLDP [RD27] asserts that, in order to adapt to effects of climate change, proposals will only be permitted where they are located away from flood risk areas unless it can be clearly demonstrated that there is no risk or that the risk can be managed. Strategic Policy PS 8 states that proposals should, as far as is appropriate or relevant, provide flood protection measures to manage flood risk and, where feasible, deliver improvements in the locality.
- 4.2.92 Policy PCYFF 3 in the JLDP [RD27] states that proposals would only be permitted where their drainage systems are designed to limit surface water run-off, flood risk and pollution.
- 4.2.93 Policy PCYFF 6 in the JLDP [RD27] requires development to incorporate water conservation measures where practicable, including Sustainable Drainage Systems. This policy also notes that proposals should use flood minimisation or mitigation measures where possible, to reduce surface water run-off and minimise its contribution to flood risk elsewhere.
- 4.2.94 GP 21 of the Wylfa SPG [RD28] suggests that the Wylfa Newydd Project should include measures to control surface water runoff.

Planning assessment

Environmental assessment

- 4.2.95 A Flood Consequence Assessment is provided at appendix D8-04 of the Environmental Statement (Application Reference Number: 6.4.29) and is considered as part of chapter D8 of the Environmental Statement (Application Reference Number: 6.4.8).

- 4.2.96 During the construction stage it will be necessary for elements of the construction to take place within Flood Zone C. Details to show why they are required to take place within this flood zone are set out in volume 2 of the Site Selection Report (Application Reference 8.24.2).
- 4.2.97 During the operation stage a number of the Marine Works associated with the Power Station, including the Cooling Water System (intake and outfall), breakwater, and Marine Off-Loading Facility (MOLF) are at risk of flooding due to their proposed location at Porth-y-pistyll Flood Zone C2.
- 4.2.98 Critical infrastructure associated with the development is located in the lowest flood risk areas (Flood Zone A).

Mitigation

- 4.2.99 Horizon would provide a series of measures to prevent increased risks to off-site flooding, including appropriate construction drainage and a passive engineered drainage system for the landform areas, which would match baseline conditions as closely as practicable as part of the final landform design. The detailed designs for landform and drainage would be informed by hydraulic modelling.

Residual effects

- 4.2.100 With the mitigation identified no significant residual effects on flood risk are anticipated during operation, construction or decommissioning.

Assessment against policy

Construction

- 4.2.101 All of the land within the WNDA that would be used for construction would be classified as an employment site which is defined in TAN 15 as “less vulnerable development”. [RD52].
- 4.2.102 The details set out in volume 2 of the Site Selection Report (Application Reference 8.24.2) satisfy the sequential approach at a site level for the purposes of construction works within Flood Zone C, in accordance with paragraph 3.6.11 of NPS EN-6 [RD5]. The Proposed Development requires construction works within high flood risk areas due to the nature of the development within and adjacent to the Irish Sea.
- 4.2.103 In accordance with paragraph 3.6.13 of NPS-EN-6 [RD5] paragraph 13.4.2 of PPW [RD8], and policies PCYFF 3 and PCYFF 6 of the JLDP [RD27], mitigation is proposed during the construction phase to prevent increased risk of off-site flooding, as set out above.
- 4.2.104 This also shows that the Exception Test can be passed in accordance with paragraph 5.7.16 of NPS EN-1 [RD4] and paragraph 3.6.13 of NPS-EN-6 [RD5].

Operation

- 4.2.105 During the operation stage the Marine Works would be located in Flood Zone C2, however these structures are water compatible and would remain

operational and safe for users in times of flood. As such they can therefore be considered appropriate to be sited in an area at risk of flooding. Critical infrastructure associated with the development is located in the lowest flood risk areas (Flood Zone A) in accordance with paragraph 3.6.11 of NPS-EN6 [RD5].

4.2.106 As for the construction phase, the details set out in volume 2 of the Site Selection Report (Application Reference 8.24.2) satisfy the sequential approach at a site level for the purposes of construction works within Flood Zone C, in accordance with paragraph 3.6.11 of NPS EN-6 [RD5]. In summary, these elements need to be located within high flood risk areas as they need to be in physical contact with the Irish Sea for operational purposes.

4.2.107 The minimal flood risk to water compatible uses will be clearly outweighed by the wider sustainability benefits to the community, as set out in section 6 of the Planning Statement main report. As a water compatible use, the Flood Consequences Assessment (Application Reference Number: 6.4.29) shows that the Proposed Development will be safe.

4.2.108 In accordance with paragraph 3.6.13 of NPS-EN-6 [RD5] paragraph 13.4.2 of PPW [RD8], and policies PCYFF 3 and PCYFF 6 of the JLDP [RD27], mitigation is proposed during the operation phase to prevent increased risk of off-site flooding, as set out above.

4.2.109 This also shows that the Exception Test can be passed in accordance with paragraph 5.7.16 of NPS EN-1 [RD4] and paragraph 3.6.13 of NPS-EN-6 [RD5].

Decommissioning

4.2.110 Mitigation would be provided to address risks during the decommissioning phase to accord with policy as set out for the construction and operation stages above.

Conclusion

4.2.111 The text above shows that the Proposed Development is in accordance with national and local policy (including PPW and policies PCYFF 3 and PCYFF 6 of the JLDP [RD27] and NPS EN-1 [RD4] and EN-6 [RD5], in relation to flood risk.

Historic environment

4.2.112 The historic environment is identified as a Generic Impact in EN-1 [RD4].

Policy context

Infrastructure Planning (Decisions) Regulations 2010

4.2.113 Section 3 of the *Infrastructure Planning (Decisions) Regulations 2010* states that when deciding an application which affects a Listed Building or its setting, the decision maker must have regard to the desirability of preserving the Listed Building or its setting or any features of special architectural or historic interest which it possesses.

National Policy Statements

- 4.2.114 Paragraph 1.7.2 of EN-1 [RD4] states that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects on cultural heritage.
- 4.2.115 Paragraph 5.8.1 of EN-1 [RD4] recognises that the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment.
- 4.2.116 Paragraph 5.8.2 of EN-1 [RD4] confirms that those elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest are called 'heritage assets'.
- 4.2.117 In relation to Wylfa, paragraphs C.9.68 and C.9.69 of EN-6 [RD5] identify the potential for adverse effects on heritage assets, namely Cestyll Garden, the Bronze Age standing stones Scheduled Monument, three Grade II Listed Buildings in Cafnan and Listed Buildings around Cemaes. It is noted that it should be possible to mitigate against the potential adverse effects on Scheduled Monuments, although further detailed assessment at project level will be required.
- 4.2.118 Paragraph 5.8.14 of EN-1 [RD4] states that *"there should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be"*. Paragraph 5.8.14 of EN-1 [RD4] also states:
- "Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II* listed buildings; grade I and II* registered parks and gardens; and World Heritage Sites, should be wholly exceptional"*.
- 4.2.119 Paragraph 5.8.15 of EN-1 [RD4] states that any harmful impacts on the significance of designated heritage assets should be "...weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss".
- 4.2.120 Paragraph C.9.68 and C.9.69 of NPS EN-6 [RD5] identify potential adverse effects on Cestyll Garden, the Bronze Age standing stones Scheduled Monument, three Grade II listed buildings in Cafnan and listed buildings around Cemaes. It is noted that it should be possible to mitigate against the potential adverse effects on scheduled monuments, although further detailed assessment at project level will be required.

Welsh national and local policy

- 4.2.121 PPW [RD8] identifies objectives including conserving and enhancing the historic environment at section 6.2. PPW [RD8] confirms that the greater the significance and/or impact on the historic environment, then the greater the benefit needed to justify any harm (paragraph 6.5.1).
- 4.2.122 PPW [RD8] also clarifies at paragraph 6.5.5 that where nationally important archaeological remains, whether scheduled or not, and their settings are likely to be affected by proposed development, there should be a presumption in favour of their physical protection *in situ*. Paragraph 6.5.5 in PPW [RD8] states:
- "It will only be in exceptional circumstances that planning permission will be granted if development would result in an adverse impact on a Scheduled Monument (or an archaeological site shown to be of national importance) or has a significantly damaging effect upon its setting. In cases involving less significant archaeological remains, local planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development".*
- 4.2.123 At the local level, Strategic Policy PS 5 in the JLDP [RD27] confirms that development will be supported where it is consistent with its sustainable development principles, including preserving and enhancing the quality of the built and historic environment assets including their setting.
- 4.2.124 For example, Policy PS 9 in the JLDP [RD27] relates to the main site and states that the layout and design of the Power Station and the scale of open spaces, landscaping, planting (including hedging and tree belts), waterways and similar features should avoid, minimise, mitigate or compensate for impacts on cultural and historic aspects of the landscape, both in the short and longer term.
- 4.2.125 Policy PS 20 in the JLDP [RD27] states that local planning authorities should endeavour to preserve or enhance heritage assets, both designated and undesignated. Policy PS 20 also states that proposals which preserve and where appropriate enhance the heritage assets, their setting and Significant Views into and out of the building/area will be granted.
- 4.2.126 Policy AT 1 in the JLDP [RD27] states that any proposal within or assessed to affect the setting of Conservation Areas, World Heritage Sites, Registered Historic Landscapes and Parks and Gardens should have regard to relevant character appraisals, management plans, delivery strategies and assessments adopted by the Local Planning Authority.
- 4.2.127 Policy AT 3 in the JLDP [RD27] states that proposals will be required to conserve and seek opportunities to enhance buildings, structures and areas of locally or regionally significant non-designated heritage assets, which create a sense of local character, identity and variation.
- 4.2.128 Policy AT 4 in the JLDP [RD27] states that the importance and condition of archaeological sites, and the potential impact of development on this should be assessed prior to planning. Consent will only be granted if development need outweighs the significance of the archaeology, and may include a requirement for archaeological investigation.

Planning assessment

Environmental assessment

4.2.129 The EIA of development within the WNDA on historic environment matters is set out in chapter D11 of the Environmental Statement (Application Reference Number: 6.4.11).

4.2.130 During construction, the following significant effects have been identified.

- Major adverse effects on terrestrial archaeological remains.
- Moderate adverse effects on terrestrial archaeological remains.
- No significant adverse effects on marine archaeological remains.
- A major adverse effect on Felin Gafnan Corn Mill, a Grade II* Listed Building located immediately to the west of the Power Station Site and WNDA.
- Moderate adverse effects on historic buildings.
- A major adverse effect on Cestyll Garden, a Grade II Registered Historic Park and Garden.
- A moderate adverse effect on Dame Sylvia Crowe's Landscaping Area.

Mitigation

4.2.131 Prior to the start of relevant works, mitigation would be provided for heritage assets including: archaeological surveys; palaeoenvironmental assessments; watching briefs; photographic surveys; excavation; strip map and sampling; historic building recordings; and/or historic landscape recordings.

4.2.132 For archaeological assets defined in the Main Power Station Site sub-CoCP (Application Reference Number: 8.7), archaeological mitigation strategies would also be developed in consultation with relevant stakeholders.

4.2.133 Peats and other deposits at Tre'r Gof SSSI with the potential for the presence of archaeological and palaeoenvironmental remains would be preserved in situ through the avoidance of works within the Tre'r Gof SSSI boundary and buffer zones, and through the minimisation of any new drainage within this area.

4.2.134 There would be phased implementation of landscape mounding, seeding of pasture and woodland planting to soften views of the Power Station, to include early creation of the outer slopes of the linear landscaped mound adjacent to Tregele, and landscape mounding on the edge of Cemaes.

4.2.135 The Lady's Finger of Lancaster apple tree would be translocated from Cestyll Garden kitchen garden.

4.2.136 The landscape design for the location of the former kitchen garden would be agreed with relevant stakeholders.

4.2.137 The wooded mounds forming part of the landscape design for the Existing Power Station by Dame Sylvia Crowe would be retained.

4.2.138 The environmental design would include restoration of the characteristic field pattern with traditional boundary types including hedgerows, to integrate the Power Station into the landscape.

4.2.139 Where practicable, excess land would be returned to agriculture, in conjunction with proposed ecological enhancement measures, to help to integrate the Power Station into the landscape.

4.2.140 A vibration risk assessment would be undertaken to help establish safe working distances from heritage assets in relation to construction vibration.

Residual effects

4.2.141 During construction moderate and major residual adverse residual effects have been identified at Felin Gafnan Corn Mill, a Grade II* Listed Building located immediately to the west of the Power Station Site and WNDA.

4.2.142 Moderate residual adverse effects during the construction phase are identified at the corn drying house and Mill House at Felin Gafnan, as well as Cafnan House and Outbuildings.

4.2.143 A moderate adverse residual effect has been identified for St. Patrick's Church in Llanbadrig during the construction phase due to construction activity forming an intrusive element in views of the church. Construction would not affect key attributes of the asset's setting, such as its coastal location and views out to sea.

4.2.144 A major adverse residual effect is identified at Cestyll Garden, a Grade II Registered Historic Park and Garden, due to the permanent removal of the kitchen garden, the plot of land where Cestyll House formerly stood, and parts of its Essential Setting.

4.2.145 The operational phase would result in the following effects on historic assets, which cannot be mitigated due to their location in the landscape:

- a loss of amenity for the setting of Felin Cafnan Corn Mill, and for the settings of the corn drying house and mill house at Felin Gafnan, due to the presence of the Power Station and breakwater, altering the coastal rural setting and intruding on views of the mill from Cestyll Garden;
- a loss of amenity for the settings of Cafnan House and Outbuildings due to the presence of the Power Station, landscape mounds and planting;
- visual intrusion into the setting and Significant Views of Cestyll Garden, a Registered Historic Park and Garden; and
- visual intrusion into key views of Dame Sylvia Crowe's landscape.

4.2.146 During decommissioning, many of the buildings on the Power Station Site would be removed, which would restore the setting of some of the cultural heritage assets. The following effects on historic assets would be expected:

- noise and visual intrusion on the setting of Felin Gafnan Corn Mill, and the corn-drying house and mill house at Felin Gafnan, and on Cafnan House and Outbuildings, due to the operation of demolition plant, the removal of Power Station structures and remediation of the site; and

- visual intrusion due to the continued presence of the breakwater in significant views from Cestyll Garden.

Assessment against policy

- 4.2.147 The significant residual effect identified on Cestyll Garden has been assessed to constitute substantial harm as this would result in a permanent and substantial loss of the significance of this heritage asset.
- 4.2.148 In accordance with paragraph 5.8.14 of NPS EN-1 [RD4], loss of, or substantial harm to, a Grade II Registered Historic Park and Garden should be exceptional.
- 4.2.149 The loss arises from the location of a construction laydown area, which needs to be located in this area because of the following:
- The area is required to provide access to the western breakwater and allow surface water and treated effluent to discharge.
 - The area is the only available space in close proximity to the western breakwater, as other areas adjacent to Porth-y-pistyll bay are required to support proposals such as the MOLF.
 - Repositioning the laydown area further away from Cestyll Gardens would require other laydown areas within the WNDA to be repositioned, which would be likely to encroach on the Tre'r Gof SSSI.
- 4.2.150 The substantial harm and loss identified to Cestyll Gardens is necessary to achieve the substantial public benefits of delivering the Power Station, by helping to meet the identified urgent need for new electricity NSIPs in the UK within the next 10 to 15 years. The main report identifies that the benefits outweigh the harm and loss in accordance with paragraph 5.8.15 of NPS EN-1 [RD4]. For this reason it is also considered that the Proposed Development is in accordance with Policy PS20 of the JLDP as preservation of heritage assets is sought where possible, unless it is essential for the delivery of the project.
- 4.2.151 Adverse impacts on other heritage assets are not considered to constitute substantial harm. This includes the significant residual adverse effect on Felin Gafnan Corn Mill, because the effect would not result in a permanent and substantial loss of the significance of this heritage asset.
- 4.2.152 More information on how substantial harm has been defined is contained in volume B, chapter 11 of the Environmental Statement (Application Reference Number: 6.2.11).

Conclusion

- 4.2.153 The text above shows that the Proposed Development is in accordance with national and local policy, including NPS EN-1 [RD4] and EN-6 [RD5], in relation to the historic environment.

Landscape and visual

Policy context

National Policy Statements

- 4.2.154 Paragraph 1.7.2 of EN-1 [RD4] states that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects *inter alia* on landscape and visual amenity. In general, it should be possible to mitigate satisfactorily the most significant potential negative effects of new energy infrastructure consented in accordance with the energy NPSs. However, paragraph 1.7.2 of EN-1 [RD4] acknowledges that the impacts on landscape and visual amenity in particular will sometimes be hard to mitigate.
- 4.2.155 Paragraph 1.7.11 of EN-1 [RD4] states that EN-1 [RD4] already contains policies which severely limit the prospects for development of large-scale energy infrastructure in the most attractive landscapes and townscapes. Paragraph 1.7.11 of EN-1 [RD4] continues to state that:
- “Tightening the development consent policies in EN-1 to make it harder for energy infrastructure to be consented which would have adverse landscape or townscape effects would be likely to make it significantly more difficult to gain consent for a range of large-scale energy infrastructure projects”.
- 4.2.156 The landscape and visual effects of energy projects will vary on a case by case basis according to the type of development, its location and the landscape setting of the proposed development, as clarified at paragraph 5.9.1 in EN-1 [RD4].
- 4.2.157 EN-1 [RD4] states at paragraph 4.5.1 that the visual appearance of a building is sometimes considered to be the most important factor in good design. But high quality and inclusive design goes far beyond aesthetic considerations. It clarifies that the functionality of an object — be it a building or other type of infrastructure — including fitness for purpose and sustainability, is equally important.
- 4.2.158 Paragraph 4.5.1 in EN-1 [RD4] continues to state that:
- “Applying ‘good design’ to energy projects should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible. It is acknowledged, however that the nature of much energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area”.
- 4.2.159 Paragraph 5.9.8 of EN-1 [RD4] states that virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.
- 4.2.160 EN-1 [RD4] also clarifies at paragraph 5.9.5 that:
- “The landscape and visual assessment should include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project. The

applicant's assessment should also take account of any relevant policies based on these assessments in local development documents in England and local development plans in Wales".

4.2.161 Paragraph 5.9.9 in EN-1 [RD4] states that the conservation of the natural beauty of the landscape and countryside should be given substantial weight by the decision maker in deciding on applications for development consent in nationally designated landscapes, such as an AONB.

4.2.162 Paragraph 5.9.10 in EN-1 [RD4] confirms that the decision maker may grant development consent in nationally designated landscapes, such as AONBs, in exceptional circumstances. The development should be demonstrated to be in the public interest and consideration of such applications should include an assessment of:

- the need for the development, including in terms of national considerations, and the impact of consenting or not consenting it upon the local economy;
- the cost of, and scope for, developing elsewhere outside the designated area or meeting the need for it in some other way, taking account of the policy on alternatives set out in section 4.4 of EN-1 [RD4]; and
- any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

4.2.163 Paragraph 5.9.11 in EN-1 [RD4] states that the decision maker should, *"...ensure that any projects consented in these designated areas should be carried out to high environmental standards, including through the application of appropriate requirements where necessary"*.

4.2.164 Paragraph 5.9.12 in EN-1 [RD4] confirms that the duty to have regard to the purposes of nationally designated sites also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints.

4.2.165 Paragraph 5.9.14 in EN-1 [RD4] confirms that local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.

4.2.166 Paragraph 5.9.15 in EN-1 [RD4] acknowledges that the scale of such projects means that they will often be visible within many miles of the site of the proposed infrastructure. The decision maker should therefore judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the Project.

4.2.167 Paragraph 5.9.16 in EN-1 [RD4] states that the decision maker should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the decision maker considers reasonable.

- 4.2.168 Paragraph 5.9.17 in EN-1 [RD4] states that the decision maker “...*should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation*”.
- 4.2.169 Paragraph 5.9.18 in EN-1 [RD4] recognises that coastal areas are particularly vulnerable to visual intrusion because of the potential high visibility of development on the foreshore, on the skyline and affecting views along stretches of undeveloped coast.
- 4.2.170 Paragraph 5.9.20 in EN-1 [RD4] states that the decision maker should ensure applicants have taken into account the landscape and visual impacts of visible plumes from chimney stacks and/or the cooling assembly.
- 4.2.171 Paragraph 5.9.21 in EN-1 [RD4] states that there may be exceptional circumstances where mitigation could have a very significant benefit and warrant a small reduction in function. In these circumstances, the decision maker may decide that the benefits of the mitigation to reduce the landscape and/or visual effects outweigh the marginal loss of function.
- 4.2.172 Paragraph 5.9.22 in EN-1 [RD4] states that within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project.
- 4.2.173 Paragraph 2.8.3 of EN-6 [RD5] states that the decision maker should consider how good design can act to mitigate the impacts of new nuclear power stations, such as landscape and visual impacts.
- 4.2.174 Paragraph 3.10.8 of EN-6 [RD5] states that the decision maker:
- “...should not expect the visual impacts associated with new nuclear power stations to be eliminated with mitigation. Indeed, the scope for visual mitigation will be quite limited. Mitigations should, however, be designed to reduce the visual intrusion of the project as far as reasonably practicable”.
- 4.2.175 Paragraph C.9.71 and C.9.72 of EN-6 [RD5] state that there are likely to be some long lasting adverse direct and indirect effects on landscape character and visual impacts on the AONB. Further detailed assessment is therefore required to understand these effects and whether they affect the purpose of the designation.
- 4.2.176 Paragraph 5.6.3 of EN-1 [RD4] identifies that some impacts from artificial light, smoke and steam may be unavoidable, but the aim should be to keep impacts to a minimum, and at a level that is acceptable.
- 4.2.177 Paragraph 5.6.7 of EN-1 clarifies that the decision maker be satisfied that all reasonable steps have been taken, and will be taken, to minimise any detrimental impacts on artificial light, smoke and steam.

Welsh national and local policy

4.2.178 Section 5.3 of PPW [RD8] sets out measures to conserve landscape and biodiversity.

- AONBs should be given the highest status of protection from inappropriate development. Great weight should be given to the conservation and enhancement of their natural beauty;
- Non-statutory designations, such as, Special Landscape Areas should be protected; and
- LANDMAP NRW, (2011 and 2013a-2013d) [RD47] provides an important information resource to use in undertaking landscape assessments which inform decision making.

4.2.179 PPW [RD8] states that, while the value of all the landscapes of Wales is recognised local planning authorities should have regard to the relative significance of international, national and local designations in considering the weight to be attached to nature conservation interests and should take care to avoid placing unnecessary constraints on development (paragraph 5.3.2).

4.2.180 JLDP [RD27] Strategic Policy PS 5 states that proposals should protect and improve the quality of the natural environment, its landscapes and biodiversity assets.

4.2.181 Strategic Policy PS 9 in the JLDP [RD27] states that the design of all the Wylfa Newydd Project and related development should ensure the scheme layout and design and the scale of open spaces, landscaping, planting, waterways and similar features proposed should avoid, minimize, mitigate or compensate for visual and landscape 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. This policy clarifies that proposals will be expected to be commensurate with the scale of the development, and the extent of its impact.

4.2.182 Policy PCYFF 4 in the JLDP [RD27] states that all proposals should integrate into their surroundings and clarifies that those proposals that fail to show (in a manner appropriate to the nature, scale and location of the proposed development) how landscaping has been considered from the outset as part of the design proposal will be refused. This policy also requires that landscape schemes for developments should *inter alia*:

- give due consideration to the Landscape Character Area Assessment or Seascape Character Area Assessment;
- respect the natural contours of the landscape;
- respect and protects local and strategic views;
- respect, retain and complement any existing positive natural features, landscapes, or other features on site;
- identify trees, hedgerows, water courses and topographical features to be retained; and
- justify circumstances where the removal/loss of existing trees, hedgerows, water courses and topographical features cannot be avoided and provides details of replacements.

- 4.2.183 Strategic Policy PS 19 states that development should conserve and where appropriate enhance the distinctive natural environment, countryside and coastline, and confirms that proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area.
- 4.2.184 This policy also states that when determining planning applications, consideration should be given to:
- Safeguarding the coastline and landscapes;
 - Protecting or where appropriate enhance sites of international, national, regional and local importance and, where appropriate, their settings in line with National Policy.
 - Having appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with National Policy.
 - Protecting, retaining or enhancing the local character and distinctiveness of the individual Landscape Character Areas and Seascape Character Areas; and
 - Protecting, retaining or enhancing trees, hedgerows or woodland of visual, ecological, historic cultural or amenity value.
- 4.2.185 Policy AMG 1 of the JLDP [RD27] states that proposals within or affecting the setting and/or Significant Views into and out of the AONB must, where appropriate, have regard to the relevant AONB management plan.
- 4.2.186 Policy AMG 2 of the JLDP [RD27] states that proposals within Special Landscape Areas will need to appropriately consider the scale and nature of the development ensuring that there is no significant adverse detrimental impact on the landscape, adding that such development should aim to maintain, enhance or restore the recognised character and qualities of the SLA. However, this policy clarifies that in exceptional circumstances, where development is necessary and could result in significant impacts on the landscape, appropriate mitigation and compensation measures should be provided.
- 4.2.187 Policy AMG 3 of the JLDP [RD27] requires proposals that would have a significant adverse impact upon landscape character, as defined by the Landscape Character Areas, to demonstrate how landscape character has influenced the design, scale and nature and site selection of the development.
- 4.2.188 Policy CCC 3.1 of the Isle of Anglesey AONB Management Plan (2015) [RD47] states that all development proposals within and up to 2km adjacent to the Isle of Anglesey AONB should be subjected to rigorous assessment to reduce inappropriate development.
- 4.2.189 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.

4.2.190 The Wylfa SPG [RD28] also encourages the project promoter at GP 20 to demonstrate that the Wylfa Newydd Project either alone or in combination with other proposals, would not have significant adverse impacts on the local landscape character with reference to the Special Landscape Areas and Local Landscape Character Areas. GP 20 also clarifies that where adverse impacts cannot be avoided, IACC expect appropriate mitigation and/or compensation measures to be implemented.

Planning assessment

Environmental assessment

4.2.191 The environmental assessment in terms of landscape and visual matters, is set out in chapter D10 of the Environmental Statement (Application Reference Number: 6.4.10).

4.2.192 This assessment also covers the visual impacts from artificial light, steam and smoke.

Mitigation

Construction

4.2.193 Measures to mitigate construction effects include.

- The design of temporary buildings within the site compound and construction/laydown areas, as well as the perimeter fence, would seek to mitigate the visual impact of those buildings on the surrounding areas through the use of visually recessive colour, finishes and maximum heights.
- Phased implementation of landscape mounding, seeding of pasture and woodland planting to include early creation of the outer slopes of the linear landscaped mound adjacent to Tregele, and landscape mounding on the edge of Cemaes. Landscape mounding and landscaping would be sequenced in accordance with the Phasing Strategy (Application Reference Number: 8.29).
- Enhancements to existing boundary features, such as infill planting and management to improve structure and species diversity, and introduction of hedgerow trees where appropriate. Stone walls would be repaired and current condition of cloddiau improved, where necessary and practicable.
- Where soils would be stored for longer than 60 days, stockpiles and temporary landscape mounding would be seeded with an appropriate low-maintenance seed mix to reduce adverse effects.
- management and enhancement of retained trees, scrub and hedgerows including Dame Sylvia Crowe designed woodland and new areas of

landscaping to completed areas of landscape mounding, and the control of unwanted plant species, including invasive species.

- The use of appropriate materials within the marine environment, such as the MOLF and breakwaters, to help to integrate new structures into the existing seascape character.
- Construction lighting would be designed to reduce sky glow, glare and light spill onto sensitive receptors, where practicable.
- Existing walls, boundary hedgerows, trees, gateposts and fences outside the perimeter site fence, but within the WNDA would be retained.
- Appropriate management and enhancement of the retained Dame Sylvia Crowe wooded mound, to manage its condition and to safeguard its longevity and role in visually softening the Existing Power Station as part of Horizon's long-term strategy for the site.
- A commitment to further landscape design development to take account of landscape architecture, ecology and cultural heritage, including restoration of agricultural field pattern, including hedgerows, cloddiau, drystone walls and woodland planting.
- New stone walls and cloddiau forming part of the landscape design would be constructed from stone saved from dismantled stone walls and cloddiau.
- The rocky shoreline and intertidal zone would be protected and reinstated.
- design construction lighting to reduce light spill to below thresholds where significant effects are predicted where practicable.

Operation

4.2.194 Mitigation measures for the operational phase would include:

- The landscape design of the WNDA outside of the Power Station Site would seek to soften the appearance of the Power Station and reduce visual effects.
- A colour scheme based on natural colours would be developed, which would seek to break down the scale and massing of the Power Station buildings and help integrate them into the landscape, using a similar approach to that used for the Existing Power Station.
- Consolidation of certain Power Station buildings within a smaller footprint to reduce the overall scale and massing, wherever practicable.
- The production of landscape management schemes for newly created landscape and habitats.
- Landscape mounding and woodland planting would be provided to help soften views of and integrate the Power Station into the landscape.
- The area reserved for the Spent Fuel Storage Facility and Intermediate Level Waste Storage Facility would be temporarily seeded until needed.

- The operational lighting designs would be developed to: meet operational, safety and security purposes; limit light spill onto sensitive receptors to below thresholds where significant effects are predicted; maintain a uniform lighting solution to reduce dark and light spots; and limit visibility of new lighting at distant receptors.

Decommissioning

- 4.2.195 Lighting for decommissioning would be designed to reduce light spill onto sensitive receptors. Consideration would be given to the long-term appearance of new or existing buildings to remain during the care and maintenance period. Recreation of an appropriate field pattern consisting of new hedgerows planted with native plant species and areas of native woodland would assist in mitigating the long-term landscape and visual effects of the Power Station.
- 4.2.196 There would be site restoration of the Power Station Site, landscaped to an 'equivalent' land use to that which existed prior to construction. Landscaped areas outside of the Power Station Site, including landscaped mounding and associated pasture and planting, would be retained.

Residual effects

- 4.2.197 The key issue for the landscape and visual impact assessment is the scale of the Power Station in relation to the existing landscape and seascape context and its appearance in views from the surrounding area. Details of the scale of the residual effects are set out in Tables 4-1 to 4-3 below.

Construction

- 4.2.198 During construction, an erosion of landscape character for most of the WNDA and the wider landscape would be expected.
- 4.2.199 Changes for the rural landscape would arise from removal of existing rural features and the introduction of fencing, compounds and other construction activities, together with views to other associated construction works nearby, creating a significant adverse effect on directly affected parts of the landscape character of the Anglesey AONB and the North Anglesey Heritage Coast. Nine Local Landscape Character Areas and nine Local Seascape Character Areas would also experience effects from these activities.
- 4.2.200 Local communities would experience significant adverse visual effects arising from site clearance, the introduction of permanent and temporary structures, plant and construction activities. In particular, Cemaes and Tregele would experience significant adverse effects arising from the proximity of these activities. Views from communities of Llanfairynghornwy and Llanfechell would also be significantly adversely affected by these activities.
- 4.2.201 Significant adverse visual effects would be experienced by users of the Copper Trail, the WCP, other PRoWs and roads. Visitors to Cemlyn Bay and Cestyll Garden, William Thomas Monument at Mynydd y Garn, the standing stones of Llanfechell and offshore viewers would also experience changes in their views.

4.2.202 Users of the A5025 and the local road network would also experience significant adverse effects in views due to site clearance and construction activities.

4.2.203 There would also be significant adverse night-time visual effects, caused by proposed lighting, on users of the A5025, the local road network, and local communities.

Operation

4.2.204 Many operational effects would reduce over time. During summer time in the operational phase, fifteen years after operations begin, the landscape character of localised parts of the Anglesey AONB, the wider landscape context and five Local Landscape Character Areas would continue to be significantly adversely affected by the Proposed Development. Maturing vegetation including the proposed landscape restoration of those parts of the WNDA not required for operational purposes would help further integrate the landscape mounding and Power Station.

4.2.205 The seascape character of directly affected parts of the North Anglesey Heritage Coast and six Local Seascape Character Areas would be significantly adversely affected by the proposed development.

4.2.206 The community of Cemaes would experience reduced visual effects to minor adverse compared to the construction phase effects, because the maturing vegetation and landscape mounding would provide screening of the Power Station buildings with glimpses of the top of one main stack. For the community of Tregele, the softening effects of the maturing vegetation would not completely mitigate the visual effects and they are likely to remain significant. For the community of Llanfairynghornwy, most large scale buildings would remain visible and the effects are likely to remain significant.

4.2.207 There would be reduced visual effects compared to the construction phase for users of the Copper Trail, the West Coast Path, other PRoWs and roads. Visitors to Cemlyn Bay and Cestyll Garden, William Thomas Monument at Mynydd y Garn, the standing stones of Llanfechell and offshore viewers would also experience reduced visual effects compared with the construction phase and early years of the operational phase.

Decommissioning

4.2.208 During decommissioning, the gradual dismantling of buildings and structures would cause adverse effects on the landscape and visual receptors mentioned above as listed in the tables below.

Summary of residual effects

Table 4-1 Summary of residual effects - landscape

Receptor (or group of receptors)	Construction	Operation – Winter year 1	Operation – Summer year 15	Decommissioning
Isle of Anglesey AONB (directly)	Major adverse	Major adverse	Moderate adverse	Major adverse

affected area only)				
Non-designated landscape	Major adverse	Major adverse	Moderate adverse	Major adverse
Local Landscape Character Areas (LLCAs)	Minor to major adverse	Minor to major adverse	Minor to moderate adverse	Minor to major adverse
North Anglesey Heritage Coast (directly affected area only)	Major adverse	Major adverse	Major adverse	Major adverse
Local Seascape Character Areas (LSCAs)	Minor to major adverse	Minor to major adverse	Minor to major adverse	Minor to major adverse

Table 4-2 Summary of residual effects - visual

Receptor (or group of receptors)	Construction	Operation – Winter year 1	Operation – Summer year 15	Decommissioning
WCP walkers	Moderate to major adverse	Minor to major adverse	Negligible to major adverse	Moderate to major adverse
Local PRoWs and open access land	Moderate to major adverse	Minor to major adverse	Minor to major adverse	Moderate to major adverse
Copper Trail/NCN Route 566	Minor to major adverse	Negligible to moderate adverse	Negligible to moderate adverse	Minor to major adverse
A5025 users	Moderate to major adverse	Minor to major adverse	Minor to moderate adverse	Moderate to major adverse
Local road network users	Minor to major adverse	Minor to major adverse	Negligible to moderate adverse	Moderate to major adverse
Cemaes	Moderate to major adverse	Minor to moderate adverse	Minor adverse	Moderate to major adverse
Tregele	Major adverse	Major adverse	Moderate adverse	Major adverse
Llanfairynghor nwy	Moderate adverse	Moderate adverse	Moderate adverse	Moderate adverse
Llanfechell	Moderate adverse	Negligible	Negligible	Moderate adverse
Visitors to Cestyll Garden	Major adverse	Major adverse	Major adverse	Major adverse

Visitors to William Thomas Monument at Mynydd y Garn	Major adverse	Major adverse	Moderate adverse	Moderate adverse
Visitors to the standing stones north of Llanfechell	Major adverse	Major adverse	Major adverse	Major adverse
Offshore viewers	Major adverse	Moderate to major adverse	Moderate to major adverse	Major adverse
Residents in the vicinity of the Ecological Compensation Site at Cae Canol-dydd	Moderate adverse	Negligible	Negligible	Not applicable
Residents in the vicinity of the Ecological Compensation Site at Tŷ Du	Moderate adverse	Negligible	Negligible	Not applicable

Table 4-3 Summary of residual effects – night-time visual

Receptor (or group of receptors)	Construction	Operation – Winter year 1	Operation – Summer year 15	Decommissioning
A5025 users	Moderate to major adverse	Minor to moderate adverse	Moderate adverse	Moderate to major adverse
Local road network users	Major adverse	Moderate adverse	Moderate adverse	Major adverse
Tregele	Major adverse	Minor adverse	Negligible	Major adverse
Llanfairynghor nwy	Moderate adverse	Negligible	Negligible	Moderate adverse

Assessment against policy

4.2.209 Due to the scale and nature of the Power Station, the impacts remain significant following additional mitigation for nearly all of the landscape and visual receptors, as identified in tables 4-1 to 4-2. This is the case despite substantial measures to reduce the impact as noted above. Effects from artificial light, as shown in Table 4-3, are assessed separately below.

4.2.210 With mitigation including those listed above in place, the Proposed Development has sought to minimise harm to the landscape outside nationally designated areas in accordance with paragraph 5.9.17 of NPS EN-1 [RD4] and reduce the visual intrusion of the Proposed Development as far as

reasonably practicable in accordance with paragraph 3.10.8 of NPS EN-6 [RD5]. Designated areas are considered separately below. The applicant has worked closely with stakeholders to design mitigation in parallel with meeting the Power Station requirements and the resulting proposals would result in a new naturalistic setting that complements the surrounding area whilst also seeking to balance earthwork movements through cut and fill.

Anglesey AONB and North Anglesey Heritage Coast

- 4.2.211 Directly affected areas of the AONB will receive a major significant residual adverse landscape impact during the construction period due to the construction of a landscaped mound. As the landscaping matures, the impact on the directly affected areas of the AONB is likely to reduce to a moderate adverse impact by the 15th summer following planting.
- 4.2.212 The special qualities of the AONB are also likely to be adversely affected in a variety of other ways, including:
- a total loss of a small area of broad-leaved woodland within the WND and AONB during construction, which would then be replaced with new planting once the earthworks are complete;
 - harm to the setting of Listed Buildings and a Registered Historic Park and Garden located within the AONB;
 - the removal of archaeological remains within the WND and AONB;
 - a total loss of public access to localised areas of the AONB from the removal of PRoWs 30/034/1, 38/034/2, 38/035/1 and 38/035/2 and 38/035A/1; and
 - a partial loss of recreational amenity at Cemlyn Bay beach from construction and operation activities.
- 4.2.213 Major adverse impacts on localised areas of the Heritage Coast have been identified for the duration of the construction and operation periods due to the presence of the construction project and Power Station.
- 4.2.214 Paragraph 5.9.10 of NPS EN-1 [RD4] states that development consent may be granted in nationally designated landscapes, such as AONB and Heritage Coast, in exceptional circumstances.
- 4.2.215 The landscape mound within the AONB is provided to minimise the impacts of the Power Station on the AONB in accordance with paragraph 5.9.10 of NPS EN-1 [RD4], as without the mound the adverse landscape and visual effects of the Proposed Development would be much greater.
- 4.2.216 The main report demonstrates exceptional circumstances and that the Proposed Development is in the public interest, in accordance with Paragraph 5.9.10 of EN-1.
- 4.2.217 The applicant has had regard to the relevant AONB management plan as set out in the Landscape and Habitat Management Strategy (Application Reference Number: 8.16), in accordance with Policy AMG 1 of the JLDP [RD27].

Visual impact from artificial light

- 4.2.218 Whilst effects remain permanent and significant for users of the A5025 and the local road network, they do diminish over time for Tregele and Llanfairynghornwy to a not significant level. This is due largely to the care taken to provide adequate landscaping and screening which will mature over time. It is therefore considered that the application accords with paragraphs 5.6.3 and 5.6.7 of NPS EN-1 [RD4].

Visual impact from smoke and steam

- 4.2.219 Chapter D10 of the Environmental Statement (Application Reference Number: 6.4.10) makes it clear that there would be no visible plumes from the main stacks. The assessment does acknowledge visible plumes from the auxiliary boilers during certain weather conditions and the cooling towers during operational testing and certain emergency events, but concludes that the plumes are not considered likely to lead to an adverse increase in the level of visual effect for any visual receptors. Given the nature of the Proposed Development all reasonable steps have been taken and therefore the application accords with paragraphs 5.6.3 and 5.6.7 of NPS EN-1 [RD4].

Conclusion

- 4.2.220 The text above shows that the Proposed Development is in accordance with national and local policy (including AMG 1 of the JLDP) and NPS EN-1 [RD4] and EN-6 [RD5], in relation to landscape and visual impacts.

Public access and recreation

Policy context

National Policy Statements

- 4.2.221 Paragraph 5.10.16 of EN-1 [RD4] states that the decision maker should expect applicants to have taken advantage of opportunities to maintain and enhance access to the coast. In doing so the decision maker should consider the implications for development of the creation of a continuous signed and managed route around the coast, as provided for in the MCAA, 2009 [RD12].
- 4.2.222 Paragraph 5.10.24 of EN-1 [RD4] states that PRoWs, National Trails and other rights of access to land are important recreational facilities. The decision maker should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails and other PRoWs. Where this is not the case the decision maker should consider what appropriate mitigation requirements might be attached to any grant of development consent.
- 4.2.223 Paragraph 3.12.2 of EN-6 [RD5] states that the nuclear AoS noted that the sites listed in the NPS are on coastal or estuarine locations in rural areas and that there is therefore the potential for impact on land that has recreational and amenity value.

Welsh national and local policy

- 4.2.224 Paragraph 5.2.11 in section 5 of PPW [RD8] states that common land should not be developed and access should not be prevented or impeded unnecessarily. Paragraph 11.1.13 of PPW [RD8] states that local authorities should seek to protect and enhance the rights of way network as a recreational and environmental resource. Paragraph 11.1.13 also confirms that local authorities are encouraged to promote the national cycle network, long distance footpaths, bridleways, canals, and the use of inland waters and disused railways as greenways for sustainable recreation.
- 4.2.225 TAN 18 (2007) encourages the use of PRoW for sustainable travel and states that development should identify and protect existing and proposed recreational routes (section 6). TAN 16 (2009) [RD19] generally seeks to protect PRoWs.
- 4.2.226 Strategic Policy PS 4 in the JLDP [RD27] states that, where possible, PRoW and cycle networks should be safeguarded, improved, enhanced and promoted in order to increase health, leisure, well-being and tourism benefits for both local residents and visitors.
- 4.2.227 GP 5 in the Wylfa SPG [RD28] states that the detailed assessments should consider the impacts on access to the Island's natural and built environmental assets, including on PRoW. GP 8 in the Wylfa SPG [RD28] expects applicants to undertake a comprehensive assessment of the potential impacts of the Project on open space, recreation and leisure provision. GP 20 in the Wylfa SPG [RD28] states that the Project should not have a significant adverse impact on the Wales Coast Path. GP 26 in the Wylfa SPG [RD28] seeks improvement to the Wales Coast Path and PRoWs.

Planning assessment

Environmental assessment

- 4.2.228 The EIA on public access and recreation is set out in chapter D4 of the Environmental Statement (Application Reference Number: 6.4.4).

Mitigation

Construction

- 4.2.229 A diversion of the WCP would be provided around the construction fence between Cemlyn Bay (junction of Nanner Road and the access road to Cemlyn Bay car park) and Cemaes, with access to Cemaes being routed along PRoW 20/007/2. This route would be unsurfaced and wooden bridges suitable for use by walkers would be provided where the diverted route crosses a watercourse.
- 4.2.230 A temporary diversion would be implemented around the perimeter of the work site as soon as practicable to address severance of PRoW 20/004/2 from Cemaes to Tre-r Gof Isaf.
- 4.2.231 Access to Wylfa Head would be retained throughout construction, by retaining PRoWs along the north coast between Cemaes and Wylfa Head as a linear route, though a localised diversion of PRoW 20/056/1 and 20/002/2 may be required.

- 4.2.232 Access to Porth Wylfa and Porth yr Ogof from the WCP would be retained throughout construction.
- 4.2.233 Bilingual notices and information boards about the diversion route of the WCP would be installed to inform users of PRoW of the diversions and closures.
- 4.2.234 A s.106 payment to IACC would be made for them to spend on improving other PRoW in the vicinity of the WNDA during construction. This would reduce the impact of the closure of PRoWs within the WNDA.
- 4.2.235 Measures including the provision of landscape mounding would help to shield views from some PRoWs. Mitigation would also be provided to limit potential effects from noise, vibration and dust on the users of the PRoWs.
- 4.2.236 Signage to inform users over the new route for the Copper Trail prior to the permanent closure of Cemlyn Road.

Operation

- 4.2.237 During operation of the Power Station, the WCP would remain diverted however it would follow a shorter route than during the construction of the Power Station.
- 4.2.238 A public car park would be provided at the same location as the current Fisherman's Car Park accessible from the public highway along its existing route. The car park would be surfaced and suitable for wheelchair users. Within the car park there would be interpretation boards and picnic tables. Clear signage to the WCP and other PRoW that lead away from the car park would be provided.
- 4.2.239 New footpaths would be created on re-profiled land outside the Power Station Site, linking to the WCP, existing PRoW network and Cemaes. These would include routes that are suitable for wheelchair users. The routes would include picnic areas, a wildlife watching shelter, interpretation boards and a nature trail.

Decommissioning

- 4.2.240 As the facility is decommissioned, there may be further opportunities to enhance the PRoW network.

Residual effects

- 4.2.241 During the construction phase, a major adverse residual effect on users of the WCP remains due to the need for a temporary diversion around the construction fence, which results in longer route and the loss of sea views, as well as a loss of recreational amenity on the WCP beyond the WNDA due to construction works.
- 4.2.242 The remaining PRoWs and permissive paths, both within and up to 2km outside of the WNDA, would experience a moderate to major adverse effect as paths within the WNDA would be closed and amenity in the surrounding area would be reduced. Visitors to Wylfa Head, GeoMôn Geopark, Cemlyn Bay and the AONB near Porth-y-pistyll would be subject to a moderate to major adverse effect.

- 4.2.243 During the operational phase, the permanent diversion of the WCP would increase the length of the route (compared with the pre-construction route only) and result in fewer sea views than the current provision, leading to a significant (major) adverse residual effect. The proposed route would lead to additional sea views compared with the temporary diversion during the construction period.
- 4.2.244 The remaining PRoWs and permissive paths within the WNDA would experience a moderate beneficial effect due to the increased recreational amenity of the new footpaths compared with the original (pre-construction) footpaths as set out in the mitigation section above.

Assessment against policy

Construction

- 4.2.245 The applicant has considered and consulted on a coastal route for the WCP, as well as an inland route. However, further analysis throughout the design development period has shown that the inland route needs to be proposed for technical, safety and security considerations. The proposed route would also be more cost effective. The applicant has therefore sought to maintain and enhance access to the coast in accordance with paragraph 5.10.16 of NPS EN-1 [RD4].
- 4.2.246 Many of the residual adverse effects described above would be temporary and mitigation would be provided where possible during the operational stage. These mitigation measures are appropriate, as set out in paragraph 5.10.24 of NPS EN-1 [RD4], given the adverse effects on coastal access and other PRoWs; however, it is not possible to fully address the adverse effects.

Operation

- 4.2.247 Paragraph 5.10.16 expects applicants to take advantage of opportunities to maintain and enhance access to the coast. There are no such reasonable or practicable opportunities.
- 4.2.248 Improvements to the recreational amenity of remaining PRoWs and permissive footpaths within the WNDA accord with, and far exceed the minimum expectations of, paragraph 5.10.24 of NPS EN-1 [RD4]. The moderate beneficial effects are also in accordance with Strategic Policy PS 4 in the JLDP [RD27].

Decommissioning

- 4.2.249 No significant adverse effects have been identified during the decommissioning phase in accordance with paragraph 5.10.24 of NPS EN-1 [RD4].

Conclusion

- 4.2.250 The text above shows that the Proposed Development is in accordance with national and local policy (including Strategic Policy PS4 of the JLDP), and NPS EN-1 [RD4] and EN-6 [RD5], in relation to public access and recreation.

Noise and vibration

Policy context

National Policy Statements

- 4.2.251 Paragraph 5.11.1 of EN-1 [RD4] states that excessive noise can have wide-ranging impacts on the quality of human life, health (for example owing to annoyance or sleep disturbance) and use and enjoyment of areas of value such as quiet places and areas with high landscape quality. Similar considerations apply to vibration, which can also cause damage to buildings.
- 4.2.252 Paragraph 5.11.2 in EN-1 [RD4] states that noise resulting from a proposed development can also have adverse impacts on wildlife and biodiversity, which should be assessed by the decision maker in accordance with the 'biodiversity and geological conservation' section of EN-1 [RD4].
- 4.2.253 Paragraph 5.11.8 of EN-1 [RD4] states that the Proposed Development should demonstrate good design through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.
- 4.2.254 Paragraph 5.11.9 of EN-1 [RD4] states that:
- "the decision maker should not grant development consent unless it is satisfied that the proposals will meet the following aims:
- avoid significant adverse impacts on health and quality of life from noise;
 - mitigate and minimise other adverse impacts on health and quality of life from noise; and
 - where possible, contribute to improvements to health and quality of life through the effective management and control of noise".
- 4.2.255 Paragraph 5.11.11 of EN-1 [RD4] states that the decision maker should consider whether mitigation measures are needed both for operational and construction noise over and above any which may form part of the project application.
- 4.2.256 Paragraph 5.11.12 of EN-1 [RD4] states that mitigation measures may include one or more of the following:
- engineering: reduction of noise at point of generation and containment of noise generated;
 - lay-out: adequate distance between source and noise-sensitive receptors; incorporating good design to minimise noise transmission through screening by natural barriers, or other buildings; and
 - administrative: restricting activities allowed on the site; specifying acceptable noise limits; and taking into account seasonality of wildlife in nearby designated sites.
- 4.2.257 Paragraph 5.11.13 of EN-1 [RD4] confirms that in certain situations, and only when all other forms of noise mitigation have been exhausted, it may be

appropriate for the decision maker to consider requiring noise mitigation through improved sound insulation to dwellings.

4.2.258 In EN-6 [RD5], paragraph 3.12.3 states the following:

“The operation of a new nuclear power station is unlikely to be associated with significant noise, vibration or air quality impacts (although there may be local impacts from transport and associated activities during construction; and if cooling towers are required, particularly forced draught towers, the potential noise impact may be greater). With appropriate mitigation, the subsequent effect of these potential impacts on human health is unlikely to be significant”.

Welsh national and local policy

4.2.259 Paragraph 13.15.1 in PPW [RD8] confirms that noise can be a material planning consideration. Paragraph 13.15.2 in PPW [RD8] also states that special consideration is required where noise-generating development is likely to affect a protected species, or is proposed in or near statutorily designated areas, including urban ‘quiet areas’ designated in Noise Action Plans. It continues to state that the effect of noise on the enjoyment of other areas of landscape, wildlife and historic value should also be taken into account.

4.2.260 In addition, Policy AMG 4 [RD27] states that proposals on the coast should not cause unacceptable harm to the area’s biodiversity interests due to noise.

4.2.261 The Wylfa SPG [RD28] at GP 7 states that the applicant should work with IACC and the identity of any potentially significant health impacts and appropriate mitigation measures. GP 7 also states that Associated Developments should not be proposed where construction activities would give rise to unacceptable impacts on air quality, noise/vibration and light pollution and the amenity of the existing residents, visitors, businesses and construction workers.

Planning assessment

Environmental effects

4.2.262 The environmental assessment of development within the WNDA on noise and vibration matters is set out in chapter D6 of the Environmental Statement (Application Reference Number: 6.4.6).

4.2.263 The main sources of noise at the Power Station during the operational stage are typically located in the centre of the development, which means that distance to local receptors, such as properties, has generally been maximised. Large buildings, including the main reactor buildings, also help to provide effective noise screening from being located between other main noise sources and receptors, in accordance with paragraph 5.11.8 of NPS EN-1 [RD4].

4.2.264 Internal noise levels are likely to be high within the reactor building, control building, heat exchanger building, radioactive waste building and filter vent building. However, all façades of these buildings would be constructed from a substantial thickness of concrete, built to withstand impact from aircraft. In addition, there would be thick, heavy door sets to all entranceways that would

not open during normal operations. These factors mean that noise breakout from the internal sources through the building façades would be negligible during the operational stage.

Mitigation

4.2.265 To help protect quality of life and health throughout the construction period, Horizon has proposed a wide range of mitigation.

- Earth mounds located at the north-east, south and south-west extents of the WNDA would provide attenuation of construction noise for receptors.
- An earth bund along the boundary with the A5025 would reduce construction noise levels at properties in Tregele.
- Earthworks would be phased to reduce construction noise effects.
- Proposed haul routes within the WNDA would be capped as soon as reasonably practicable reduce noise and vibration than unsurfaced haul roads.
- Noise or vibration emitting plant will be situated as far as practicable from sensitive areas.
- Certain mounds would be built in layers, with the perimeter of the mound nearest to properties being built first, which would then provide attenuation whilst the remainder of that layer is completed behind.
- A Community Liaison Group will be established and construction issues will be regularly discussed between Horizon, the contractors, the IACC and representatives from the local community.
- A voluntary Local Noise Mitigation Strategy (LNMS) would be committed to, which would offer secondary glazing to properties within the LNMS boundary area, as set out in the Wylfa Newydd CoCP (Application Reference Number: 8.6).
- Safe working distances between properties and construction vibration would be established and monitored. Where works are required within the safe working distances, alternate equipment or working methods would be used to reduce effects to the greatest extent practicable.
- A web-based continuous noise monitoring scheme would be installed and IACC would have shared access to the data.

4.2.266 No additional measures are considered necessary during the operation phase as noise and vibration effects would be reduced through good practice measures and embedded mitigation within the design.

4.2.267 It is not possible to determine mitigation measures for the decommissioning phase at this time. However, it is likely that mitigation measures would be developed to minimise noise and vibration, although some effects may be experienced by residential properties, schools and hotels.

Residual effects

4.2.268 During construction, significant noise effects would remain for a number of receptors.

- Moderate and major residual adverse effects on residential properties, mainly in Cefn Coch, Tregele and individual properties which are close to the WNDA and the A5025 between Cemaes and Tregele.
- One school, three hotels, five offices, one place of worship and one commercial property are likely to experience a significant moderate residual adverse effect from noise.
- Two hotels are likely to experience a major adverse effect.

4.2.269 During construction, residential properties and other buildings in close proximity to the WNDA are likely to experience a moderate residual adverse effect from vibration.

4.2.270 The HIA Report (Application Document Reference 8.19) addresses the effect of noise during construction on the WNDA on health. It concludes that the residual significance of potential health and well-being effects is considered to be minor adverse for the general population (the majority of people) near the WNDA. For particularly sensitive groups within the affected population, the residual effect in relation to health outcomes could range up to moderate adverse.

4.2.271 During operation, noise and vibration effects are not likely to be significant.

4.2.272 During decommissioning, noise and vibration effects are anticipated to be less than during the construction phase.

Assessment against policy

Construction

4.2.273 The Proposed Development has sought to avoid significant adverse impacts from construction noise and vibration on health and quality of life. Where it is not practicable to reduce noise to a not-significant level, noise insulation would be offered in the circumstances set out above. It is therefore considered that the scheme is in accordance with paragraph 5.11.9 of NPS EN-1 [RD4] and GP 7 of the Wylfa SPG [RD28]. It is also noted that effects would typically be short term and unlikely to occur continuously over the duration of the construction period.

Operation

4.2.274 There are likely to be no significant adverse noise and vibration effects during the operation period following mitigation, in accordance with paragraphs 5.11.8 and 5.11.9 of NPS EN-1 [RD4], and GP 7 of the Wylfa SPG [RD28].

Decommissioning

4.2.275 Mitigation would be proposed in order to reduce adverse effects during the decommissioning phase, which are likely to be less than during the construction phase and therefore remain in accordance with policy.

Conclusion

- 4.2.276 The text above shows that the Proposed Development is in accordance with national and local policy, including NPS EN-1 [RD4] and EN-6 [RD5], and GP 7 of the Wylfa SPG [RD 28] in relation to noise and vibration.

Socio-economic

Policy context

National Policy Statements

- 4.2.277 Paragraph 5.12.6 of EN-1 [RD4] states that the decision maker should have regard to the potential socio-economic impacts of new energy infrastructure identified by the applicant and from any other sources that the decision maker considers to be both relevant and important to its decision.
- 4.2.278 Paragraph 5.12.8 of EN-1 [RD4] states that the decision maker should consider any relevant positive provisions the developer has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts.
- 4.2.279 Paragraph 5.12.9 of EN-1 [RD4] states that the decision maker should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development.
- 4.2.280 EN-6 [RD5] then refers to policy specific to nuclear power stations. Paragraph 3.11.4 of in EN-1 [RD4] states that *"the assessment of socio-economic impacts should demonstrate that the applicant has taken account of, amongst other things, potential pressures on local and regional resources, demographic change and economic benefits"*.
- 4.2.281 It notes that as nuclear power stations involve large scale construction projects *"...there are likely to be positive effects of local economic significance, although these are less significant at the regional scale... There may also be negative effects,"* (paragraph 3.11.2, EN-1 [RD4]).
- 4.2.282 The Strategic Siting Assessment at annex C of EN-6 [RD5] makes some comments on socio-economic effects. It states that some consultees argued that socio-economic considerations should be a factor in deciding whether a site was potentially suitable, and that it was stated that *"...unemployment in Anglesey is high and that the benefits a new nuclear power station would bring should be a key factor in the decision whether to list the site on the Nuclear NPS,"* (paragraph C.9.110, EN-1 [RD4]). It then clarifies that potential socio-economic effects of development should be considered when assessing development consent applications at a point where it is clearer how many workers would be required for a development, or what proportion would come from outside the local area (paragraph C.9.111, EN-1 [RD4]).

Welsh national and local policy

- 4.2.283 PPW [RD8] includes planning policies, to promote quality, lasting, environmentally sound and flexible employment opportunities for a low carbon economy, and to protect and, where possible, improve people's health and well-being. Chapter 4 (planning for sustainability) of PPW [RD8] sets out the

Welsh government's objectives for achieving sustainable development and chapter 7 (economic development) confirms the Welsh government's objectives for economic development, i.e. development of land and buildings for activities that generate wealth, jobs and incomes.

- 4.2.284 TAN 23 [RD25] highlights that the geographical distribution of economic benefits associated with development may be far beyond the area where the development is located.
- 4.2.285 *Economic Renewal: A New Direction (Welsh Government, 2010)* clarifies the role the Welsh Government can play in providing the best conditions and framework to enable the private sector to grow and flourish.
- 4.2.286 Several policies within the JLDP [RD27] require proposals to accord with a number of criteria relating to socio-economic impacts. Policy PS 5 in the JLDP [RD27] states that development will be supported where it is demonstrated to be consistent with the principles of sustainable development. It clarifies that proposed developments should; give priority to effective use of land and protect, support and promote the use of Welsh language.
- 4.2.287 Policy PS 9 specifically requires consideration to be given to the nature, scale, range and possible impact of any development. It confirms that local economic and community benefits need to be maximized, where feasible, through agreement of strategies for procurement, employment, education, training and recruitment with the Councils at an early stage of project development.
- 4.2.288 The Guiding Principles in the Wylfa SPG [RD28] are considered relevant to the socio-economic assessment and include the following principles.
- GP1: IACC will require the Wylfa Newydd Project promoter to support the delivery of the Energy Island Programme and Anglesey Enterprise Zone, maximising the economic opportunities available to the Island's local communities.
 - GP2: Local job creation and skills development through the implementation of an Employment and Skills Strategy, which should include the maximisation of local labour provision.
 - GP5: Supporting the visitor economy and ensuring that the construction and operation of the Power Station and any associated developments do not adversely affect the value and importance of tourism to the Island. One of the key elements of the island's tourism offer being the quality and diversity of its natural and historic environments. This includes the 125 mile coastline and the numerous beaches linked by the Wales Coast Path.
 - GP6: Maintaining and enhancing community facilities and services, including education, healthcare and leisure facilities.

Planning assessment

Environmental assessment

4.2.289 The EIA of development within the WNDA on socio-economics matters is set out in chapter D3 of the Environmental Statement (Application Reference Number: 6.4.3).

4.2.290 The design of the Proposed Development, plus the provision of Associated Development collectively work to reduce adverse effects on local communities.

Mitigation

4.2.291 Additional measures would be put in place to reduce adverse effects on local communities from the Proposed Development in relation to matters including air quality, noise, vibration, views and traffic as set out throughout this section of the appendix.

4.2.292 In addition, a Community Impact Fund will be used to help mitigate effects to local recreational resources and open spaces, and for unforeseen effects arising as a result of the presence of the workforce in the area, including effects on people/groups with protected characteristics.

4.2.293 A Tourism Fund will serve to address any material effects which could arise on the sector as a result of the Wylfa Newydd Project. This fund will seek to ensure that the perceived impacts on the local tourism sector can be moderated using positive mechanisms to develop existing and new forms of tourism.

4.2.294 No further mitigation is proposed during the operational or decommissioning phases.

Residual effects

4.2.295 A moderate adverse effect on community amenity remains as a consequence of environmental effects and traffic, despite the mitigation noted above.

4.2.296 A minor to moderate adverse effect remains from adverse environmental effects, traffic and construction works on local businesses.

4.2.297 No significant adverse effects have been identified for the operational and decommissioning phases.

4.2.298 For the avoidance of doubt, the above effects do not include project-wide socio-economic effects, including local economic benefits.

Assessment against policy

4.2.299 The environmental assessment undertaken allows the decision maker to have regard to socio-economic related impacts in accordance with paragraph 5.12.6 of NPS EN-1 [RD4].

4.2.300 The mitigation measures identified above should be considered by the decision maker in accordance with paragraph 5.12.8 of NPS EN-1 [RD4].

4.2.301 The main report of this Planning Statement assesses the project-wide socio-economic effects, including the significant (major) beneficial effects of the Wylfa Newydd DCO Project on the labour market and the significant (moderate) beneficial effects on the local economy during construction, in

accordance with PPW and Policy PS 9 of the JLDP and GP2 of the Wylfa SPG.

Conclusion

- 4.2.302 The text above shows that the Proposed Development is in accordance with national and local policy, including NPS EN-1 [RD4] and EN-6 [RD5], Policy PS 9 of the JLDP [RD 27] and various elements of the Wylfa SPG [RD28] in relation to socio-economic matters including GP2 and GP6 (and draft guiding principle GP2 of the draft SPG).

Soils and geology

Policy context

National Policy Statements

- 4.2.303 Paragraph 5.10.8 of EN-1 [RD4] states that development should seek to minimise impacts on “best and most versatile” agricultural land and preferably use land in areas of poorer quality except where this would be inconsistent with other sustainability considerations. Paragraph 5.10.8 states that applicants should also identify any effects and seek to minimise impacts on soil quality taking into account any mitigation measures proposed. For developments on previously developed land, applicants should ensure that they have considered the risk posed by land contamination.
- 4.2.304 Paragraph 5.10.15 of EN-1 [RD4] states that the decision maker should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. Paragraph 5.10.15 continues to state that decision makers should give little weight to the loss of poorer quality agricultural land (in grades 3b, 4 and 5).
- 4.2.305 EN-1 [RD4] states at paragraph 5.3.3 that, where the development is subject to EIA, the applicant should ensure that the ES clearly sets out any effects on internationally, nationally and locally designated sites of geological conservation importance.
- 4.2.306 EN-1 [RD4] states at paragraph 5.3.4 that the applicant should also show how the project has taken advantage of opportunities to conserve and enhance geological conservation interests. Paragraph 5.3.7 in EN-1 [RD4] states that developments should aim to avoid significant harm to geological conservation interests, including through mitigation and consideration of reasonable alternatives. Where significant harm cannot be avoided, then appropriate compensation measures should be sought.
- 4.2.307 Paragraph 5.3.13 of EN-1 [RD4] emphasises the fundamental role of RIGS in meeting overall national biodiversity targets, contributing to the quality of life and the well-being of the community, and in supporting research and education. The decision maker should therefore give due consideration to such designations. However, given the need for new infrastructure, these designations should not be used in themselves to refuse development consent.

4.2.308 EN-6 [RD5] states at paragraph 3.7.8 that *“the contamination of water resources can be mitigated through the EIA process and managed through the possible implementation of Environmental Management Plans”*.

Welsh national and local policy

4.2.309 PPW [RD8] states at paragraph 13.7.1 that planning decisions need to take into account:

- the potential hazard that contamination presents to the development itself, its occupants and the local environment; and
- the results of a specialist investigation and assessment by the developer to determine the contamination of the ground and to identify any remedial measures required to deal with any contamination.

4.2.310 PPW [RD8] states at paragraph 13.7.2 that where acceptable remedial measures can overcome contamination, permission may be granted subject to requirements specifying the necessary measures.

4.2.311 PPW [RD8] states at paragraph 4.10.1 that the best and most versatile agricultural land (Grades 1, 2 and 3a) should be conserved as a finite resource for the future and that considerable weight should be given to protecting such land from development, because of its special importance. This paragraph also clarifies that the best and most versatile agricultural land should only be developed if there is an overriding need for the development, and either previously developed land or land in lower agricultural grades is unavailable, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations. Paragraph 4.10.1 in PPW [RD8] also states that if the best and most versatile agricultural land does need to be developed, and there is a choice between sites of different grades, development should be directed to land of the lowest grade.

4.2.312 Strategic Policy PS6 in the JLDP [RD27] states that proposals will only be permitted where it is demonstrated with appropriate evidence that the applicant has fully taken account of and responded to the need to safeguarding the best and most versatile agricultural land.

4.2.313 JLDP [RD27] Policy PS 19 states that proposals that have a significant adverse effect on the areas distinctive natural environment, countryside and coastline will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area. This policy also clarifies that consideration should be given to safeguarding the geology of the area.

4.2.314 Policy AMG 3 in the JLDP [RD27] confirms that proposals will be granted provided that they do not have a significant adverse impact upon features and qualities which are unique to the local landscape in terms of visual, historic, geological, ecological or cultural aspects.

4.2.315 Policy AMG 6 in the JLDP [RD27] states that proposals likely to cause direct or indirect significant harm to RIGS will be refused unless it can be proven that there is an overriding social, environmental and/or economic need for the

development, and that there is no other suitable site that would avoid having a detrimental impact on sites of local nature conservation value or local geological importance.

4.2.316 GP 20 of the Wylfa SPG [RD28] states that SSSIs, RIGS and the Geopark status of Anglesey should not be subjected to significant adverse impacts, or if they are, sufficient mitigation should be implemented. GP20 also advocates the remediation of contaminated land at GP 20.

4.2.317 GP 26 [RD28] of the Wylfa SPG [RD28] highlights that agricultural land should be reinstated where development is temporary.

Policy assessment

Environmental assessment

4.2.318 The environmental assessment for soils and geology matters is set out in chapter D7 of the Environmental Statement (Application Reference Number: 6.4.7).

Mitigation

4.2.319 The CW outfall and the associated temporary cofferdam have been designed to avoid the dolerite dyke intrusion, which forms the key feature of the RIGS. In order to partially mitigate the effects, information boards regarding the Porth Wnal Dolerite RIGS would be erected on Wylfa Head to provide an educational resource, and access for geologists to study rock exposures.

4.2.320 A contamination watching brief would be maintained by suitably qualified personnel during excavation works in areas where made ground has previously been encountered, so that any areas of unexpected contamination would be identified as soon as practicable.

4.2.321 Monitoring for contamination during excavation would ensure any unexpected contamination would be identified as soon as practicable with.

4.2.322 Topsoil and subsoil (where necessary), will be stripped as per good practice construction techniques from all areas of the main site where development is taking place. The soils will be reused sustainably.

4.2.323 The Power Station Site sub-CoCP (Application Reference Number: 8.7) includes pollution prevention and waste control measures.

4.2.324 Pollution prevention measures as outlined in the Wylfa Newydd CoOP (Application Reference Number: 8.13) would be implemented during operation, to reduce the risk of accidental leaks and spills occurring and to reduce any effects on the environment, should any accidental leaks or spills occur.

4.2.325 It is anticipated that similar mitigation would be provided at the decommissioning stage.

Residual effects

4.2.326 The following significant effects would remain during construction.

- Moderate and major beneficial effects in relation to the remediation of contaminated land.
- A moderate adverse effect on construction workers remains due to their potential exposure to unexpected contamination.
- A moderate adverse residual effect would persist on a site of geological importance within GeoMôn Geopark and the Porth Wnal Dolerite RIGS, due to the construction of the CW outfall and associate cofferdam required for construction.

4.2.327 No significant residual adverse effects are likely during the operational phase.

4.2.328 No significant residual adverse effects are anticipated during the decommissioning phase.

Assessment against policy

Construction

4.2.329 Whilst the development does result in a loss of “best and most versatile” agricultural land, this equates to only 7.6% of the total WNDA. The loss of this land cannot be practicably avoided as it is mostly located in close proximity to the A5025 and Tregelle, which is an important area for landscape mitigation through mounding. It is therefore considered that losses have been minimised and justified in accordance with paragraphs 5.10.8 and 5.10.15 of NPS EN-1 [RD4], as well as paragraph 4.10.1 of PPW [RD8] and Strategic Policy PS6 of the JLDP. The loss of Grade 1 agricultural land in particular represents less than 0.02% of the best and most versatile agricultural land on Anglesey.

4.2.330 Whilst the CW outfall would, for operational reasons, involve the destruction of part of the Porth Wnal Dolerite RIGS, the design has been refined to seek to avoid the dolerite dyke intrusion, which forms the key feature of the RIGS. It was deemed that the chosen onshore location would provide a number of advantages over alternative options, including the following.

- Reduced seabed footprint, limited offshore construction activities, reduced construction cost and programme, and less health and safety risks.
- Greater understanding of the likely impacts due to the adjacent outfall associated with the Existing Power Station.
- Limiting impacts to an area already generally affected by the outfall.

4.2.331 The applicant has therefore given due consideration to RIGS designations in accordance with paragraph 5.3.13 of NPS EN-1 [RD4]. A significant (moderate) adverse effect is nonetheless identified for the Porth Wnal Dolerite RIGS for the reasons identified above, however it is noted in paragraph 5.3.13 that these designations should not be used in themselves to refuse development consent. The over-riding need for the Proposed Development is considered to justify the proposal in relation to Policy AMG 6 of the JLDP and GP 20 of the Wylfa SPG.

4.2.332 As with any construction activities, there is the potential for construction workers to become exposed to unexpected contamination despite ground

investigation surveys, mitigation would be put in place as described above to minimise the likelihood in accordance with paragraph 3.7.8 of NPS EN-6 [RD5].

- 4.2.333 The major beneficial effects from remediating contaminated land across the WNDA, which would benefit those using or accessing the site in future and would benefit two water catchment areas (Tre'r Gof and Afon Cafnan) is in accordance with paragraph 13.7.1 of PPW [RD8].

Operation

- 4.2.334 No significant adverse effects are likely during the operational phase and the Proposed Development continues to accord with NPS EN-1 [RD4] and EN-6 [RD5].

Decommissioning

- 4.2.335 No significant adverse effects are anticipated during the decommissioning phase and the Proposed Development continues to accord with NPS EN-1 [RD4] and EN-6 [RD5].

Conclusion

- 4.2.336 The text above shows that the Proposed Development is in accordance with national and local policy, including NPS EN-1 [RD4] and EN-6 [RD5], and JLDP Policies PS6, AMG4 and AMG6, and GP 20 of the Wylfa SPG in relation to soils and geology.

Traffic and transport

- 4.2.337 This section of the appendix refers to shipping movements only as these are considered to be specific to the WNDA. Project-wide traffic and transport considerations are set out in the main report.
- 4.2.338 Traffic and transport is identified as both a Generic Impact in EN-1 [RD4] and a Nuclear Impact in EN-6 [RD5].

Policy context

National Policy Statements

- 4.2.339 NPS EN-1 [RD4] states at 5.13.10 that water-borne or rail transport is preferred over road transport at all stages of the Proposed Development, where cost effective.

UK marine policy

- 4.2.340 The *UK Marine Policy Statement (2011)* [RD16] seeks to:

- promote sustainable economic development;
- promote a sustainable marine environment;
- help the UK move towards a low carbon economy; and
- contribute to the societal benefits of the local marine area.

Welsh national and local policy

- 4.2.341 The Welsh Government is currently developing the Welsh National Marine Plan which, when adopted, will also be an appropriate marine policy document. The Welsh Government is currently consulting on a draft until 29 March 2018 [RD17]. There is therefore currently no relevant marine policy document that the decision maker can have regard to.
- 4.2.342 Paragraph 8.5.3 of PPW [RD8] states that wherever possible decision-makers should promote the carriage of freight by water or pipeline rather than by road. Paragraph 8.5.6 of PPW [RD8] states that decision makers should seek to promote the use of ports and inland waterways by protection or provision of access to them and by the retention or provision of appropriate facilities, weighing the benefits alongside environmental considerations.
- 4.2.343 Paragraph 8.5.7 of PPW [RD8] states that great care should be taken to minimise the adverse impacts of new transport infrastructure, or improvements to existing infrastructure, on the natural, historic and built environment and on local communities, where neighbourhood severance should especially be avoided. It clarifies that routes should make the best use of existing landforms and other landscape features to reduce noise and visual effects, subject to safety and other environmental considerations. Paragraph 8.5.7 of PPW [RD8] states that where no other alternative routes or options are practicable, transport infrastructure schemes should provide mitigation measures to minimise the impacts caused by their construction and operation.
- 4.2.344 Strategic Policy PS 9 in the JLDP [RD27] is specific for the Wylfa Newydd Project Associated Developments and requires highways and transport proposals to form part of an Integrated Traffic and Transport Strategy that has regard to Strategic Policy PS 4 and other relevant policies. Strategic Policy PS 4 states that adverse transport impacts should be minimised to an acceptable level at all project stages. It continues to state that proposals should where feasible make a positive contribution to transportation policy objectives in the locality, and should include multi-modal solutions and investment that encourages travel by public transport, walking and cycling and other sustainable forms of transport. Strategic Policy PS 9 also states that IACC will seek the provision of community infrastructure, including park and ride facilities.
- 4.2.345 GP 14 of the Wylfa SPG [RD28] confirms that the use of rail and waterborne modes should be prioritised in accordance with national planning policy and the need for road transport minimised. It also states that where the use of road transport is required, the applicant should assess the potential impacts on road infrastructure and seek to ensure highway improvements are provided where appropriate to minimise congestion, ensure safety and minimise environmental impacts.

Planning assessment

Environmental assessment

4.2.346 The EIA of development within the WNDA on shipping and navigation matters is set out in chapter D15 of the Environmental Statement (Application Reference Number: 6.4.15).

Mitigation

4.2.347 Mitigation measures set out in the Marine Works Sub-CoCP (Application Reference Number: 8.8) aim to reduce the navigational risk associated with the Proposed Development and therefore mainly related to safety.

4.2.348 Horizon is seeking Harbour Authority powers, which would be required for the delivery of a number of these mitigation measures associated with marine management and safety.

4.2.349 No additional mitigation measures have been proposed for the operation phase.

4.2.350 During decommissioning, it is anticipated that mitigation measures similar to those employed during construction would be used.

Residual effects

4.2.351 During the dredging and Marine Works activities, the following potential minor adverse effects have been identified:

- risk of collision between recreational vessels in the vicinity of the MOLF and commercial vessels travelling to or from the WNDA; and,
- risk of small recreational vessels becoming stranded on the breakwater during periods of adverse weather.

4.2.352 During operation of the MOLF, which would occur at the same time as the Main Construction phase of the Power Station, the following potential effects have been identified:

- vessels striking breakwaters;
- vessels striking the MOLF;
- collision of recreational/fishing/high speed/harbour vessel with vessels travelling to or from the MOLF;
- grounding of vessels within the harbour;
- steering/propulsion failure of vessels entering or leaving the harbour;
- diversion of recreational and fishing vessels into areas where larger vessels navigate;
- vessel unloaded incorrectly alongside the MOLF; and
- stranding of small recreational vessels on the breakwater.

4.2.353 During operation, adverse effects are likely to be negligible.

4.2.354 During decommissioning, removal of structures including the cooling water intake and outfall and MOLF would lead to an increase in vessel movements, as would the potential requirement to remove materials from the area by sea. However, the scale of effects are unlikely to be greater than those identified during the construction stage.

Assessment against policy

- 4.2.355 The text below identifies how the Proposed Development is in accordance with national and local policy, including NPS EN-1 [RD4] and EN-6 [RD5], in relation to the shipping and navigation elements of traffic and transport.
- 4.2.356 It is estimated that approximately 60% to 80% of all construction materials (by weight), including the majority of Abnormal Indivisible Loads, would be delivered via water-borne transport to the MOLF. The Environmental Statement (Application Reference Number: 6.1.1) considers the worst case scenario in terms of deliveries by road in its assessment (60%). Use of the MOLF by water-borne transport would greatly reduce the number of deliveries by road and therefore the volume of road traffic and its associated effects, in accordance with paragraph 5.13.10 of NPS EN-1 [RD4], paragraph 8.5.3 of PPW and GP 14 of the Wylfa SPG [RD28].

Conclusion

- 4.2.357 The text above shows that the Proposed Development is in accordance with national and local policy, including PPW and GP 14 of the Wylfa SPG, and NPS EN-1 [RD4] and EN-6 [RD5], in relation to shipping and navigation matters.

Water quality and resources

Policy context

National Policy Statements

- 4.2.358 Paragraph 5.15.5 of EN-1 [RD4] states that the decision maker will generally need to give impacts on the water environment more weight where a project would have an adverse effect on the achievement of the environmental objectives established under the WFD. The *WFD (2000/60/EC)* is a European Commission Directive with the overarching objective of all water bodies in Europe attaining Good or High Ecological Status or Potential by 2027.
- 4.2.359 Paragraph 5.15.6 of EN-1 [RD4] states that the decision maker should satisfy itself that a proposal “...*has regard to the River Basin Management Plans and meets the requirements of the Water Framework Directive (including Article 4.7) and its daughter directives, including those on priority substances and groundwater*”.
- 4.2.360 Paragraph 5.15.9 in EN-1 [RD4] states that the risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution control practice. Additionally, paragraph 5.15.10 of EN-1 [RD4] confirms that the impact on local water resources can be minimised through planning and design for the efficient use of water, including water recycling.
- 4.2.361 Paragraph 4.10.8 in EN-1 [RD4] states that the decision maker should not refuse consent on the basis of pollution impacts unless it has good reason to believe that any relevant necessary operational pollution control permits or licences or other consents will not subsequently be granted.

- 4.2.362 As a general principle, paragraph 5.3.7 in EN-1 [RD4] states that development should aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives; where significant harm cannot be avoided, then appropriate compensation measures should be sought.
- 4.2.363 Paragraph 5.3.11 in EN-1 [RD4] states that where a proposed development on land within or outside a SSSI is likely to have an adverse effect on a SSSI, development consent should not normally be granted. Paragraph 5.3.11 continues to state that where an adverse effect, after mitigation, on the site's notified special interest features is likely, an exception should only be made where the benefits (including need) of the development at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs. Paragraph 5.3.11 in EN-1 [RD4] states that the decision should use requirements and/or planning obligations to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest.
- 4.2.364 EN-6 [RD5] states at paragraph 3.9.3 that applicants should consider the effects of the construction of a new Power Station on the groundwater regime and its effects on terrestrial/coastal habitats. Paragraph 3.9.6 in EN-6 [RD5] states that potential mitigation measures could include variations to the building layout to avoid ecologically sensitive areas and on-site measures to protect habitats and species and to avoid or minimise pollution and the disturbance of wildlife.
- 4.2.365 Paragraph 3.7.6 of EN-6 [RD5] states that the CWS intake and outfall should be sited to avoid or minimise adverse impacts on legitimate commercial and recreational uses of the receiving waters, including their ecology. Paragraph 3.7.6 continues to state that there should also be specific measures to minimise impact to fish and aquatic biota by entrainment or by excessive heat or biocidal chemicals from discharges to receiving waters.
- 4.2.366 EN-6 [RD5] states that contamination of water resources “...*can be mitigated through the EIA process and managed through the possible implementation of Environmental Management Plans,*” (paragraph 3.7.8).

Welsh national and local policy

- 4.2.367 Strategic Policy PS 5 in the JLDP [RD27] states that proposals should adapt to the unavoidable impacts of climate change, avoiding pollution and reducing the amount of water used and wasted and reducing the effect on water resources and quality.
- 4.2.368 Policy PCYFF 2 in the JLDP [RD27] states that proposals would be refused where they would have an unacceptable adverse impact on the quality of ground or surface water.
- 4.2.369 Policy PCYFF 6 in the JLDP [RD27] requires development to incorporate water conservation measures where practicable, including Sustainable Drainage Systems.

4.2.370 GP 20 of the Wylfa SPG [RD28] states that the release of potentially polluting substances to air, water or land should be minimised. GP 21 states that the Wylfa Newydd Project should include measures to control surface water runoff where the potential for adverse impacts is identified.

Water Framework Directive

4.2.371 The Water Framework Directive (2000/60/EC) is implemented in Wales by the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017.

4.2.372 For a derogation to be granted, the criteria in Article 4(7) must be satisfied. Article 4(7) states that “Member States will not be in breach of this Directive when:

- failure to achieve good groundwater status, good ecological status or, where relevant, good ecological potential or to prevent deterioration in the status of a body of surface water or groundwater is the result of new modifications to the physical characteristics of a surface water body or alterations to the level of bodies of groundwater, or
- failure to prevent deterioration from high status to good status of a body of surface water is the result of new sustainable human development activities and all the following conditions are met:
 - all practicable steps are taken to mitigate the adverse impact on the status of the body of water;
 - the reasons for those modifications or alterations are specifically set out and explained in the River Basin Management Plan required under Article 13 and the objectives are reviewed every six years;
 - the reasons for those modifications or alterations are of overriding public interest and/or the benefits to the environment and to society of achieving the objectives set out in paragraph 1 are outweighed by the benefits of the new modifications or alterations to human health, to the maintenance of human safety or to sustainable development, and
 - the beneficial objectives served by those modifications or alterations of the water body cannot for reasons of technical feasibility or disproportionate cost be achieved by other means, which are a significantly better environmental option.”

Planning assessment

Water Framework Directive

4.2.373 With the exception of the Ynys Môn Secondary groundwater body and the Skerries coastal water body, the WFD Compliance Assessment determined that the Wylfa Newydd Project would not cause deterioration in WFD water bodies on a non-temporary basis and would not prevent WFD water bodies

from attaining Good Ecological Status or Potential. The exceptions are described below.

- 4.2.374 The Ynys Môn Secondary B aquifer groundwater body has the potential to be adversely affected by saline intrusion as result of dewatering during the construction period and, although the extent of the effect would be small, it may prevent the groundwater body from attaining Good Ecological Status or Potential by 2027, which is not in accordance with the overarching environmental objective established under the Water Framework Directive and the decision maker will need to give this impact more weight in accordance with paragraph 5.15.5 of NPS EN-1 [RD4]. Horizon has prepared a derogation case in consultation with NRW and this has been submitted with the DCO application.
- 4.2.375 There is also the potential for an in-combination effect on the Secondary B aquifer arising from: exposing soils, which could lead to a temporary increase in contaminants; temporary foul drainage malfunctions; and leaks in the use of cement which could infiltrate the groundwater.
- 4.2.376 The assessment determined that there is potential for the Wylfa Newydd Project to jeopardise the ongoing attainment of good status of the saline intrusion test in the Ynys Môn Secondary groundwater body. The predicted extent of saline intrusion is limited in both space and time. However, the dewatering during construction does not have a defined end date and the duration of the effect is uncertain. Although the extent of the effect would be small, it may take longer than one River Basin Management Plan (RBMP) cycle (six years) to fully recover. Advice provided by Natural Resources Wales (NRW) stated that any saline intrusion would be considered as a deterioration. This effect is relevant to both quantitative and chemical tests for saline intrusion. However, it is specifically related to a reversal of groundwater flow along the coast rather than an introduction of any chemicals into the groundwater body.
- 4.2.377 In relation to Groundwater dependent terrestrial ecosystem (GWDTE) quality, it was concluded that the Wylfa Newydd Project could cause deterioration in the status of the Ynys Môn Secondary groundwater body with respect to the effects on Tre'r Gof SSSI GWDTE. This effect is relevant only to the quantitative status test for GWDTE.
- 4.2.378 The changes to morphological conditions represent a small change proportionally in The Skerries water body. The assessment determined that it was not possible to definitively conclude that new modifications within the Skerries water body would result in minor anthropogenic change, and therefore constitute within class, rather than between class deterioration. It is therefore concluded that there is a risk that the morphological conditions quality element could deteriorate from high to good status.
- 4.2.379 There is a requirement to develop a case to support an application for derogation under Article 4(7) of the Water Framework Directive, which makes provision for a situation where the objectives of the Water Framework Directive cannot be met. This case covers both the Ynys Môn Secondary groundwater and The Skerries coastal water body as shown below.

- 4.2.380 Within the document, 'Water Framework Directive Information to Support Article 4(7) Derogation' (Application Reference Number: 8.27), information is provided in relation to each of the tests relating to Article 4(7) of the Water Framework Directive for the relevant classification and quality elements in both water bodies. A summary is set out below.
- 4.2.381 For test (a) mitigation for the effects relating to saline intrusion and effects on Groundwater-Dependent Terrestrial Ecosystem in the Ynys Môn Secondary Ground water body is outlined, which mainly focuses on mitigation relating to design and construction. For The Skerries water body, mitigation for the effects on hydromorphology (in particular the loss of intertidal habitat) is presented. Each mitigation measure is considered in with respect to technical feasibility and disproportionate cost.
- 4.2.382 For test (b) the report outlines how Horizon will work with Natural Resources Wales to include the water body modifications when the Western Wales River Basin Management Plan is updated.
- 4.2.383 To address test (c) the case for overriding public interest for the Wylfa Newydd Project is presented with links made with national policy and legislation.
- 4.2.384 Test (d) considers the alternative solutions and locations of the relevant elements of the Wylfa Newydd Project. This includes consideration of different designs and alternative means of achieving the same result. For both The Skerries and Ynys Môn Secondary water bodies the relevant design-related options are investigated to determine whether there was a significantly better environmental option.

Environmental assessment

- 4.2.385 The EIA of development within the WNDA on surface water and groundwater is set out in chapter D8 of the Environmental Statement (Application Reference Number: 6.4.8). Flood risk is considered separately earlier in this section.
- 4.2.386 Tre'r Gof SSSI is a particularly complex hydrological system that has interactions between direct rainfall, surface water, soil and sub-soil water and groundwater. The geology beneath and adjacent to this lime-rich wetland habitat is complex with a variety of drift deposits present underlain by bedrock. There are also substantial changes in water quality across the area caused by different water sources and flow routes. Substantial changes occur over a range of timescales, including short-term changes during rainfall events (especially summer storms), medium-term changes due to seasons and long-term changes caused by climate change and other factors such as management practices.
- 4.2.387 It is likely that the natural water catchment area of Tre'r Gof SSSI would change as a result of landscape mounding, which could alter the rainfall/runoff rates and base flow from groundwater, leading to changes to water availability at the SSSI.
- 4.2.388 Increased suspended sediments in runoff from landscape mounding could also potentially affect water quality for the Cemlyn Catchment and Cemlyn Bay SSSI.

Mitigation

4.2.389 Mitigation would be provided to reduce adverse effects as far as practicable.

- A buffer zone would be provided around Tre'r Gof SSSI and adjacent to watercourses, all works within surface water buffer zones would first be subject to a risk assessment.
- Appropriate drainage would be installed on-site prior to main construction to manage run-off. This would include sediment settlement ponds and appropriate treatment to manage flows and meet water quality thresholds.
- The installation of a managed drainage system to the landscape mounding that is designed to avoid changes to catchment boundaries and water quality as far as practical.
- Surface water runoff from exposed topsoil during construction and later from the newly formed landscape mounds will be managed by a treatment train of sustainable drainage system (SuDS) features.
- Measures will be taken to prevent the deposition of silt or other material arising from work operations in existing watercourses or catchment areas.
- There will be no discharge of drainage from the construction areas to Cae Gwyn SSSI.
- Surface water drainage will discharge to the sea, subject to qualitative and quantitative control measures.
- All temporary hardstanding (on non-foreshore sites), as far as is reasonably practicable, will incorporate permeable surfacing unless there is a risk of surface water or groundwater pollution from contaminants.
- Continued monitoring of the water environment up to the start of construction to improve the robustness of baseline data. The data would then be used to refine the detailed drainage design and aim to reduce the potential effects on Tre'r Gof SSSI and its water catchment area.
- Once installed, active management of the drainage system would include monitoring of every discharge point to determine if there is a significant departure from baseline conditions. There would also be monitoring upstream and downstream of all outfall points to surface watercourses to determine if the outfall is having an effect on water quality.
- The drainage system would be designed to be as flexible as possible within topography constraints, which would allow for changes to be made relatively easily. This would maximise the potential for baseline conditions to be matched and thereby maximise the likelihood that the habitat is preserved.

- Features such as settlement ponds, lined channels and silt retention features would be used to help ensure pollution removal before surface water is discharged.
- 4.2.390 During the operational phase, all fuel and chemical storage at the Power Station will be within engineered containment facilities, including (where appropriate) suitably bunded tanks. Storage areas for fuel and chemicals will be located more than 15m away from watercourses, and protected to avoid damage by plant and vehicles.
- 4.2.391 Pollution prevention controls will be provided for the operational phase.
- 4.2.392 Mitigation measures for the decommissioning phase would be similar to those identified for the construction phase.

Residual effects

- 4.2.393 Taking a precautionary approach, it is necessary to identify that the construction period is likely to result in a moderate adverse residual effect on Tre'r Gof SSSI and the associated catchment area during the construction period as the complexity of the water environment in the WNDA results in a high level of uncertainty on the likely success of the proposed mitigation. A major adverse effect is identified during the construction stage from a biodiversity perspective, as set out earlier in this section.
- 4.2.394 During the operational phase, changes to the catchment areas through landscape mounding and drainage, which could alter flow rates, are likely to have a major adverse residual effect on the Tre'r Gof catchment and a moderate adverse effect on the Afon Cafnan, Cemaes and Cemlyn catchment areas.
- 4.2.395 There is also a potential moderate adverse combined effect from dewatering and vibration on the Existing Power Station ancillary buildings and services.
- 4.2.396 No significant adverse effects have been identified at this stage for the decommissioning phase.

Compensation

- 4.2.397 Due to the high level of uncertainty of the success of the proposed mitigation in reducing effects on the Tre'r Gof SSSI, a compensation package is also proposed. Compensation to be provided and managed by the applicant would be designed to enhance areas of existing wetland habitat within Anglesey, and to create new areas of wetland habitat.
- 4.2.398 If monitoring of the Tre'r Gof SSSI suggests that the drainage strategy has been successful and the species composition was retained, the compensation package would still be provided and managed by the applicant, which would represent a significant net-gain in wetland habitat and biodiversity.
- 4.2.399 The three Ecological Compensation Sites are:
- Cae Canol-dydd;
 - Cors Gwawr; and,
 - Tŷ Du.

4.2.400 Appendix D1-2 (Ecological Compensation Sites: Assessment of Environmental Effects) (Application Reference Number: 6.4.18) describes these three sites and provides an environmental assessment of the habitat creation proposals.

Assessment against policy

4.2.401 The text below identifies how the Proposed Development is in accordance with national and local policy, including NPS EN-1 [RD4] and EN-6 [RD5], in relation to water quality and resources.

Construction

4.2.402 There is insufficient certainty that significant harm to Tre'r Gof SSSI can be avoided and therefore appropriate compensation measures would be provided in accordance with paragraph 5.3.7 of NPS EN-1 [RD4].

4.2.403 Paragraph 5.3.7 of NPS EN-1 [RD4] also states that reasonable alternatives should be considered. NPS EN-6 [RD5] states that as a result of the Strategic Siting Assessment and Alternative Sites Study, UK Government does not believe that there are any sites in England and Wales other than the eight selected that are suitable for the development of new nuclear power stations in the time specified. In terms of alternative layouts within the WNDA, the scheme already seeks to reduce the potential for adverse effects in the following ways.

- The WNDA has been increased to allow for construction laydown areas to be located adjacent to the east and west of the Power Station Site, thereby avoiding encroachment onto the SSSI.
- The Power Station has been designed to maintain a suitable distance from the SSSI, allowing for buffer zones to be provided.

4.2.404 The document entitled Water Framework Directive Information to Support Article 4(7) Derogation (Application Reference Number: 8.27) sets out how all reasonable alternatives were considered to avoid significant harm to biodiversity interests in including Tre'r Gof SSSI. These include alternative:

- locations, depths and sequencing of excavations for Unit 1 and Unit 2;
- locations and depths for the CW intake; and,
- locations, gradients, scales and construction methodologies for the landscape mounds.

4.2.405 Paragraph 5.3.11 states that development consent should only be granted where the benefits (including need) of the development at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs.

4.2.406 As set out in the main report the significant harm identified is necessary to achieve the substantial public benefits of delivering the Power Station, by helping to meet the identified urgent need for new electricity NSIPs in the UK within the next 10 to 15 years. No alternative locations are available for the reasons identified above and that the benefits outweigh the impacts in

accordance with paragraph 5.3.11 of NPS EN-1 [RD4]. It is considered that this also satisfies Policy PCYFF2 of the JLDP as the adverse impact is necessary for overall benefit of the Wylfa Newydd Project and is therefore not an unacceptable major to moderate adverse impact, particularly given that a precautionary approach has been taken.

4.2.407 Horizon have provided the necessary information to support an application for derogation under Article 4.7.

4.2.408 The CW intake and outfall have not caused significant adverse impacts on legitimate commercial and recreational uses due to the embedded design in accordance with Paragraph 3.7.6 of EN-6.

Operation

4.2.409 Adverse effects at the operation stage are unlikely to be greater than at the construction stage and therefore the application would continue to comply with policy as set out above.

Decommissioning

4.2.410 Adverse effects at the operation stage are unlikely to be greater than at the construction stage and therefore the application would continue to comply with policy as set out above.

Conclusion

4.2.411 The text above shows that the Proposed Development is in accordance with national and local policy, including NPS EN-1 [RD4] and EN-6 [RD5] and JLDP Policy PCYFF 2 and GP 20 and 21 of the Wylfa SPG in relation to water quality and resources matters

Biodiversity

Policy context

4.2.412 Biodiversity is identified as both a Generic Impact in EN-1 [RD4] and a Nuclear Impact in EN-6 [RD5].

National Policy Statements

4.2.413 Paragraph 5.3.3 in EN-1 [RD4] requires an ES to clearly set out:

“...any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity”.

4.2.414 Further, paragraph 5.3.4 in EN-1 [RD4] states that the applicant should show how the proposals have taken advantage of opportunities to conserve and enhance biodiversity interests.

4.2.415 Paragraph 5.3.7 EN-1 [RD4] states that as a general principle, and subject to other paragraphs in EN-1 [RD4], development should aim to avoid significant harm to biodiversity interests, including through mitigation and consideration

of reasonable alternatives; where significant harm cannot be avoided, then appropriate compensation measures should be sought.

- 4.2.416 Paragraph 5.3.8 in EN-1 [RD4] confirms that the decision maker should ensure that appropriate weight is attached to designated sites of international, national and local importance; protected species; habitats and other species of principal importance for the conservation of biodiversity; and to biodiversity interests within the wider environment.
- 4.2.417 Paragraph 5.3.6 (and 5.3.15) in EN-1 [RD4] recognise that the benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and that these may outweigh harm to these interests.
- 4.2.418 Paragraph C.9.58 of EN-6 [RD5] states that there is the potential for significant adverse effects at Tre'r Gof SSSI, Cemlyn Bay SSSI and Cae Gwyn SSSI. Paragraph C.9.60 in of EN-6 [RD5] has recognised that given the scope for mitigation of biodiversity effects (identified in the Appraisal of Sustainability (AoS)) it is reasonable to conclude that it may be possible to avoid or mitigate impacts to an extent. For that reason, the Government does not think this justifies not including the site in this NPS. Paragraph C.9.61 of EN-6 [RD5] recognises the need for further assessment at the application stage.
- 4.2.419 Paragraph 5.3.11 in EN-1 [RD4] relates to SSSIs and states:
- “Where a proposed development on land within or outside an SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect, after mitigation, on the site’s notified special interest features is likely, an exception should only be made where the benefits (including need) of the development at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs. The decision maker should use requirements and/or planning obligations to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site’s biodiversity or geological interest”.
- 4.2.420 Paragraph 5.3.14 in EN-1 [RD4] confirms that ancient woodland is a valuable biodiversity resource and the decision maker should not grant development consent for any development that would result in its loss or deterioration “...unless the benefits (including need) of the development, in that location outweigh the loss of the woodland habitat”.
- 4.2.421 Paragraph 5.3.16 in EN-1 [RD4] confirms that many individual wildlife species receive statutory protection under a range of legislative provisions.
- 4.2.422 Paragraph 5.3.17 in EN-1 [RD4] states that other species and habitats have been identified as being of principal importance for the conservation of biodiversity in England and Wales and thereby requiring conservation action. The decision maker should ensure that these species and habitats are protected from the adverse effects of development by using requirements or planning obligations. The decision maker should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits

(including need) of the development outweigh that harm. In this context, the decision maker should give substantial weight to any such harm to the detriment of biodiversity features of national or regional importance which it considers may result from a proposed development.

4.2.423 Paragraph 3.9.2 in EN-6 [RD5] states that the nuclear AoS identified some common implications for biodiversity resulting from:

- water discharge, abstraction and quality issues;
- habitat and species loss and fragmentation/coastal squeeze;
- disturbance events (noise, light and visual); and
- air quality.

4.2.424 Paragraph 3.9.3 of EN-6 [RD5] states that in carrying out an assessment in accordance with section 5.3 of EN-1 [RD4], applicants should also consider the effects of the construction of a new nuclear power station on the groundwater regime and its effects on terrestrial habitats.

4.2.425 Paragraphs 5.3.18 and 5.3.19 of EN-1 [RD4] identify that the applicant should include appropriate mitigation measures as an integral part of the Proposed Development. Paragraph 3.9.6 of EN-6 [RD5] states that potential mitigation measures could include variations to building layout to avoid ecologically sensitive areas and on-site measures to protect habitats and species and to avoid or minimise pollution and the disturbance of wildlife.

Welsh national and local policy

4.2.426 Paragraph 5.2.8 of PPW [RD8] states that the planning system should promote biodiversity objectives and seek to minimise the fragmentation of habitats.

4.2.427 The planning system has an important part to play in meeting biodiversity objectives by promoting approaches to development which create new opportunities to enhance biodiversity, prevent biodiversity losses, or compensate for losses where damage is unavoidable. Paragraph 5.2.8 in PPW [RD8] confirms that the adaptation needs of biodiversity could be considered by identifying the scope for minimising or reversing the fragmentation of habitats and improving habitat connectivity through the promotion of wildlife corridors.

4.2.428 Section 5.5 of PPW [RD8] states that sites should be protected relative to their importance. In the interests of achieving sustainable development, it is important to balance conservation objectives with the wider economic needs of communities. Where development does occur, it is important to ensure that all reasonable steps are taken to safeguard or enhance the environmental quality of land. Further, section 5.5 of PPW [RD8] recognises where other material considerations outweigh the potential adverse environmental effects, authorities should seek to minimise those effects.

4.2.429 Policy PCYFF 2 in the JLDP [RD27] states that proposals should include provision for the appropriate management and eradication of invasive species.

4.2.430 Strategic Policy PS 5 in the JLDP [RD27] states that development will be supported where it is demonstrated that it is consistent with the principles of sustainable development. It also states that all proposals should protect and improve the quality of the natural environment, its landscapes and biodiversity assets.

4.2.431 Strategic Policy PS 19 in the JLDP [RD27] states that the Councils will manage development so as to conserve and where appropriate enhance the distinctive natural environment, countryside and coastline, and that proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area. Strategic Policy PS 19 also states that when determining planning application, consideration should be *inter alia* to the following items.

- Safeguarding habitats and species and geology.
- Protecting or where appropriate enhancing sites of international, national, regional and local importance and, where appropriate, their settings in line with National Policy.
- Protecting or enhancing biodiversity through networks of green/blue infrastructure and/or restoring networks of natural habitats.
- Protecting, retaining or enhancing trees, hedgerows or woodland of ecological value.
- Having appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with National Policy.

4.2.432 Policy AMG 6 in the JLDP [RD27] states that proposals likely to cause direct or indirect significant harm to Local Nature Reserves, Wildlife Sites or RIGS would be refused, unless it can be proven that there is an overriding need for the development, and that there is no other suitable site that would avoid having a detrimental impact on sites of local nature conservation value or local geological importance.

4.2.433 Section 4.10 of the Wylfa SPG [RD28] relates to the natural environment and GP 20 states that the Wylfa Newydd DCO Project should seek to ensure that the island's unique and distinctive natural environment is conserved and, where possible, enhanced. This includes the consideration of, among other things:

- the integrity of statutory and non-statutory sites for nature conservation;
- internationally and nationally protected habitats and species; and
- ecological functionality and relationships within the wider landscape.

4.2.434 GP 20 of the Wylfa SPG [RD28] states that *inter alia*; protected species, the ecological functionality of nature conservation sites, Special Areas of Conservation, Special Protection Areas, SSSIs, RIGS and the Geopark status of Anglesey should not be subjected to significant adverse impacts, or if they

are, sufficient mitigation should be implemented. GP 20 of the Wylfa SPG [RD28] goes on to state that where adverse effects cannot be avoided, the Council seeks appropriate mitigation and/or compensation measures.

Planning assessment

Environmental assessment

- 4.2.435 The environmental assessment of development within the WNDA on terrestrial and freshwater ecology matters is set out in volume D, chapter 9 of the Environmental Statement (Application Reference Number: 6.4.9).
- 4.2.436 The assessment identified that during construction, many of the effects are likely to be caused by vegetation removal and topsoil stripping, as these activities will remove surface habitats. This includes the loss of two areas of ancient woodland and adverse effects on the Arfordir Mynydd y Wylfa - Trwyn Penrhyn Wildlife Site.
- 4.2.437 As set out in the Water Quality and Resources section above, the hydrology of Tre'r Gof SSSI is also likely to change as a result of construction works and changes to drainage patterns, which would affect the biodiversity that it supports.
- 4.2.438 The realignment of a tributary (Nant Porth-y-pistyll) to the Afon Cafnan would result in the direct loss of the affected habitat.
- 4.2.439 12 types of invasive non-native plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) have been recorded at several locations within the WNDA and are listed in volume D chapter 9 of the Environmental Statement (Application Reference Number: 6.4.9).

Mitigation

- 4.2.440 Additional mitigation has been identified to provide opportunities to conserve biodiversity interests during the construction stage, including those listed below.
- Tre'r Gof SSSI buffer zones and drainage measures including those described in the Water Quality and Resources section above.
 - Buffer zones around bat barns and watercourses would also be provided.
 - Construction compounds would be located as far as reasonably practicable from noise sensitive receptors, such as bat barns and chough nesting sites.
 - The watercourse realignment would be designed to provide habitats of greater value than the existing section by improving sinuosity and enhanced riparian planting. The phasing of the watercourse realignment would also allow maturation so that there would be no habitat fragmentation caused by the stream realignment.

- Two receptor sites (newly created habitats) would be provided to accommodate species translocated or displaced by clearance works, as described in section 1 of this appendix.
 - Ancient woodland soil would be translocated to a new and larger off-site location as a compensation measure for the loss of ancient woodland.
 - Identified invasive non-native species would be appropriately managed.
- 4.2.441 At the operational stage, long-term botanical monitoring of Tre'r Gof SSSI would identify the need for any adaptive management.
- 4.2.442 During the decommissioning phase, the WNDA would be restored to sympathetically-managed agricultural land, focusing on the creation of species-rich habitats, providing high quality habitat for those species of conversation focus.

Compensation

- 4.2.443 Due to the high level of uncertainty of the success of the proposed mitigation in reducing effects on the Tre'r Gof SSSI, a compensation package is also proposed as set out in the Water Quality and Resources section above.

Residual effects

- 4.2.444 During construction, major adverse effects on Tre'r Gof SSSI as a result of water quality and water quantity changes are likely to remain despite mitigation, which would cause a major adverse effect on species assemblages for which the SSSI is notified.
- 4.2.445 A major adverse effect due to the loss of ancient woodland within the WNDA would remain. These are Simdda-Wen, which is an ancient semi-natural woodland, The Firs, which is a restored ancient woodland site and track improvement works through Manor Gardens.
- 4.2.446 Minor residual adverse effects are likely on choughs, fungi and the Arfordir Mynydd y Wylfa - Trwyn Penrhyn Wildlife Site. These effects would be temporary and during the construction period only, despite mitigation measures.
- 4.2.447 Moderate beneficial effects on Caeau Talwrn SSSI, Cors Bodeilio SSSI and Corsydd Môn/Anglesey Fens SAC due to the creation and management of rich fen habitat at the Ecology Compensation Sites.
- 4.2.448 No significant effects have been identified at this stage for the decommissioning phase.

Assessment against policy

- 4.2.449 The EIA of development within the WNDA on terrestrial and freshwater ecology matters is set out in chapter D9 of the Environmental Statement (Application Reference Number: 6.4.9). An assessment of the Proposed Development on the marine environment and geological conservation are considered separately above.

Construction

- 4.2.450 As evidenced in the mitigation section above, opportunities to conserve biodiversity interests have been taken in accordance with paragraph 5.3.4 of NPS EN-1 [RD4].
- 4.2.451 An assessment of the adverse effects on the Tre'r Gof SSSI against policy are set out in the Water Quality and Resources section above.
- 4.2.452 Despite measures to avoid significant adverse effects on biodiversity interests in accordance with paragraph 5.3.7 of NPS EN-1 [RD4], residual major adverse effects are also predicted due to the loss of two areas of ancient woodland within the WNDA.
- 4.2.453 Paragraph 5.3.14 states that the decision maker should not grant development consent for any development that would result in the loss or deterioration of ancient woodland unless the benefits (including need) of the development in that location outweigh the loss of the woodland habitat. The ancient woodland is located within the Power Station Site and its loss is necessary to facilitate the development of the Power Station itself, which is required to meet the urgent need for new electricity NSIPs in the UK within the next 10 to 15 years. Alternative layouts considered for the WNDA Development are set out in volume 2 of the Site Selection Report (Application Reference Number: 8.24.2).
- 4.2.454 The decision maker should refuse consent where harm to habitats or species outweighs the benefit (including need) of the development in accordance with paragraphs 5.3.11, 5.3.14 and 5.3.17 of EN-1 [RD4], as well as Strategic Policy PS 9 and Policy AMG6 in the JLDP [RD27], and GP 20 of the Wylfa SPG [RD28]. As set out in the main report the significant harm identified is necessary to achieve the substantial public benefits of delivering the Power Station, by helping to meet the identified urgent need for new electricity NSIPs in the UK within the next 10 to 15 years. No alternative locations are available for the reasons identified above and the benefits outweigh the impacts in accordance with these policies.
- 4.2.455 The identified non-native species would be controlled in accordance with Policy PCYFF 2 in the JLDP.

Operation

- 4.2.456 An assessment of the Tre'r Gof SSSI against policy during the operation period is set out in the Water Quality and Resources section above. There are no other likely significant effects during the operational period in accordance with paragraph 5.3.7 of NPS EN-1 [RD4], Strategic Policy PS 19 in the JLDP [RD27] and GP 20 in the Wylfa SPG [RD28].

Decommissioning

- 4.2.457 No significant effects are identified during the decommissioning stage in accordance with paragraph 5.3.7 of NPS EN-1 [RD4].

Conclusion

- 4.2.458 The text above identifies how the Proposed Development is in accordance with national and local policy (including Strategic Policy PS 9 and Policy AMG6

in the JLDP [RD27], and GP 20 of the Wylfa SPG [RD28]) and NPS EN-1 [RD4] and EN-6 [RD5] in relation to biodiversity.

Human health and well-being

Policy context

National Policy Statements

- 4.2.459 Paragraph 3.12.7 of NPS EN-6 [RD5] states that the applicant should identify any potentially significant health impacts and appropriate mitigation measures.

Welsh national and local policy

- 4.2.460 Policy PCYFF1 of the JLDP [RD27] states that proposals should not have an unacceptable adverse impact on health.
- 4.2.461 GP 7 of the Wylfa SPG [RD28] states that the applicant should undertake a comprehensive assessment of health and amenity impact of the Project.

Planning assessment

- 4.2.462 An assessment of the site-specific effects of the Proposed Development on human health and well-being is set out in the Health Impact Assessment (Application Reference Number: 8.19). A summary is set out below.
- 4.2.463 UK Air Quality Objective levels would not be exceeded, however, the construction activity would result in a decrease in air quality. For particularly sensitive groups within the affected population, the residual effect could range up to moderate adverse. Sensitivity in this case is particularly linked to living close to sources of emissions; regularly using footpaths close to sources of emissions; spending more time in affected dwellings; age; or existing poor health. Details of mitigation provided to minimise adverse effects on air quality are set out in the Air Quality section above.
- 4.2.464 Construction activity would result in both day-time and night-time noise. Many people in the communities closest to the WNDAs would be exposed to frequent levels of noise (particularly night-time noise) that could reduce their quality of life. For particularly sensitive groups within the affected population, the residual effect in relation to health outcomes could range up to moderate adverse. Sensitivity in this case is particularly linked to living close to sources of noise; age; existing poor health; spending more time in affected dwellings; or vulnerability due to deprivation or health inequalities. Details of mitigation provided to minimise adverse effects on noise are set out in the Noise and Vibration section above.
- 4.2.465 Construction would bring visual change and disturbance to the WNDAs. For particularly sensitive groups within the affected population, the residual effect could range up to moderate adverse. Sensitivity in this case is particularly linked to living close to the WNDAs and with younger and older people most sensitive to change as the effects would span an important time in their lives. Details of mitigation provided to minimise adverse effects on visual impacts are set out in the Landscape and Visual Impact section above.

- 4.2.466 As the Proposed Development would result in changes to many routes near Tregele and Cemaes, this population (including residents of isolated dwellings around the WNDA) would benefit from additional support to be physically active. For particularly sensitive groups within the affected population, the residual effect could be up to moderate beneficial from encouraging greater levels of physical activity. Sensitivity in this case is particularly linked to the community of Tregele, which would particularly benefit from improved active travel links to Cemaes, where the majority of local amenities are located, including the local primary school.
- 4.2.467 The above impacts need to be seen in context with the overall effects of the Wylfa Newydd DCO Project, which are summarised in the main report and considered in the Health Impact Assessment to be beneficial. It is therefore considered that the Proposed Development is in accordance with paragraph 3.12.7 on NPS EN-6 [RD5] and Policy PCFFF1 of the JLDP [RD27]. The applicant has undertaken a comprehensive Health Impact Assessment (Application Reference Number: 8.19) in accordance with GP 7 of the Wylfa SPG.

5 Planning Balance

- 5.1.1 Paragraph 3.1.3 of NPS EN-1 [RD4] states that the decision maker:
- “should assess all applications for development consent order for the types of infrastructure covered by the energy NPSs on the basis that the Government has demonstrated that there is a need for those types of infrastructure and that the scale and urgency of that need is as described for each of them in this Part.”
- 5.1.2 Paragraph 3.5.1 of NPS EN-1 [RD4] confirms that *“there is an urgent need for new electricity generation plant, including new nuclear power.”*
- 5.1.3 It is then confirmed at paragraph 3.1.4 of NPS EN-1 [RD4] that the decision maker should *“give substantial weight to the contribution which projects would make towards satisfying this need”*.
- 5.1.4 In considering the Proposed Development and weighing the adverse impacts of the Proposed Development against its benefits, paragraph 4.1.3 of NPS EN-1 [RD4] states that the decision maker should take into account the following.
- Its potential benefits including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits.
 - Its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.
- 5.1.5 A summary of the potential adverse impacts and potential benefits of the Proposed Development provided at section 4, is set out below.
- 5.1.6 The analysis in section 4 has shown that the Proposed Development, as described in section 2, does not individually or cumulatively cause potential adverse effects that are so severe that the decision maker should refuse the application.
- 5.1.7 The Proposed Development results in the loss of ancient woodland; however, section 4 sets out the reasons why no alternative sites are available and how the benefits (including the need) of the development are considered to outweigh the loss of the woodland habitat. For this reason, the Proposed Development accords with paragraph 5.3.14 of NPS EN-1 [RD4].
- 5.1.8 No significant adverse effects are considered likely for protected species in accordance with paragraph 5.3.7 of NPS EN-1 [RD4]. Management and enhancement of retained habitats, in addition to off-site receptor sites where necessary and practicable, would be provided to help ensure this, in compliance with paragraph 5.3.4 of NPS EN-1 [RD4].
- 5.1.9 Mitigation is proposed to ensure no likely significant adverse effects on coastal processes and coastal geomorphology, in compliance with paragraph 5.5.11 of EN-1 [RD4]. Furthermore, no significant effects are predicted on the marine environment in accordance with paragraph 5.3.7 of NPS EN-1 [RD4].
- 5.1.10 Substantial harm is however predicted to Cestyll Garden, which is a Grade II Registered Historic Park and Garden, as part of it would be lost. In accordance

with paragraph 5.8.14 of NPS EN-1 [RD4], substantial harm to the setting of a Grade II listed heritage asset should be “exceptional”. Section 4 describes why the substantial harm and loss identified is necessary and the main report considers that the harm does not outweigh the substantial public benefits of delivering the Wylfa Newydd DCO Project in accordance with paragraph 5.8.15 of NPS EN-1 [RD4].

- 5.1.11 The Anglesey AONB and North Anglesey Heritage Coast will be directly adversely affected by the Proposed Development as a small part will become a construction site during the construction phase and will then become a landscaped earth mound at the earliest practicable opportunity within the construction period or part of the Marine Works respectively. The landscaped mound is then provided to minimise the visual impacts of the Power Station on the AONB and other receptors. The adverse effects are significant, but exceptional circumstances are demonstrated as the Wylfa Newydd DCO Project is demonstrably in the public interest in accordance with paragraph 5.9.10 of NPS EN-1 [RD4], as set out in the main report.
- 5.1.12 There are multiple other adverse landscape and visual effects set out in section 4, which have been minimised as much as reasonably practicable in accordance with paragraph 3.10.8 of NPS EN-6 [RD5]. This paragraph of NPS EN-6 [RD5] recognises that the scope for visual mitigation will be quite limited. Mitigation should; however, be designed to reduce the visual intrusion of the Proposed Development as far as reasonably practicable. For the reasons set out in section 4 and the main report, this has been achieved and the adverse impacts on non-designated landscapes are not so damaging as to outweigh the benefits (including need) of the Wylfa Newydd DCO Project, in compliance with paragraph 5.9.15 of NPS EN-1 [RD4].
- 5.1.13 Whilst the development does result in a loss of “best and most versatile” agricultural land, this equates to only 7.6% of the total WNDA. The loss of this land cannot be practicably avoided as it is mostly located in close proximity to the A5025 and Tregele, which is an important area for landscape mitigation through mounding. The loss of Grade 1 agricultural land in particular represents less than 0.02% of the best and most versatile agricultural land on Anglesey. Losses have been minimised and are justified in accordance with paragraphs 5.10.8 and 5.10.15 of NPS EN-1 [RD4].
- 5.1.14 The CW outfall would involve the destruction of part of the Porth Wnal Dolerite RIGS, however the design has been refined to seek to avoid the dolerite dyke intrusion, which forms the key feature of the RIGS. Section 4 sets out the range of options considered, all of which would result in adverse effects as a result of construction and habitat loss. The applicant has therefore given due consideration to RIGS designations in accordance with paragraph 5.3.13 of NPS EN-1 [RD4]. Paragraph 5.3.13 is clear that adverse effects on RIGS designations should not be used in themselves to refuse development consent.
- 5.1.15 The Proposed Development, including widespread embedded mitigation and good practice measures as described in section 4, has sought to avoid significant adverse impacts from construction noise and vibration on health and quality of life in accordance with paragraph 5.11.9 of NPS EN-1 [RD4].

Where it is not practicable to reduce noise to a not-significant level in-situ, noise insulation would be offered. It is therefore considered that the scheme is in accordance with paragraph 5.11.9 of EN-1 [RD4].

- 5.1.16 A significant (moderate) adverse effect on community amenity has been identified as a consequence of environmental effects (air quality, noise and vibration, landscape and traffic) during the construction period. A significant (moderate) adverse effect resulting from changing sources and extent of expenditure in local businesses has also been identified during this period. Mitigation is proposed in the form of a Community Impact Fund and Tourism Fund; however, this is unlikely to reduce adverse effects to a not-significant level for these local receptors. The decision maker should have regard to these effects and mitigation measures in accordance with paragraphs 5.12.6 and 5.12.8 of NPS EN-1 [RD4].
- 5.1.17 For the reasons set out in section 4, there is insufficient certainty, with mitigation factored in, that significant harm to Tre'r Gof SSSI can be avoided. Therefore, appropriate compensation measures would be provided in accordance with paragraph 5.3.7 of NPS EN-1 [RD4]. The compensation package would be designed to enhance areas of existing rich fen habitat within Anglesey, and to create new areas of rich fen habitat to offset potential effects to Tre'r Gof SSSI. These sites are set out in section 2.
- 5.1.18 Paragraph 5.3.7 of NPS EN-1 [RD4] also states that reasonable alternatives should be considered. NPS EN-6 [RD5] states that no other sites are considered to be potentially suitable in the time specified. In terms of alternative layouts within the WNDA, the scheme already seeks to reduce the potential for adverse effects in the following ways.
- The WNDA has been increased to allow for construction laydown areas to be located adjacent to the east and west of the Power Station Site, thereby avoiding encroachment onto the SSSI.
 - The Power Station has been designed to maintain a suitable distance from the SSSI, allowing for buffer zones to be provided.
- 5.1.19 Further details on alternatives considered are set out in Volume 2 of the Site Selection Report (Application Reference Number: 8.24.2).
- 5.1.20 Paragraph 5.3.11 states that development consent should only be granted where the benefits (including need) of the development at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs. For the reasons set out in the main report, the benefits outweigh the impacts in accordance with paragraph 5.3.11 of NPS EN-1 [RD4].
- 5.1.21 The Ynys Môn Secondary B aquifer and The Skerries water bodies have the potential to be adversely affected and so would not be in accordance with the overarching environmental objective established under the WFD and the decision maker will need to give this impact more weight in accordance with paragraph 5.15.5 of NPS EN-1 [RD4]. Horizon has prepared a derogation case in consultation with NRW as explained in section 4 and this has been submitted with the DCO application.

- 5.1.22 Paragraph 5.10.24 of NPS EN-1 [RD4] states that the decision maker should expect applicants to “take appropriate mitigation measures to address adverse effects on coastal access”, as well as PRoWs. Paragraph 5.10.16 states that the decision maker should “expect applicants to have taken advantage of opportunities to maintain and enhance access to the coast”.
- 5.1.23 Whilst mitigation is provided in the form of alternative routes for the WCP during construction and operation, the Proposed Development reduces access to the coast for the reasons set out in section 4, which is not in accordance with paragraph 5.10.24. However, opportunities to maintain access to the coast, which paragraph 5.10.16 expects applicants to take advantage of, were not reasonable or practicable for the reasons set out in section 4.
- 5.1.24 The remaining PRoWs and permissive paths would experience a moderate beneficial effect due to the increased recreational amenity of the new footpaths compared with the original (pre-construction) footpaths. New routes would include routes that are suitable for wheelchair users and would include picnic areas, interpretation boards and a nature trail. These routes would create a network of new footpaths within the WNDA, to provide alternative sea views and other attractive routes for recreational walkers, including a route along the Afon Cafnan and a route over the new drumlin landform. This network of footpaths would link to Cemlyn Bay, Wylfa Head and the re-opened Fisherman’s Car Park. In addition, a dual footpath and cycle path would be created linking the Copper Trail to Cemaes, via Penrhyn. This addresses adverse effects on PRoWs (excluding the WCP) in accordance with paragraph 5.10.24 of NPS EN-1 [RD4]. Furthermore, the moderate beneficial effects far exceed the expectations of paragraph 5.10.24.
- 5.1.25 The MOLF will also provide a significant benefit to the scheme as it provides mitigation that would greatly reduce the number of deliveries by road and therefore the volume of road traffic and its associated effects, in accordance with paragraph 5.13.10 of NPS EN-1 [RD4]. It is estimated that approximately 60% to 80% of all construction materials (by weight), including the majority of Abnormal Indivisible Loads, would be delivered via water-borne transport to the MOLF.
- 5.1.26 A further major beneficial effect would be the remediation of contaminated land across the WNDA, which would benefit those using or accessing the site in future and would benefit two water catchment areas (Tre’r Gof and Afon Cafnan).

6 Conclusion

- 6.1.1 This appendix considers relevant national and local planning policies within the overarching context of NPS EN-1 and NPS EN-6. It demonstrates that, when assessed against these relevant policies and material considerations, the Proposed Development benefits from strong policy support and is acceptable in land use planning terms.
- 6.1.2 Whilst the Proposed Development will, in common with any national infrastructure project, result in some adverse effects to the environment and local community, the main report states that these (considered individually or collectively) do not outweigh the important benefits. These benefits would be delivered for the UK as a whole, including a vital role in the provision of safe and secure low carbon electricity, as well as local benefits including jobs creation, investment in the local economy and provision of skills for the local workforce. Together these benefits have the potential to create a significant lasting positive legacy for Anglesey, north Wales and the UK.

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Appendix B Off-site Power Station Facilities Planning Statement

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Contents

1	Introduction and Purpose.....	1
1.1	Introduction	1
2	Off-Site Power Station Facilities	2
2.1	Overview of the development proposals.....	2
	AECC.....	3
	MEEG	4
	ESL	4
	Access and parking	4
	Security and fencing	4
	Lighting	5
	Utilities	5
	Drainage	5
	Waste and materials.....	5
	Development phases and activities	5
2.2	Design, layout and scale.....	6
3	The Site and Surrounding Area	8
3.1	Site Location	8
3.2	Existing Site Characteristics	8
	Ecology.....	9
	Topography	9
	Surface Water and Groundwater	9
	Existing Land Use.....	9
	Public Access	10
	Air Quality	10
	Cultural Heritage.....	10
	Soils.....	10
	Landscape	10
4	Principal Planning Analysis.....	12
4.1	Introduction	12
4.2	Principle of development	12
	Policy context.....	12
	Assessment	13
4.3	Other Site-Specific Planning Issues.....	14
	Air quality and emissions	15
	Biodiversity	17
	Soils and geology	20
	Flood risk	23
	Water quality and resources	27
	Historic environment.....	29
	Landscape and visual impacts.....	32
	Noise and vibration	37
	Socio-economics	40
	Public access and recreation	43

	<i>Human health and well-being</i>	44
	<i>Welsh language impact</i>	45
5	Planning Balance	48
6	Conclusion	51

List of Figures

Figure 2-1	Illustrative site layout	3
Figure 3-1	Site location	8

1 Introduction and Purpose

1.1 Introduction

- 1.1.1 The purpose of this appendix is to consider the site-specific planning issues relevant to the Off-Site Power Station Facilities.
- 1.1.2 In order to provide resilience against extreme events with very low probabilities, and in line with industry good practice, Horizon is required to develop a suite of integral facilities that would be physically separate from, but local to, the Power Station Site. These facilities form part of the Nationally Significant Infrastructure Project (NSIP) alongside the Power Station and would include the following:
- An **Alternative Emergency Control Centre (AECC)**, to provide back-up command and communications facilities that would be used to remotely manage an incident at the Power Station in the extremely unlikely event the primary facilities on the Power Station Site were untenable or if there was no access to the Power Station Site.
 - An **Environmental Survey Laboratory (ESL)**, to perform environmental monitoring and would contain radiation monitoring equipment to conduct radiological surveys in the local area.
 - A **Mobile Emergency Equipment Garage (MEEG)**, to store a number of specialist vehicles at a location close to, but separate from, the Power Station Site, allowing them to be rapidly deployed if needed to support an incident. The MEEG could also be used as a marshalling point for support arriving on Anglesey before onward dispatch to the Power Station Site in an emergency situation.
- 1.1.3 Project-wide considerations and those related to other sites are considered elsewhere in the Planning Statement (Application Reference Number: 8.1).
- 1.1.4 This appendix is structured as follows:
- Chapter 2 – provides a more detailed description of the Off-Site Power Station Facilities;
 - Chapter 3 – provides a description of the site, its location and its surroundings;
 - Chapter 4 – provides a planning analysis of the proposed development; and
 - Chapter 5 – provides the conclusions to this appendix.
- 1.1.5 A more detailed description of the potential environmental effects of the development is provided in the Environmental Statement (ES) (Application Reference Number: 6.5.1 to 6.5.12) and details of how the proposed development would deliver good design and inclusive access are contained in volume 3 of the Design and Access Statement (DAS) (Application Reference Number: 8.2.3). Details of the consultation process are provided in the Consultation Report (Application Reference Number: 5.1).

2 Off-Site Power Station Facilities

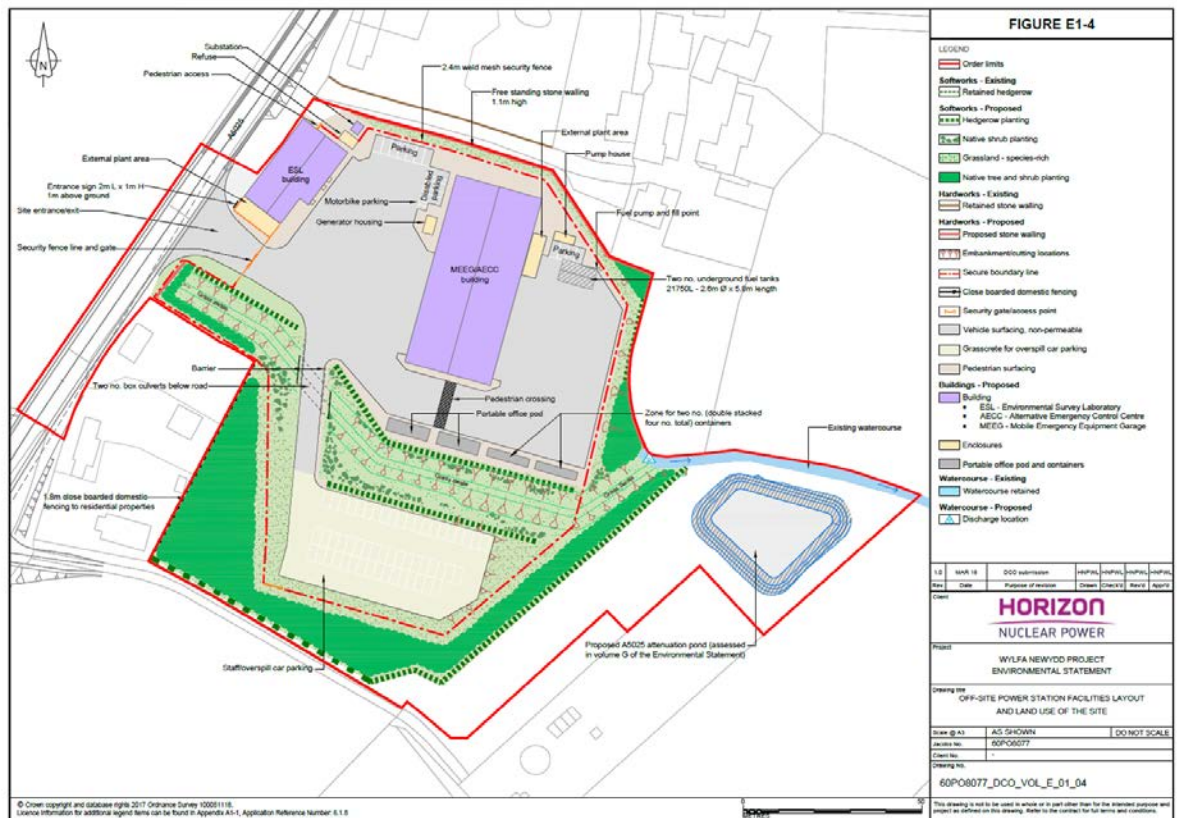
2.1 Overview of the development proposals

2.1.1 The Off-Site Power Station Facilities will comprise:

- MEEG/AECC building;
- ESL building;
- car parking and pedestrian walkways;
- access and delivery areas;
- generator;
- pump house;
- fuel pump and fill point;
- substation;
- two underground fuel tanks;
- refuse compound;
- portable office pods;
- container storage;
- security fencing; and
- drainage swale.

- 2.1.2 The illustrative locations of these components of the Off-Site Power Station Facilities are shown in Figure 2-1 below.

Figure 2-1 Illustrative site layout



- 2.1.3 The locations shown in figure 2-1 are only illustrative as an amount of flexibility is required for the proposed buildings and structures to allow for changes that may arise from variances in subsequent design and manufacture. This parameter based approach for the Off-Site Power Station Facilities is set out in volume 3 of the DAS (Application Reference Number: 8.2.3).

AECC

- 2.1.4 During normal operation of the Power Station, it is expected that the AECC would be in use only once per year for an annual incident exercise. This would normally be carried out during working hours, however in some instances a full out-of-hours exercise may be required.
- 2.1.5 In the event of an incident, the AECC would be operational 24 hours a day.
- 2.1.6 Should there be an incident, there could be more than 58 staff working at the MEEG/AECC building.
- 2.1.7 Training at the AECC would be required in addition to the annual incident exercise and would take place at regular intervals, involving a small number of staff using the main AECC area for a limited period of time.
- 2.1.8 Approximately once a month, maintenance would need to be carried out at the facility which may include running a back-up generator for a short time.

MEEG

- 2.1.9 The MEEG would have an operational workforce of up to four staff and 12 drivers during training (which would happen during normal working hours approximately once a year). During an incident, the staff would be working 24 hours per day, seven days per week. During periodic vehicle checks, typically once every six months, a similar number of staff would also be required on-site. The facility would not be staffed at other times.
- 2.1.10 The MEEG and the AECC would be co-located within one building at the centre of the site, with the AECC located at the northern end of the building.

ESL

- 2.1.11 The ESL would be used for routine sampling. There would be an operational workforce of three staff at the ESL on a regular basis working normal day time hours only. In the event of an incident, the ESL would be operational 24 hours per day.
- 2.1.12 The ESL would be located in a separate building at the north-west of the site.

Access and parking

- 2.1.13 There would be 13 staff car spaces provided on the hardstanding portion of the site (including two disabled spaces) and two motorcycle spaces.
- 2.1.14 Additionally, there would be an overspill car park for 54 spaces provided in the southern portion of the site. This would be used during an incident or training exercise, and would be paved in 'grasscrete', a permeable paving material.
- 2.1.15 Access for 4x4 vehicles would be provided up to the ESL building entrance with turning space.
- 2.1.16 The site has been designed to allow for two-way heavy goods vehicle (HGV) access into and out of the site, with space for manoeuvring about the site via turning circles on both sides of the MEEG/AECC building.
- 2.1.17 Vehicle access would be via the existing site access point. The proposed entrance gate to the site would be located a sufficient distance from the road to allow an HGV to wait for the gate to open without the road being obstructed.
- 2.1.18 Pedestrian access routing has also been provided on-site, with a pedestrian/cycle gated site access separate from the vehicle access.

Security and fencing

- 2.1.19 The Off-Site Power Station Facilities would be served by closed circuit television and lighting. The perimeter of the site would be secured with a 2.4m high mesh panel security fence.
- 2.1.20 The AECC and MEEG require critical infrastructure protection status and are integral to the operation of the Power Station. The necessary security would be achieved through a strengthened exterior construction of stone walling, fencing and retaining walls, combined with vegetation barriers.

Lighting

- 2.1.21 Lighting would be provided at the buildings on-site, car park and pedestrian footpath, and entrance to the site. The lighting requirements for the MEEG/AECC building are likely to vary between day-to-day operation and emergency events and the lighting would be designed to be responsive. Lights would be switched down to a minimum at the end of the working day and through the night. When the MEEG/AECC building is unmanned, lighting at the site would be minimal.
- 2.1.22 The ESL building would generally only be in operation from 08.00 to 18.00 on weekdays during non-emergency periods. During non-emergency periods, low lighting levels (typically a 50% reduction) would be applied during evenings and on weekends.

Utilities

- 2.1.23 Utilities (including water and telecommunications) would be connected to the site via existing service routes.
- 2.1.24 The buildings would be serviced with a low energy ventilation system, low energy heating and low energy lighting.

Drainage

- 2.1.25 A drainage scheme incorporating Sustainable Urban Drainage System techniques has been proposed for the site to manage surface water runoff.
- 2.1.26 A drainage swale would be located to the south of the hardstanding section of the site to accommodate surface water flows. The swale would be approximately 2.2m wide, and would channel surface water flows to the unnamed watercourse to the south-east of the site.
- 2.1.27 The vehicle hardstanding would be constructed using permeable paving and, when necessary, surface runoff would be contained in a below-ground storage system until it could be drained after a flood event.
- 2.1.28 The foul drainage systems at the site would connect into the public sewer.
- 2.1.29 An attenuation pond associated with the A5025 Off-line Highway Improvements would be located in the south-east portion of the site.

Waste and materials

- 2.1.30 All waste and materials arising from construction works at the Off-Site Power Station Facilities would be managed in a responsible manner with the clear intention of applying the principles of the waste hierarchy, as described in the waste and materials management strategy in the Wylfa Newydd Code of Construction Practice (CoCP) (Application Reference Number: 8.6).
- 2.1.31 Waste would be generated during the operation of the Off-Site Power Station Facilities, including waste arising from maintenance activities, site administration and welfare facilities.

Development phases and activities

Construction

- 2.1.32 Construction activities would be undertaken within the site footprint, except for works to adapt the entrance to the west of the site, which would require minor amendments to the existing A5025 such as new road markings and signage.
- 2.1.33 The two existing commercial garages, motor vehicle repair building and existing single-storey house in the south-west of the site would be demolished.
- 2.1.34 The construction of the Off-Site Power Station Facilities would commence in the third year following grant of development consent, and last for approximately two years. The Off-Site Power Station Facilities would be operated until the decommissioning of the Power Station.
- 2.1.35 The construction of the Off-Site Power Station Facilities would commence following the completion of the A5025 Highway Improvements. The construction workforce for the Off-Site Power Station Facilities would be a maximum of 85 workers on the construction site at any one time, working in shift patterns of a minimum of six hours per day.
- 2.1.36 The construction contractor would typically undertake construction works between 08.00 to 18.00 Monday to Friday and 08.00 to 13.00 on Saturdays, as necessary.
- 2.1.37 During construction, it is anticipated that the peak vehicle trip generation would be 204 two-way vehicle trips per day (i.e. 102 in and 102 out), including 48 HGV trips, 102 car trips and 54 minibus and light goods vehicle trips.

Operation

- 2.1.38 The MEEG/AECC building would not be staffed day-to-day but would be accessed for training events, periodic vehicle checks, maintenance and during an emergency response event.
- 2.1.39 The ESL building would be staffed day-to-day during normal business hours.
- 2.1.40 Operational traffic for the Off-Site Power Station Facilities would primarily be associated with the day-to-day operation of the ESL, and would include 10 two-way vehicle trips per day, including four HGV trips, two car trips and four light goods vehicle or minibus trips.

Decommissioning

- 2.1.41 At present, it is assumed that the MEEG, AECC and ESL buildings would be decommissioned and removed from the site around the same time as the decommissioning of the Power Station commences at the end of its operational life. Any alternative proposals for use of the buildings or the site beyond this period would need to be considered and determined as part of a future planning application at that time.

2.2 Design, layout and scale

- 2.2.1 Whilst the Off-Site Power Station Facilities have been subject to an extensive process of design development and consultation, Horizon will have a continuing need to refine the proposals. Flexibility is required in the

Development Consent Order (DCO) to reduce the potential need for non-material changes post consent for minor amendments. An amount of flexibility is therefore required for the proposed buildings and structures to allow for changes that may arise from variances in subsequent design and manufacture.

- 2.2.2 The approach to flexibility sought in the DCO is set out in volume 3 of the DAS (Application Reference Number: 8.2.3). For the Off-Site Power Station Facilities, this involves a parameters based approach.
- 2.2.3 Details of design (including size, external appearance, siting and samples of materials) for the Off-site Power Station will be submitted to, and approved in writing by, the local planning authority, in accordance with the parameters secured in the DCO requirements and the design principles set out in volume 3 of the DAS (Application Reference Number: 8.2.3).
- 2.2.4 The design evolution has resulted in a general layout for the Off-Site Power Station Facilities. The exact position of buildings and structures would, however, be flexible within the two zones shown on the Off-site Power Station Facilities Parameter Plan to accommodate the potential for minor changes in the detailed design. There is one zone for the ESL building and one zone for the MEEG/AECC building.
- 2.2.5 Within these zones, it is proposed that the length, width and height of buildings would have a tolerance to pre-empt differences in manufacturers' module details and cladding extent. This is reflected in the maximum dimensions set in the DCO Requirements. No minimum dimensions are proposed.

Ecology

- 3.2.2 The nearest area that has been designated for its nature conservation interest is Llyn Garreg-Lwyd Site of Specific Scientific Interest (SSSI), which is located approximately 700m to the northwest of the Off-Site Power Station Facilities site. Coed Carreglwyd candidate Wildlife Site and an area of ancient woodland are both located approximately 700m to the northwest of the site.

Topography

- 3.2.3 The Off-Site Power Station Facilities site is located within an area of undulating landform gently rising to the north-west. There are also noticeable drumlin features to the west and east. The site topography falls from the western edge along the A5025 to the eastern edge. A bund is present running from west to east through the middle of the site. This bund both separates the current garage area of the site from the farmland to the south and from a small watercourse, a tributary of the Afon Llanrhuddlad, which runs approximately to the east towards Llanfaethlu village. There is a significant drop to the south-east corner of the garage area.

Surface Water and Groundwater

- 3.2.4 The Off-Site Power Station Facilities site is located within a parcel of land that has been heavily modified by previous development. Historical mapping indicates that a spring and watercourse used to flow from west to east across the north of the Off-Site Power Station Facilities site where the garage buildings are currently located. Any watercourses or flow paths that would have previously been open are now culverted or potentially realigned. Historical mapping indicates that the ponds located to the west of the site have formed within former quarries.
- 3.2.5 The main watercourse within the proposed Off-Site Power Station Facilities site emerges at the eastern corner and is a small unnamed tributary of the Afon Llanrhuddlad, referred to as the East Drain for the purposes of this assessment. Upstream of the site, there is no evidence of a formal watercourse.
- 3.2.6 A small drain flows from north to south along the eastern field boundary of the Off-Site Power Station Facilities site. This drain, referred to here as the Hen-shop Drain, runs perpendicular to and discharges into the East Drain.

Existing Land Use

- 3.2.7 The Off-Site Power Station Facilities site exhibits two contrasting characteristics. The northern half is a former bus depot, and is currently used for garaging and vehicle storage (brownfield) and the southern section is predominately open farmland (greenfield). The existing buildings on-site are due to be demolished (including the property to the west adjacent to the site entrance) and it is anticipated that the area of hardstanding and industrial sheds of the former bus depot may contain some historic ground contamination. There are hedgerows to the southern and eastern boundaries and an evergreen shelterbelt to the north; otherwise, vegetation is limited.

Public Access

- 3.2.8 There is no public right of access within the Off-Site Power Station Facilities site, although there are six footpaths within a 250m radius. Five of these footpaths are Public Rights of Ways (PRoW), with one further footpath not present on the definitive map but identifiable using aerial photography.
- 3.2.9 PRoW 29/009/1 is located immediately south of the Off-Site Power Station Facilities site and provides a link between two sections of the A5025 via Cae'r-bryniau.

Air Quality

- 3.2.10 Existing air quality in the vicinity of the Off-Site Power Station Facilities site is good and concentrations of air pollutants are generally well within the relevant Air Quality Objectives. Through the Local Air Quality Management process, the Isle of Anglesey County Council (IACC) has not identified any relevant exposure areas where the Air Quality Objectives are exceeded in the vicinity of the Off-Site Power Station Facilities site, or close to the A5025.

Cultural Heritage

- 3.2.11 St Maethlu's Church is a Grade II* Listed Building with inter-visibility with the Off-Site Power Station Facilities.
- 3.2.12 The Off-Site Power Station Facilities would be visible from some views from the southern edge of the Essential Setting of Carreglwyd Grade II* Registered Park and Garden.

Soils

- 3.2.13 During the Agricultural Land Classification survey for the A5025 Off-line Highway Improvements one auger point was located in the southwest of the site, and the area around this was classified as sub-grade 3b. It is anticipated that the undeveloped parts of the site would also be classified as sub-grade 3b.

Landscape

- 3.2.14 The A5025 forms the eastern boundary of the Isle of Anglesey AONB. The Off-Site Power Station Facilities site is located on the east side of the A5025 and is outside of the AONB.
- 3.2.15 Visibility to and from the Off-Site Power Station Facilities site is described below:
- To the north – immediate and open views are limited to the adjoining development. Visibility extends to some elevated locations, across the undulating drumlin landscape up to approximately 3.5km. This includes middle-distance views possible from the summit and PRoW within the locality of Mynydd y Garn. There is no inter-visibility with the settlement of Rhydwyn.

- To the west and south-west – local views extend across the adjoining A5025 to the Llanfaethlu Primary School and nearby farmland. Beyond this, views are curtailed by a ridgeline situated approximately 250m to the west of the Off-Site Power Station Facilities site. Views are possible from the adjoining A5025, the public footpaths immediately to the west and the Isle of Anglesey AONB.
- To the south – open, local views are possible from the nearby properties immediately to the south of the Off-Site Power Station Facilities site. Beyond these properties, the Off-Site Power Station Facilities site can be partially seen from the surrounding rural landscape up to the settlement edge of Llanfaethlu and scattered development off the A5025. Further visibility to the south is restricted by the intervening drumlin landform and the built form associated with nearby agricultural development.
- To the east – local visibility extends to the nearby agricultural fields up to a ridgeline approximately 1km from the Off-Site Power Station Facilities site boundary. More distant glimpsed views are possible from the rising summits of distant drumlins to the east, located approximately 2-6km away from the site.

4 Principal Planning Analysis

4.1 Introduction

- 4.1.1 The purpose of this section is to present and analyse the site-specific planning considerations that emerge from the planning policy background, site characteristics and issues, as well as the feedback raised through the pre-application consultation process.
- 4.1.2 A detailed assessment of the likely effects of the construction, operation and decommissioning of the Wylfa Newydd Project is set out in the ES (Application Reference Number: 6.5.1 to 6.5.12), Health Impact Assessment Report (Application Reference Number: 8.19), Welsh Language Impact Assessment (WLIA) (Application Reference Number: 8.21) and Equality Impact Assessment (Application Reference Number: 8.22).
- 4.1.3 Design principles and parameters for the Off-Site Power Station Facilities are set out in volume 3 of the DAS (Application Reference Number: 8.2.3), alongside details of how the design of the scheme has evolved during pre-application discussions.
- 4.1.4 Details of the need for the Wylfa Newydd DCO Project and the effect of the Statement on Energy Infrastructure (7 December 2017) [RD4] on the decision making process are identified in Chapter 5 of the Planning Statement main report (Application Reference Number: 8.1).
- 4.1.5 This concludes that NPS EN-1 [RD4] and NPS EN-6 [RD5] remain important and relevant matters which would carry significant weight in the determination of projects that will deploy after 2025. They continue to represent the primary policy basis for a decision made by the Secretary of State (SoS) on this application for development consent for the Wylfa Newydd DCO Project.

4.2 Principle of development

Policy context

- 4.2.1 Given the urgent need for new electricity NSIPs in the UK within the next 10-15 years, as set out in the main body of the Planning Statement (Application Reference Number: 8.1), the decision maker should assess relevant applications on the basis that the need for all types of energy infrastructure covered by NPS EN-1 [RD4] has already been demonstrated by the UK Government (Paragraph 3.1.3). The Off-Site Power Station Facilities need to be in close proximity to the Power Station Site, the location of which was informed by Section C.9 in NPS EN-6 [RD5] (Annexes - volume II of II) which identifies 'Wylfa' as a potentially suitable location for a new nuclear power station to be deployed by 2025 to meet the identified and urgent need for low carbon energy. Section C.9 in NPS EN-6 [RD5] has therefore indirectly informed the location of the Off-Site Power Station Facilities.
- 4.2.2 The decision maker should also give substantial weight to the contribution which projects would make towards satisfying this need when considering applications for development consent (Paragraph 3.1.4 in NPS EN-1 [RD4]).

4.2.3 In considering the proposed development and weighing the adverse impacts of the proposed development against its benefits, Paragraph 4.1.3 of NPS EN-1 [RD4] states that the decision maker should take into account:

- its potential benefits including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits; and
- its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.

Whilst noting that the Wylfa SPG [RD28] was adopted prior to a detailed understanding of the ONR requirements for Off-Site Power Station Facilities and whilst noting that the Off-Site Power Station Facilities is an integral part of the NSIP rather than Associated Development, Policy GP 31 provides useful guidance on IACC's locational guidance for employment generating uses such as the Off-Site Power Station Facilities:

"The County Council would generally only support proposals to accommodate appropriate new, small scale employment uses providing supply chain opportunities related to the Wylfa Nuclear New Build project in or adjoining the main villages in the A5025 corridor. The County Council may, however, support employment generating proposals on other suitable sites where there is strong justification with respect to operational need which cannot be accommodated within villages and due consideration of environmental and social issues".

4.2.4 In addition, paragraph 5.1.57 in the Wylfa Newydd: SPG Consultation Draft (January 2018) [RD14] acknowledges at that *"the combination of the MEEG, ESL and AECC on one site in Llanfaethlu presents an opportunity to improve the appearance and potentially remediate land presently occupied as a garage/depot"*. In addition, Policy GP 31 [RD14] supports the co-location of the MEEG, ESL and AECC stating that *"the project promoter should design a combined facility that is in scale and character with the surrounding landscape recognising that it is separate from the settlement of Llanfaethlu"*.

Assessment

4.2.5 The Off-Site Power Station Facilities is a fundamental requirement of the NSIP, the need for which has already demonstrated, in accordance with Paragraph 3.1.3 of NPS EN-1 [RD4].

Alternative sites

4.2.6 As set out in detail in volume 3 of the Site Selection Report (Application Reference Number: 8.24.3), the location of the Off-Site Power Station Facilities has been informed by locational and operational criteria, namely that the Off-Site Power Station Facilities must be:

- In close proximity to a main connecting road, to ensure a timely response in an emergency event. For the MEEG there is also a requirement during normal operation to be near a main road as the specialist vehicles,

including off road response vehicles, excavators and HGVs will need to be maintained and used to ensure that they are ready in an emergency.

- Upwind of any prevailing potential airborne hazards, which would avoid the facilities being affected in the event of such a release.
- Within a zone of least seismic activity, given the nature of the facilities and the requirement to plan against all eventualities including an earthquake.
- At least 1.5km from the Advance Boiling Water Reactor (ABWR) Units, to ensure it can be fully operational without restrictions during a radiation emergency.
- No further than 7.5km from the ABWR Units, to ensure that additional responders can arrive at the AECC during an emergency within appropriate timescales.
- The minimum area of land required is: 0.5 hectares for the AECC/ESL and 1 hectare for the MEEG.

4.2.7 The above criteria created an initial short-list of five sites. The Off-Site Power Station Facilities site is capable of accommodating all of the Off-Site Power Station Facilities on a single site, thereby making effective use of land.

4.2.8 Locational guidance within the Wylfa SPG [RD28] supports the development of new, small scale employment uses providing supply chain opportunities related to the Wylfa Nuclear New Build project in or adjoining the main villages in the A5025 corridor. The Off-Site Power Station facilities would be located in close proximity to Llanfaethlu on the A5025 corridor and comprise a small scale employment use. It is therefore considered to comply with the location guidance in the Wylfa SPG [RD28].

4.3 Other Site-Specific Planning Issues

4.3.1 Part 4 of NPS EN-1 [RD4] sets out the general principles that should be applied in the assessment of development consent applications across the range of energy technologies, while Part 2 of NPS EN-6 [RD5] contains additional policy for when the decision maker is considering an application for nuclear development, which have informed the structure of the analysis set out below:

- air quality and emissions;
- biodiversity;
- flood risk;
- historic environment;
- human health and well-being;
- landscape and visual;
- public access and recreation;
- soils and geology;
- noise and vibration;

- socio-economics;
- water quality and resources; and
- welsh language.

Air quality and emissions

Policy context

National Policy Statements

- 4.3.2 NPS EN-1 [RD4] states at paragraph 5.2.9 that the decision maker should generally give air quality considerations substantial weight where a project would lead to a deterioration in air quality in an area, or lead to a new area where air quality breaches any national air quality limits. Further, paragraph 5.2.9 in NPS EN-1 [RD4] confirms that air quality considerations will also be important where substantial changes in air quality levels are expected, even if this does not lead to any breaches of national air quality limits.
- 4.3.3 Where a project is likely to lead to a breach of national air quality limits, paragraph 5.2.9 in NPS EN-1 [RD4] provides that the applicant should work with the relevant local authorities to secure appropriate mitigation measures to allow the proposal to proceed. In the event that a project will lead to non-compliance with a statutory limit the decision maker should refuse consent (paragraph 5.2.10, NPS EN-1 [RD4]).
- 4.3.4 Paragraph 5.2.11 of NPS EN-1 [RD4] advises that the decision maker should consider *“whether mitigation measures are needed both for operational and construction emissions over and above any which may form part of the project application”*.
- 4.3.5 Paragraph 4.13.5 of NPS EN-1 [RD4] states that generally, those aspects of energy infrastructure which are most likely to have a significantly detrimental impact on health are subject to separate regulation (for example, for air pollution) which will constitute effective mitigation of them, so that it is unlikely that health concerns will either constitute a reason to refuse consents or require specific mitigation under the Planning Act 2008 [RD1].

Welsh national and local policy

- 4.3.6 PPW [RD8] sets out at chapter 13 (Minimising and Managing Environmental Risks and Pollution) that while planning authorities should not seek to control through planning measures, matters that are the proper concern of the pollution control authority. It also clarifies that where pollution considerations affect the use and development of land, they can be material planning considerations.

Policy PCYFF 2 in the JLDP [RD27] states that planning permission will be refused where the proposed development would have an unacceptable adverse impact on *“...the health, safety or amenity of occupiers of local residences, other land and property uses or characteristics of the locality due to increased activity, disturbance, vibration, noise, dust, fumes, litter, drainage, light pollution, or other forms of pollution or nuisance”*.

- 4.3.7 The Wylfa SPG [RD28] states at Policy GP 7 that the applicant should work with IACC and the Betsi Cadwaladr University Health Board to identify any potentially significant health impacts and appropriate mitigation measures. Policy GP 7 also states that Associated Developments should not be proposed where construction or operation activities would give rise to unacceptable impacts on *inter alia* air quality.
- 4.3.8 Policy GP 26 of the Wylfa SPG [RD28] states that IACC expect the applicant to assess measures to reduce disturbance-related impacts such as emissions to air from construction activity and HGV movements.

Assessment

- 4.3.9 The environmental impact assessment of the Off-Site Power Station Facilities on air quality matters is set out in chapter E5 of the ES (Application Reference Number: 6.5.5).
- 4.3.10 A combination of construction control measures, management measures and procedures to control the emissions of dust are set out in the Wylfa Newydd CoCP (Application Reference Number: 8.6) and Off-Site Power Station Facilities sub-CoCP (Application Reference Number: 8.9). During the operational period, the Off-Site Power Station Facilities will include a diesel generator which will act as a back-up to the incoming mains electrical supply. The selection and procurement of the standby generator will ensure selected equipment has good combustion controls and complies with the relevant European or international emissions standards for emergency generating sets, as secured by the Wylfa Newydd CoOP (Application Reference Number: 8.13). The stack height for the standby diesel generator would extend approximately 3m above the roof of the standby generator enclosure, representing a total height above ground level of up to approximately 6m as set out in volume 3 of the DAS (Application Reference Number 8.2.3).
- 4.3.11 Routine maintenance testing of the mobile emergency response plant stored in the MEEG building would only take place at the Power Station Site and is not therefore considered here.
- 4.3.12 With embedded and good practice measures in place, as identified in chapter E5 of the ES (Application Reference Number: 6.5.5), the likely air quality effects of construction, operation and decommissioning on human and ecological health would not be significant in terms of dust, odour and plant/machinery emissions.
- 4.3.13 By following embedded and good practice measures as described above, it is likely that there would be no significant adverse air quality effects associated with the Off-Site Power Station Facilities, in accordance with NPS EN-1 [RD4]. The scenarios identified in paragraphs 5.2.9 and 5.2.10 of NPS EN-1 [RD4] therefore do not apply.
- 4.3.14 Horizon has sought to reduce disturbance-related activities such as emissions to air from construction activity and associated vehicle movements, in accordance with Policy GP 26 in the Wylfa SPG [RD28].
- 4.3.15 In addition, the proposal complies with Policy PCYFF 2 in the JLDP [RD27] and Policy GP 7 of the Wylfa SPG [RD28] from an air quality perspective as

there is no unacceptable impact on the health, safety or amenity of the locality and Horizon has assessed measures to reduce disturbance-related impacts.

- 4.3.16 In terms of air quality, the Off-Site Power Station Facilities are therefore in accordance with the relevant NPSs in addition to Welsh national and local policy and guidance.

Biodiversity

- 4.3.17 Biodiversity and geological conservation is identified as both a Generic Impact in NPS EN-1 [RD4] and a Nuclear Impact in NPS EN-6 [RD5].
- 4.3.18 Biodiversity conservation is assessed below with geological conservation addressed separately

Policy context

National Policy Statements

- 4.3.19 Generic biodiversity conservation impacts of new energy NSIPs are covered in section 5.3 of NPS EN-1 [RD4].
- 4.3.20 Further, paragraph 5.3.4 in NPS EN-1 [RD4] states that the applicant should show how the proposals have taken advantage of opportunities to conserve and enhance biodiversity interests.
- 4.3.21 Paragraph 5.3.7 NPS EN-1 [RD4] states that as a general principle, and subject to other paragraphs in NPS EN-1, development should aim to avoid significant harm to biodiversity interests, including through mitigation and consideration of reasonable alternatives; where significant harm cannot be avoided, then appropriate compensation measures should be sought.
- 4.3.22 Paragraph 5.3.8 in NPS EN-1 [RD4] confirms that the decision maker should ensure that appropriate weight is attached to designated sites of international, national and local importance; protected species; habitats and other species of principal importance for the conservation of biodiversity; and to biodiversity interests within the wider environment.
- 4.3.23 Paragraphs 5.3.6 and 5.3.15 in NPS EN-1 [RD4] recognise that the benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and that these may outweigh harm to these interests.
- 4.3.24 Paragraph 5.3.16 in NPS EN-1 [RD4] confirms that many individual wildlife species receive statutory protection under a range of legislative provisions.
- 4.3.25 Paragraph 5.3.17 in NPS EN-1 [RD4] states that other species and habitats have also been identified as being of principal importance for the conservation of biodiversity in England and Wales and thereby requiring conservation action. The decision maker should ensure that these species and habitats are protected from the adverse effects of development by using requirements or planning obligations. The decision maker should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits (including need) of the development outweigh that harm. In this context, the decision maker should give substantial weight to any such harm to the

detriment of biodiversity features of national or regional importance which it considers may result from a proposed development.

- 4.3.26 Paragraphs 5.3.18 and 5.3.19 of NPS EN-1 [RD4] identify that the applicant should include appropriate mitigation measures as an integral part of the proposed development. Paragraph 3.9.6 of NPS EN-6 [RD5] states that potential mitigation measures could include variations to building layout to avoid ecologically sensitive areas and on-site measures to protect habitats and species and to avoid or minimise pollution and the disturbance of wildlife.

Welsh national and local policy

- 4.3.27 Paragraph 5.2.8 of PPW [RD8] states that the planning system should promote biodiversity objectives and seek to minimise the fragmentation of habitats.
- 4.3.28 The planning system has an important part to play in meeting biodiversity objectives by promoting approaches to development which create new opportunities to enhance biodiversity, prevent biodiversity losses, or compensate for losses where damage is unavoidable. Paragraph 5.2.8 in PPW [RD8] confirms that the adaptation needs of biodiversity could be considered by identifying the scope for minimising or reversing the fragmentation of habitats and improving habitat connectivity through the promotion of wildlife corridors.
- 4.3.29 Section 5.5 of PPW [RD8] states that sites should be protected relative to their importance. In the interests of achieving sustainable development, it is important to balance conservation objectives with the wider economic needs of communities. Where development does occur, it is important to ensure that all reasonable steps are taken to safeguard or enhance the environmental quality of land. Further, section 5.5 of PPW [RD8] recognises where other material considerations outweigh the potential adverse environmental effects, authorities should seek to minimise those effects.
- 4.3.30 Policy PCYFF 2 in the JLDP [RD27] states that proposals should include provision for the appropriate management and eradication of invasive species.
- 4.3.31 Strategic Policy PS 5 in the JLDP [RD27] states that development will be supported where it is demonstrated that it is consistent with the principles of sustainable development. It also states that all proposals should protect and improve the quality of the natural environment, its landscapes and biodiversity assets.
- 4.3.32 Strategic Policy PS 9 in the JLDP [RD27] requires all Associated Development to avoid, minimise, mitigate or compensate for potentially adverse ecological impacts in the local and wider area, both in the short and longer term.
- 4.3.33 Strategic Policy PS 19 in the JLDP [RD27] states that the Councils will manage development so as to conserve and where appropriate enhance the distinctive natural environment, countryside and coastline, and that proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area. Strategic

Policy PS 19 also states that when determining planning applications, consideration should be *inter alia* to the following items.

- Safeguarding habitats and species and geology.
- Protecting or where appropriate enhancing sites of international, national, regional and local importance and, where appropriate, their settings in line with Welsh national policy.
- Protecting or enhancing biodiversity through networks of green/blue infrastructure and/or restoring networks of natural habitats.
- Protecting, retaining or enhancing trees, hedgerows or woodland of ecological value.
- Having appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with Welsh national policy.

4.3.34 Policy AMG 5 in the JLDP [RD27] states that proposals must protect and, where appropriate, enhance biodiversity that has been identified as being important to the local area. This policy also confirms that proposals affecting sites of local biodiversity importance will be refused unless they can conform with all of the following criteria:

- That there are no other satisfactory alternative sites available for the development.
- The need for the development outweighs the importance of the site for local nature conservation.
- That appropriate mitigation or compensation measures are included as part of the proposal.

4.3.35 Section 4.10 of the Wylfa SPG [RD28] relates to the natural environment and policy GP 20 states that the Wylfa Newydd DCO Project should seek to ensure that the island's unique and distinctive natural environment is conserved and, where possible, enhanced. This includes the consideration of, among other things:

- the integrity of statutory and non-statutory sites for nature conservation;
- internationally and nationally protected habitats and species; and
- ecological functionality and relationships within the wider landscape.

4.3.36 Policy GP 20 of the Wylfa SPG [RD28] states that *inter alia*; protected species, the ecological functionality of nature conservation sites, Special Areas of Conservation, Special Protection Areas, SSSIs, Regionally Important Geological Sites and the Geopark status of Anglesey should not be subjected to significant adverse impacts, or if they are, sufficient mitigation should be implemented. Policy GP 20 of the Wylfa SPG [RD28] goes on to state that where adverse effects cannot be avoided, the Council will seek appropriate mitigation and/or compensation measures.

Assessment

- 4.3.37 The environmental impact assessment of the Off-Site Power Station Facilities on ecology matters is set out in chapter E9 of the ES (Application Reference Number: 6.5.9).
- 4.3.38 A Phase 1 Habitat Survey (provided within the MEEG Ecology Factual Report at Appendix E9-1 of the ES (Application Reference Number: 6.5.17)) has been completed and identifies that habitats likely to be affected by the development of the Off-Site Power Station Facilities are considered to be of negligible value. No protected species or species of conservation interest were found within the site boundary or the relevant wider search areas. The exception is one Great Crested Newt, although this was located on the opposite side of the A5025 and so has been discounted.
- 4.3.39 Himalayan balsam, which is a non-native invasive species of plant, is currently located within the site boundary and therefore would be removed, in accordance with Policy PCYFF2 in the JLDP [RD27].
- 4.3.40 In accordance with Strategic Policy PS 19 in the JLDP [RD27], consideration has been given to existing features, such as hedgerows, watercourses and boundary features, which would be retained where practicable. In addition, a hedgerow, native trees and shrub planting would be provided to enhance the biodiversity of the site, thus according with the 'sustainable development principles' in Policy PS 5 of the JLDP [RD27].
- 4.3.41 Buildings would be positioned away from the habitats of most value to sensitive ecological receptors and, where practicable, light sources that minimise light spill would be selected to reduce the effects of lighting. Soft landscaping, including e.g. hedgerow, shrub and tree planting, on the eastern and southern boundaries of the Off-Site Power Station Facilities, will help reduce light spill onto sensitive ecological receptors, where this does not conflict with operational and security requirements.
- 4.3.42 With the embedded mitigation and good practice measures in place, there is likely to be no significant residual adverse effects on ecology, aligning with Policy AMG 5 in the JLDP [RD27] and policy GP 20 in the Wylfa SPG [RD28]. There would be an increase in the amount of terrestrial and freshwater habitat of value during the operational phase compared to the baseline, which is likely to bring net biodiversity enhancements.
- 4.3.43 The above paragraphs show how the proposals have taken advantage of opportunities to conserve and enhance biodiversity in accordance with paragraphs 5.3.4 and 5.3.7 of NPS EN-1 [RD4], as well as paragraph 5.2.8 of PPW [RD8] and Strategic Policies PS 9 and PS 19 in the JLDP [RD27].
- 4.3.44 In terms of biodiversity, the Off-Site Power Station Facilities are therefore in accordance with the relevant NPSs in addition to Welsh national and local policy and guidance.

Soils and geology

Policy context

National Policy Statements

- 4.3.45 Paragraph 5.10.8 of NPS EN-1 [RD4] states that development should seek to minimise impacts on “best and most versatile” agricultural land and preferably use land in areas of poorer quality except where this would be inconsistent with other sustainability considerations. Paragraph 5.10.8 in NPS EN-1 [RD4] states that applicants should also identify any effects and seek to minimise impacts on soil quality taking into account any mitigation measures proposed. For developments on previously developed land, applicants should ensure that they have considered the risk posed by land contamination.
- 4.3.46 Paragraph 5.10.3 in NPS EN-1 [RD4] states that:
“Although the re-use of previously developed land for new development can make a major contribution to sustainable development by reducing the amount of countryside and undeveloped greenfield land that needs to be used, it may not be possible for many forms of energy infrastructure”.
- 4.3.47 Paragraph 5.10.15 of NPS EN-1 [RD4] states that the decision maker should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. Paragraph 5.10.15 in NPS EN-1 [RD4] continues to state that decision makers should give little weight to the loss of poorer quality agricultural land (in grades 3b, 4 and 5). Paragraph 3.7.8 of NPS EN-6 [RD5] notes that the contamination of soils and water resources can be mitigated through the EIA process and managed through the possible implementation of Environmental Management Plans.

Welsh national and local policy

- 4.3.48 PPW [RD8] states at paragraph 13.7.1 that planning decisions need to take into account:
- the potential hazard that contamination presents to the development itself, its occupants and the local environment; and
 - the results of a specialist investigation and assessment by the developer to determine the contamination of the ground and to identify any remedial measures required to deal with any contamination.
- 4.3.49 PPW [RD8] states at paragraph 13.7.2 that where acceptable remedial measures can overcome contamination, permission may be granted subject to requirements specifying the necessary measures.
- 4.3.50 PPW [RD8] states at paragraph 4.10.1 that the best and most versatile agricultural land (Grades 1, 2 and 3a) should be conserved as a finite resource for the future and that considerable weight should be given to protecting such land from development, because of its special importance. This paragraph also clarifies that the best and most versatile agricultural land should only be developed if there is an overriding need for the development, and either previously developed land or land in lower agricultural grades is unavailable, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations. Paragraph 4.10.1 in PPW [RD8] also states that if the best and most versatile agricultural land does need to be developed, and

there is a choice between sites of different grades, development should be directed to land of the lowest grade.

- 4.3.51 Strategic Policy PS6 in the JLDP [RD27] states that proposals will only be permitted where it is demonstrated with appropriate evidence that the applicant has fully taken account of and responded to the need to safeguard the best and most versatile agricultural land.
- 4.3.52 Strategic Policy PS 19 in the JLDP [RD27] states that proposals that have a significant adverse effect on the areas distinctive natural environment, countryside and coastline will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area. This policy also clarifies that consideration should be given to safeguarding the geology of the area.
- 4.3.53 Policy AMG 3 in the JLDP [RD27] confirms that proposals will be granted provided that they do not have a significant adverse impact upon features and qualities which are unique to the local landscape in terms of visual, historic, geological, ecological or cultural aspects.

Assessment

- 4.3.54 The environmental impact assessment of the Off-Site Power Station Facilities on soils and geology is set out in chapter E7 of the ES (Application Reference Number: 6.5.7).
- 4.3.55 One auger point has been located in the southwest of the site, and the area around this was classified as Subgrade 3b. It is predicted in chapter E7 of the ES (Application Reference Number: 6.5.7) that the remainder of the undeveloped parts of the site would also be classified as Subgrade 3b. This is not classified as best and most versatile. The northern half of the site is developed land covered by a layer of hardstanding and is therefore likely to contain artificial geology (made ground) underneath. The proposals are therefore considered to comply with Paragraph 5.10.8 and 5.10.15 of NPS EN-1 [RD4], paragraph 4.10.1 in PPW [RD8] and Policy PS 6 in the JLDP [RD27].
- 4.3.56 The main potential source of contamination on the site is likely to be the former garage/repair depot. Off-site sources of potential contamination include a sewage works to the south east and a historic inert landfill site to the north west. The sub-CoCP (Application Reference Number: 8.9) requires that ground investigation would be undertaken prior to construction with follow-up remediation as required. This complies with Paragraph 3.7.8 of NPS EN-6 [RD5] and paragraphs 13.7.1 and 13.7.2 in PPW [RD8].
- 4.3.57 The Off-Site Power Station Facilities also make good use of previously developed land at the site which in turn can make a “major contribution to sustainable development” by reducing the amount of countryside and undeveloped greenfield land required, aligning with paragraph 5.10.3 in NPS EN-1 [RD4].
- 4.3.58 Following embedded mitigation, no significant adverse effects were identified for soils and geology as a result of the Off-Site Power Station Facilities, in accordance with Policy PS 19 and AMG 3 in the JLDP [RD27].

- 4.3.59 In terms of soils and geology, the Off-Site Power Station Facilities are therefore in accordance with the relevant NPSs in addition to Welsh national and local policy and guidance.

Flood risk

- 4.3.60 Flood risk is identified as both a Generic Impact in NPS EN-1 [RD4] and a Nuclear Impact in NPS EN-6 [RD5].

Policy context

National Policy Statements

- 4.3.61 Paragraph 5.15.9 and 5.15.10 of NPS EN-1 [RD4] states that the risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution practice and impacts on local water resources can be minimised through planning and design for the efficient use of water, including water recycling.
- 4.3.62 NPS EN-6 [RD5] states at paragraph 3.6.11 that applicants need to submit a flood risk assessment in accordance with section 5.7 of NPS EN-1 [RD4]. Paragraph 3.6.16 in NPS EN-6 [RD5] states that applicants should set out measures to mitigate the risk of flooding on or from individual sites that may result from the development.
- 4.3.63 Paragraph 5.7.9 of NPS EN-1 [RD4] states that in determining an application for development consent, the decision maker should be satisfied that where relevant:
- the application is supported by an appropriate flood risk assessment;
 - the sequential test has been applied as part of site selection;
 - a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;
 - the proposal is in line with any relevant national and local flood risk management strategy;
 - priority has been given to the use of Sustainable Drainage Systems; and
 - in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed over the lifetime of the development.
- 4.3.64 Paragraph 5.7.12 in NPS EN-1 [RD4] states that the decision makers should not consent development in Flood Zone B unless it is satisfied that the sequential test requirements have been met. In addition, it clarifies that the decision maker should not consent development in Flood Zone C unless it is satisfied that the sequential and exception test requirements have been met. Paragraph 5.7.12 in NPS EN-1 [RD4] continues to confirm that the technology-specific NPSs set out some exceptions to the application of the sequential test. However, when seeking development consent on a site allocated in a development plan through the application of the sequential test, informed by a strategic flood risk assessment, paragraph 5.7.12 in NPS EN-1 [RD4]

advises that applicants need not apply the sequential test, but should apply the sequential approach to locating development within the site.

Welsh national and local policy

- 4.3.65 Sections 13.4 of PPW [RD8] sets out the Welsh Government's approach to flood risk and development in areas of high flood risk and dealing with contaminated land such that the development does not impact on the water environment.
- 4.3.66 Paragraph 13.4.2 of PPW [RD8] states that local planning authorities should ensure that development does not increase the risk of flooding elsewhere by loss of flood storage or flood flow route or increase the problem of surface water run-off. Paragraph 13.4.3 of PPW [RD8] confirms that flood risk is a material consideration in the determination of planning applications.
- 4.3.67 Strategic Policy PS 6 in the JLDP [RD27] asserts that, in order to adapt to the effects of climate change, proposals will only be permitted where they are located away from flood risk areas unless it can be clearly demonstrated that there is no risk or that the risk can be managed. In addition, this policy requires development to incorporate water conservation measures where practicable, including Sustainable Drainage Systems. Policy PCYFF 6 in the JLDP [RD27] also notes that proposals should use flood minimisation or mitigation measures where possible, to reduce surface water run-off and minimise its contribution to flood risk elsewhere.
- 4.3.68 Strategic Policy PS 8 in the JLDP [RD27] states that proposals should, as far as is appropriate or relevant, provide flood protection measures to manage flood risk and, where feasible, deliver improvements in the locality.
- 4.3.69 Policy PCYFF 3 in the JLDP [RD27] states that proposals would only be permitted where their drainage systems are designed to limit surface water run-off, flood risk and pollution.
- 4.3.70 Policy GP 21 of the Wylfa SPG [RD28] suggests that the Wylfa Newydd Project should include measures to control surface water runoff.

Assessment

- 4.3.71 A Flood Consequence Assessment (FCA) is provided at volume E, Appendix E8-01 of the ES (Application Reference Number: 6.5.16) in accordance with paragraphs 5.7.9 of NPS EN-1 [RD4] and 3.6.11 of NPS EN-6 [RD5].
- 4.3.72 The FCA identifies that the proposed site for the Off-Site Power Station Facilities is located within Flood Zone A, thus according with the locational objectives of Paragraph 5.7.12 in NPS EN-1 [RD4] and Strategic Policy PS 6 in JLDP [RD27]. This is an area which has been assessed as having little or no risk of fluvial or tidal flooding. However, it is noted that small catchments (any catchment less than 3km²), such as the East Drain, are not included in national-scale modelling exercises. The site may therefore be at risk of flooding, but still be shown as being within Zone A. The nearest Natural Resources Wales (NRW) modelled floodplain is associated with the Tan R'Alt downstream.

- 4.3.73 NRW surface water flood mapping [RD52] indicates that a flow path is present in the headwaters of the East Drain catchment running broadly south-east from the larger of the two ponds located approximately 330m west of the proposed Off-Site Power Station Facilities site. The flow path crosses the A5025 and runs along the northern edge of the proposed Off-Site Power Station Facilities site. The NRW surface water flood risk mapping [RD52] indicates that areas along the northern site boundary have a high risk of surface water flooding and would be at risk from a 3.33% annual exceedance probability (1 in 30-year) pluvial event. However, it is noted that neither the NRW surface water modelling nor additional modelling (see below) includes road drainage or the culvert, which is assumed to convey the East Drain before it emerges to the east beyond the proposed Off-Site Power Station Facilities site.
- 4.3.74 Surface water modelling has been undertaken by Horizon to further quantify the baseline risks to the site from this source of flooding (Application Reference Number: 6.5.16). This modelling predicts that the onset of surface water flooding within the Off-Site Power Station Facilities site would be during the 1 in 30-year rainfall event with flood depths and extents increasing during higher magnitude events (the 1 in 100 and 1 in 1,000-year rainfall events were also modelled). The flood extent for all modelled events is broadly similar in that surface water would pond on the western side of the A5025 before overtopping and flowing through the centre of the proposed Off-Site Power Station Facilities site and onwards to the East Drain. Runoff would also flow from the village of Llanfaethlu in a north-eastern direction across agricultural fields and along the A5025 onto the proposed Off-Site Power Station Facilities site.
- 4.3.75 The maximum flood depths vary between 0.1m in the centre of the proposed Off-Site Power Station Facilities site during the 1 in 30-year event to 0.15m in the same location during the 1 in 100-year event to 0.27m during the 1 in 1,000 year event. The water flow velocities during the 1 in 100-year event exceed 0.45m/s. At velocities above 0.45m/s it can become difficult to stand. Given the very high value of the Off-Site Power Station Facilities and a high probability of occurrence, the overall flood risk from surface water is determined as high.
- 4.3.76 The FCA provided at appendix E8-1 of the ES (Application Reference Number: 6.5.16) assesses the risk of groundwater flooding and the risk from drainage and water supply infrastructure to be low.

Construction

- 4.3.77 Removal of the existing hardstanding and existing site drainage would have the potential in the short-term to increase the risk of pluvial flooding to the site as rain falling directly onto the site could potentially pond. However, following site clearance, but prior to construction works, adequate drainage systems would be installed and so this risk would be mitigated, in accordance with paragraph 5.7.9 of NPS EN-1 [RD4] and policy GP 21 in the Wylfa SPG [RD28]. Such sustainable drainage solutions are required by Strategic Policy PS 6 and policy PCYFF 3 in the JLDP [RD27]. As no attenuation storage is currently provided within the site of the proposed Off-Site Power Station

Facilities, and almost all of the surfaces are impermeable, no measurable increase in runoff rates is predicted as a result of the construction phase.

- 4.3.78 The risks to the construction site from an existing flood risk from off-site flows from the west would be mitigated by construction of a swale on-site in accordance with policies PCYFF 3 and PCYFF 6 in the JLDP [RD27]. This would also have a beneficial effect of reducing flood risk downstream, in accordance with paragraph 13.4.2 in PPW [RD8]. Management requirements for flood risk during construction are outlined in the Wylfa Newydd CoCP (Application Reference Number: 8.6), in accordance with paragraph 3.6.16 in NPS EN-6 [RD5].
- 4.3.79 No increase in peak water flows, above the existing flows, are predicted during the construction period for the Off-Site Power Station Facilities. The changes to runoff patterns and subsequent effect on flood risk during construction are considered to be negligible and therefore not significant.
- 4.3.80 An attenuation pond associated with the drainage strategy of Section 5 of the A5025 Off-line Highway Improvements is proposed adjacent to the Off-Site Power Station Facilities site. The outfall from this pond is proposed to flow into the East Drain. The attenuation of flows from this pond would ensure that flood risk to the Off-Site Power Station Facilities does not increase in accordance with paragraph 13.4.2 of PPW [RD8].
- 4.3.81 During construction, the risk of flooding associated with the Off-Site Power Station Facilities is therefore in accordance with the relevant NPSs in addition to Welsh national and local policy and guidance.

Operation

- 4.3.82 Modelling (see appendix E8-1 in the ES (Application Reference Number: 6.5.16)) demonstrates that the existing surface water flow path through the centre of the proposed Off-Site Power Station Facilities site is successfully mitigated by the incorporation of drainage and a swale up to the 1 in 1,000 year event, aligning with policy GP 21 in the Wylfa SPG [RD28]. Such sustainable drainage solutions are required by Strategic Policy PS 5 and policy PCYFF 3 in the JLDP [RD27]. There would remain some shallow ponding in hardstanding areas away from buildings, with depths of 0.007m during the 1 in 1,000 year event. However, this compares to current depths of 0.27m during the baseline 1 in 1,000 year event, therefore there is a beneficial effect on flood risk to the Off-Site Power Station Facilities during operation.
- 4.3.83 There would also be a betterment in the risk of flooding to built development (the residential property and sewage works to the south and south-west of the Off-Site Power Station Facilities), the A5025 and agricultural land.
- 4.3.84 During operation, the proposals therefore continue to comply with policies in NPS EN-1 [RD4], NPS EN-6 [RD5] and the JLDP [RD27], as well as guidance in the Wylfa SPG [RD28] as set out above.

Decommissioning

- 4.3.85 Flood risk would be unlikely to change from the operational phase, due to ongoing maintenance of drainage systems and the swale including the clearance of sediment from separators and cutting of vegetation within the swale.
- 4.3.86 During decommissioning, the risk of flooding associated with the Off-Site Power Station Facilities continues to accord with the relevant NPSs in addition to Welsh national and local policy and guidance.

Water quality and resources

Policy context

National Policy Statements

- 4.3.87 Paragraph 5.15.5 of NPS EN-1 [RD4] states that the decision maker will generally need to give impacts on the water environment more weight where a project would have an adverse effect on the achievement of the environmental objectives established under the Water Framework Directive (WFD). The WFD (2000/60/EC) is a European Directive with the overarching objective of all water bodies in Europe attaining Good or High Ecological Status or Potential by 2027.
- 4.3.88 Paragraph 5.15.6 of NPS EN-1 [RD4] states that the decision maker should satisfy itself that a proposal “...has regard to the River Basin Management Plans and meets the requirements of the Water Framework Directive (including Article 4.7) and its daughter directives, including those on priority substances and groundwater”.
- 4.3.89 Paragraph 5.15.9 in NPS EN-1 [RD4] states that the risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution control practice. Additionally, paragraph 5.15.10 of NPS EN-1 [RD4] confirms that the impact on local water resources can be minimised through planning and design for the efficient use of water, including water recycling.
- 4.3.90 Paragraph 4.10.8 in NPS EN-1 [RD4] states that the decision maker should not refuse consent on the basis of pollution impacts unless it has good reason to believe that any relevant necessary operational pollution control permits or licences or other consents will not subsequently be granted.
- 4.3.91 NPS EN-6 [RD5] states at paragraph 3.9.3 that applicants should consider the effects of the construction of a new Power Station on the groundwater regime and its effects on terrestrial/coastal habitats. Paragraph 3.9.6 in NPS EN-6 [RD5] states that potential mitigation measures could include variations to the building layout to avoid ecologically sensitive areas and on-site measures to protect habitats and species and to avoid or minimise pollution and the disturbance of wildlife.

Welsh national and local policy

- 4.3.92 Strategic Policy PS 5 in the JLDP [RD27] states that proposals should adapt to the unavoidable impacts of climate change, avoiding pollution and reducing

the amount of water used and wasted and reducing the effect on water resources and quality.

- 4.3.93 Policy PCYFF 2 in the JLDP [RD27] states that proposals would be refused where they would have an unacceptable adverse impact on the quality of ground or surface water.
- 4.3.94 Policy PCYFF 6 in the JLDP [RD27] requires development to incorporate water conservation measures where practicable, including Sustainable Drainage Systems.
- 4.3.95 Policy GP 20 of the Wylfa SPG [RD28] states that the release of potentially polluting substances to air, water or land should be minimised. Policy GP 21 states that the Wylfa Newydd Project should include measures to control surface water runoff where the potential for adverse impacts is identified.

Assessment

- 4.3.96 The environmental impact assessment of the Off-Site Power Station Facilities on surface water, groundwater is set out in chapter E8 of the ES (Application Reference Number: 6.5.8). Flood risk considerations are set out earlier in this section.
- 4.3.97 Good practice mitigation would be followed relating to pollution management measures to help protect surface water and groundwater during construction and would be secured in the Off-Site Power Station Facilities sub-CoCP (Application Reference Number: 8.9).
- 4.3.98 During the operational phase, embedded mitigation would reduce the risk of pollution, including measures such as overspill car parking with permeable surfaces, drainage oil separators and the provision of a grassed swale, consistent with Policy PCYFF 6 in the JLDP [RD27] and the objectives of policies GP20 and GP21 in the Wylfa SPG [RD28]. Good practice measures are also proposed during the operational phase including the Wylfa Newydd CoOP (Application Reference Number: 8.13). The Wylfa Newydd CoOP details good practice procedures that the contractor would be required to follow, including the overarching pollution management principles to be applied throughout the operation of the Off-Site Power Station Facilities.
- 4.3.99 During the operation phase, the Off-Site Power Station Facilities would result in a reduction in flood risk due to construction of swale and an attenuation tank, providing significant beneficial effects.
- 4.3.100 No significant adverse effects were identified for surface water and groundwater, in compliance with Paragraph 4.10.8 of NPS EN-1 [RD4] and Strategic Policy PS 5 and policy PCYFF2 in the JLDP [RD27].
- 4.3.101 A WFD Compliance Assessment (Application Reference Number: 8.26) has been completed for the proposed Off-Site Power Station Facilities, in accordance with paragraph 5.15.6 NPS EN-1 [RD4]. The assessment has concluded that the Off-Site Power Station Facilities would not lead to any deterioration in the WFD water bodies or prevention of them achieving good status/potential.

- 4.3.102 In terms of water quality and resources, the Off-Site Power Station Facilities are therefore in accordance with the NPSs in addition to Welsh national and local policy and guidance.

Historic environment

- 4.3.103 The historic environment is identified as a Generic Impact in NPS EN-1 [RD4].
- 4.3.104 Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010 states that when considering whether to give permission for development which affects a Listed Building or its setting, the decision maker must have regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

Policy context

National Policy Statements

- 4.3.105 Paragraph 1.7.2 of NPS EN-1 [RD4] states that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects on cultural heritage.
- 4.3.106 Paragraph 5.8.1 of NPS EN-1 [RD4] recognises that the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment.
- 4.3.107 Paragraph 5.8.2 of NPS EN-1 [RD4] confirms that those elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest are called 'heritage assets'.
- 4.3.108 Paragraph 5.8.14 of NPS EN-1 [RD4] states that *"there should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be"*. Paragraph 5.8.14 of NPS EN-1 [RD4] also states:
- "Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II* listed buildings; grade I and II* registered parks and gardens; and World Heritage Sites, should be wholly exceptional".
- 4.3.109 Paragraph 5.8.15 of NPS EN-1 [RD4] states that any harmful impacts on the significance of designated heritage assets should be *"...weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss"*.

Welsh national and local policy

- 4.3.110 TAN 12 [RD22] sets out advice on good design, including advice on considering the historic environment in design.
- 4.3.111 TAN 24 [RD26] sets out a presumption in favour of preservation *in situ* of Scheduled Monuments or other nationally significant archaeological remains. Where the significance of archaeological remains does not merit preservation *in situ*, a programme of archaeological recording may be undertaken, including analysis and publication of the results.
- 4.3.112 PPW [RD8] also clarifies at paragraph 6.5.5 that where nationally important archaeological remains, whether scheduled or not, and their settings are likely to be affected by proposed development, there should be a presumption in favour of their physical protection *in situ*. Paragraph 6.5.5 in PPW [RD8] states:
- “It will only be in exceptional circumstances that planning permission will be granted if development would result in an adverse impact on a Scheduled Monument (or an archaeological site shown to be of national importance) or has a significantly damaging effect upon its setting. In cases involving less significant archaeological remains, local planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development”.
- 4.3.113 At the local level, Strategic Policy PS 5 in the JLDP [RD27] confirms that development will be supported where it is consistent with its sustainable development principles, including preserving and enhancing the quality of the built and historic environment assets including their setting.
- 4.3.114 Strategic Policy PS 9 in the JLDP [RD27] relates to the Wylfa Newydd Project and states that the scheme layout and design of the Power Station and associated developments, and the scale of open spaces, landscaping, planting (including hedging and tree belts), waterways and similar features should avoid, minimise, mitigate or compensate for impacts on cultural and historic aspects of the landscape, both in the short and longer term.
- 4.3.115 Policy PCYFF 3 in the JLDP [RD27] states that all proposals will be expected to demonstrate high quality design taking into account the historic environmental context and to contribute to the creation of attractive, sustainable places.
- 4.3.116 Policy PS 20 in the JLDP [RD27] states that local planning authorities should endeavour to preserve or enhance heritage assets, both designated and undesignated. Policy PS 20 also states that proposals which preserve and where appropriate enhance heritage assets, their setting and Significant Views into and out of the building/area will be granted.
- 4.3.117 Policy AT 1 in the JLDP [RD27] states that any proposal within or assessed to affect the setting of Conservation Areas, World Heritage Sites, Registered Historic Landscapes and Parks and Gardens should have regard to relevant character appraisals, management plans, delivery strategies and assessments adopted by the Local Planning Authority.
- 4.3.118 Policy AT 3 in the JLDP [RD27] states that proposals will be required to conserve and seek opportunities to enhance buildings, structures and areas

of locally or regionally significant non-designated heritage assets, which create a sense of local character, identity and variation.

- 4.3.119 Policy AT 4 in the JLDP [RD27] states that the importance and condition of archaeological sites, and the potential impact of development on this should be assessed prior to planning. Consent will only be granted if development need outweighs the significance of the archaeology, and may include a requirement for archaeological investigation.

Assessment

- 4.3.120 The environmental impact assessment of the Off-Site Power Station Facilities on archaeology and cultural heritage matters is set out in chapter E11 of the ES (Application Reference Number: 6.5.11).
- 4.3.121 An assessment has identified that two designated heritage assets would be intervisible with the Off-Site Power Station Facilities, which are St Maethlu's Church (Grade II* Listed Building) and Carreglwyd (Grade II* Registered Park and Garden). A total of five other designated heritage assets within 2km would either have no intervisibility or would only be visible in restricted distant views.
- 4.3.122 Paragraph 1.7.2 in NPS EN-1 [RD4] confirms that the development of new energy infrastructure, at the scale and speed required to meet current and future need, is likely to have some negative effects on cultural heritage. However, the scheme has been designed to minimise adverse effects on heritage assets, including new landscaping along the site boundaries, retention of existing stone walls and an architectural design that complements the character of the local area, complying with TAN 12 [RD22] and Strategic Policy PS 9 and Policy PCYFF3 in the JLDP [RD27].
- 4.3.123 The Off-Site Power Station Facilities would be present in distant views from the southern edge of Carreglwyd Grade II Registered Park and Garden (HLT 1), however the proposals would be seen in the context of existing infrastructure and would not affect the key attributes of this asset's setting and is therefore not significant. It is therefore considered that the Off-Site Power Station Facilities accord with the requirements of Policy AT 1 in the JLDP [RD27].
- 4.3.124 The proposals would not cause a significant residual adverse effect on the above heritage assets and there would be no substantial harm as a result of the proposals, in compliance with Paragraph 5.8.14 of NPS EN-1 [RD4] and Strategic Policies PS 5 and PS 20 and policy AT 3 in the JLDP [RD27].
- 4.3.125 Following the implementation of mitigation, no significant effects on any known or unknown archaeological remains are predicted. There is therefore no loss to any heritage assets with archaeological interests, in compliance with Paragraph 5.8.14 of NPS EN-1 [RD4], Paragraph 6.5.5 in PPW [RD8] and TAN 24 [RD26] in addition with Policy AT 4 in the JLDP [RD27].
- 4.3.126 Whilst the Off-Site Power Station Facilities would not result in any significant residual effects, the proposals are predicted to result in some minor and negligible harmful effects on the significance of designated heritage assets. St Maethlu's Church (Asset 176) would experience a minor adverse residual effect during both the construction and decommissioning phases. All other

residual impacts are assessed as being 'negligible adverse'. The less than substantial harmful residual effects identified on the significance of heritage assets would be clearly outweighed by the public benefits of the Off-Site Power Station Facilities which itself represent a major benefit, thus ensuring accordance with Paragraph 5.8.15 in NPS EN-1 [RD4]. In addition, the Off-Site Power Station Facilities are a requirement of the ONR and are therefore essential to the delivery of the Wylfa Newydd Project and its associated benefits which are summarised in chapter 6.2 in the main section of this Planning Statement (Application Reference Number: 8.1).

- 4.3.127 In terms of the historic environment, the Off-Site Power Station Facilities are therefore in accordance with the relevant NPSs in addition to Welsh national and local policy and guidance.

Landscape and visual impacts

- 4.3.128 Landscape and visual impact is identified as a Generic Impact in NPS EN-1 [RD4] and a Nuclear Impact in NPS EN-6 [RD5].

Policy context

National Policy Statements

- 4.3.129 Paragraph 1.7.2 of NPS EN-1 [RD4] states that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects *inter alia* on landscape and visual amenity. It clarifies that in general, it should be possible to mitigate satisfactorily the most significant potential negative effects of new energy infrastructure consented in accordance with the energy NPSs. However, paragraph 1.7.2 of NPS EN-1 [RD4] acknowledges that the impacts on landscape and visual amenity in particular will sometimes be hard to mitigate.
- 4.3.130 Paragraph 1.7.11 of NPS EN-1 [RD4] states that NPS EN-1 already contains policies which severely limit the prospects for development of large-scale energy infrastructure in the most attractive landscapes and townscapes. Paragraph 1.7.11 of NPS EN-1 [RD4] continues to state that:
- "Tightening the development consent policies in EN-1 to make it harder for energy infrastructure to be consented which would have adverse landscape or townscape effects would be likely to make it significantly more difficult to gain consent for a range of large-scale energy infrastructure projects".
- 4.3.131 Paragraph 5.9.8 of NPS EN-1 [RD4] states that virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints, the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.
- 4.3.132 Paragraph 5.9.16 in NPS EN-1 [RD4] states that the decision maker should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be

capable of being reversed in a timescale that the decision maker considers reasonable.

- 4.3.133 Paragraph 5.9.17 in NPS EN-1 [RD4] states that the decision maker “...*should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation*”.
- 4.3.134 Paragraph 5.9.9 in NPS EN-1 [RD4] states that the conservation of the natural beauty of the landscape and countryside should be given substantial weight by the decision maker in deciding on applications for development consent in nationally designated landscapes, such as an AONB.
- 4.3.135 Paragraph 5.9.12 in NPS EN-1 [RD4] confirms that the decision maker should have regard to the purposes of nationally designated areas when considering applications for projects outside the boundaries of nationally designated landscapes but which may still have impacts within them. It states that the aim should be to avoid compromising the purposes of these designations and advises that such projects should be designed sensitively given the various siting, operational, and other relevant constraints.
- 4.3.136 Paragraph 5.9.14 in NPS EN-1 [RD4] states that outside nationally designated areas, there are local landscapes that may be highly valued locally and protected by local designation. It confirms also that where a local development plan in Wales has policies based on landscape character assessment, these should be paid particular attention. However, paragraph 5.9.14 also states that local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.
- 4.3.137 Paragraph 5.9.15 in NPS EN-1 [RD4] states that the decision maker should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project.
- 4.3.138 Paragraph 5.9.22 in NPS EN-1 [RD4] states that within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project.
- 4.3.139 Paragraph 2.8.3 of NPS EN-6 [RD5] states that the decision maker should consider how good design can act to mitigate the impacts of new nuclear power stations, such as landscape and visual impacts.

Welsh national and local policy

- 4.3.140 Section 5.3 of PPW [RD8] sets out measures to conserve landscape and biodiversity. It states that:
- AONBs should be given the highest status of protection from inappropriate development. Great weight should be given to the conservation and enhancement of their natural beauty;

- Non-statutory designations, such as, Special Landscape Areas (SLAs) should be protected; and
- LANDMAP NRW, (2011 and 2013a-2013d) provides an important information resource to use in undertaking landscape assessments which inform decision making.

4.3.141 PPW [RD8] states that, while the value of all the landscapes of Wales is recognised local planning authorities should have regard to the relative significance of international, national and local designations in considering the weight to be attached to nature conservation interests and should take care to avoid placing unnecessary constraints on development (paragraph 5.3.2).

4.3.142 Strategic Policy PS 5 in the JLDP [RD27] states that proposals should protect and improve the quality of the natural environment, its landscapes and biodiversity assets.

4.3.143 Strategic Policy PS 9 in the JLDP [RD27] states that the design of all the Wylfa Newydd Project and related development should ensure the scheme layout and design and the scale of open spaces, landscaping, planting, waterways and similar features proposed should avoid, minimize, mitigate or compensate for visual and landscape 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. This policy clarifies that proposals will be expected to be commensurate with the scale of the development, and the extent of its impact.

4.3.144 Policy PCYFF 4 in the JLDP [RD27] states that all proposals should integrate into their surroundings and clarifies that those proposals that fail to show (in a manner appropriate to the nature, scale and location of the proposed development) how landscaping has been considered from the outset as part of the design proposal will be refused. This policy also requires that landscape schemes for developments should *inter alia*:

- give due consideration to the Landscape Character Area Assessment or Seascape Character Area Assessment;
- respect the natural contours of the landscape;
- respect and protect local and strategic views;
- respect, retain and complement any existing positive natural features, landscapes, or other features on site;
- identify trees, hedgerows, water courses and topographical features to be retained; and
- justify circumstances where the removal/loss of existing trees, hedgerows, water courses and topographical features cannot be avoided and provide details of replacements.

4.3.145 Strategic Policy PS 19 states that development should conserve and where appropriate enhance the distinctive natural environment, countryside and coastline, and confirms that proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area.

4.3.146 This policy also states that when determining planning applications, consideration should be given to:

- Safeguarding the coastline and landscapes;
- Protecting or where appropriate enhance sites of international, national, regional and local importance and, where appropriate, their settings in line with Welsh national policy.
- Having appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with Welsh national policy.
- Protecting, retaining or enhancing the local character and distinctiveness of the individual Landscape Character Areas and Seascape Character Areas; and
- Protecting, retaining or enhancing trees, hedgerows or woodland of visual, ecological, historic cultural or amenity value.

4.3.147 Policy AMG 1 of the JLDP [RD27] states that proposals within or affecting the setting and/or Significant Views into and out of the AONB must, where appropriate, have regard to the relevant AONB management plan.

4.3.148 Policy AMG 2 of the JLDP [RD27] states that proposals within SLAs will need to appropriately consider the scale and nature of the development ensuring that there is no significant adverse detrimental impact on the landscape, adding that such development should aim to maintain, enhance or restore the recognised character and qualities of the SLA. However, this policy clarifies that in exceptional circumstances, where development is necessary and could result in significant impacts on the landscape, appropriate mitigation and compensation measures should be provided.

4.3.149 Policy CCC 3.1 of the Isle of Anglesey AONB Management Plan (2015) [RD47] states that all development proposals within and up to 2km adjacent to the Isle of Anglesey AONB should be subjected to rigorous assessment to reduce inappropriate development.

4.3.150 Policy CCC 3.2 [RD47] 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.

4.3.151 The Wylfa SPG [RD28] also encourages the project promoter at policy GP20 to demonstrate that the Wylfa Newydd Project either alone or in combination with other proposals, would not have significant adverse impacts on the local landscape character with reference to the SLAs and Local Landscape Character Areas. Policy GP 20 also clarifies that where adverse impacts cannot be avoided, IACC expect appropriate mitigation and/or compensation measures to be implemented.

Assessment

- 4.3.152 The environmental impact assessment of the Off-Site Power Station Facilities on landscape and visual matters is set out in chapter E10 of the ES (Application Reference Number: 6.5.10), thus according with and Policy AMG 1 of the JLDP [RD27] and Policy CCC 3.1 of the Isle of Anglesey AONB Management Plan [RD47] which requires developments proposed with the AONB to be subjected to a rigorous assessment.
- 4.3.153 The existing Off-Site Power Station Facilities site contains two existing commercial garages and a motor vehicle repair building. The existing land use of the site means that it is regularly occupied by large motor vehicles (e.g. buses awaiting servicing or repair) which present their own unattractive aesthetic impact.
- 4.3.154 The A5025 forms the eastern boundary of the Isle of Anglesey AONB and the site is therefore adjacent. The AONB is a predominantly coastal designation, although the backdrop to the coast is also important. It is this backdrop that lies immediately adjacent to the site, the character of which has been influenced by centuries of farming. Agriculture is the main land use type in the AONB and features such as hedgerows, walls and cloddiau are integral to the landscape.
- 4.3.155 Paragraph 5.9.9 in NPS EN-1 [RD4] confirms that the conservation of the natural beauty of the landscape and countryside should be given substantial weight by the decision maker in deciding on applications for development consent in AONBs. In addition, Section 5.3 of PPW [RD8] confirms that AONBs should be given the highest status of protection from inappropriate development.
- 4.3.156 The Off-Site Power Station Facilities have the potential to indirectly affect the character of a small part of the AONB, and directly affect a small part of the setting of the AONB. Neither of these effects are significant because the undulating landform and urban and agricultural land uses in the surrounding area have the potential to contain the site and adverse impacts arising as a result of development to some degree.
- 4.3.157 Additionally, the Off-Site Power Station Facilities have been sensitively designed to minimise the potential impact on the Isle of Anglesey AONB, particularly in terms of landscaping, as described in volume 3 of the DAS (Application Reference Number: 8.2.3). The proposed buildings would also be positioned, designed and orientated to reduce their effect on the surrounding areas as far as is practicable within operational requirements, as set out in volume 3 of the DAS (Application Reference Number: 8.2.3). The effects of the development on the AONB are localised and are not considered to have an overwhelmingly detrimental effect that would compromise the purpose of the designation in compliance with Paragraph 5.9.12 of NPS EN-1 [RD4].
- 4.3.158 The site is located within LCA 5 (North West Anglesey), which is an area described as having an extensive drumlin field resulting in a “*classic basket of eggs description for the landscape*”. The site is not located in a SLA and there is no inter-visibility between Mynydd Mechell SLA (approximately 3km to the north-east) and the site, therefore ensuring compliance with Policy AMG 2 in the JLDP [RD27] and policy GP20 in the Wylfa SPG [RD28].

- 4.3.159 Site layout, screening, landscaping and measures to reduce light spill from lighting would provide mitigation during the construction and operation stages, in accordance with Policy CCC 3.2 in the Isle of Anglesey AONB Management Plan [RD47], Strategic Policy PS 9 and Policies PCYFF 4 and AMG 1 of the JLDP [RD27]. There would be no significant effects on landscape character during the construction, operational and decommissioning stages, which complies with Paragraph 5.9.8 of NPS EN-1 [RD4] and Strategic Policies PS 5 and PS 19 in the JLDP [RD27].
- 4.3.160 Chapter E10 of the ES (Application Reference Number: 6.5.10) predicts that the users of two nearby public footpaths to the south and west of the site would experience significant adverse visual effects during the construction and decommissioning stages, as users would be able to view and experience the construction works, but these would be temporary in nature. It is also predicted that there would be a significant adverse visual effect over the short term on the 'Community off A5025' during both construction and decommissioning, as people within nearby properties would be able to fully or partially view and experience the construction activities. There would be no other significant adverse visual effects on the local community during the construction stage and no significant adverse visual effects at all during the operational stage.
- 4.3.161 Importantly, paragraph 5.9.16 in NPS EN-1 [RD4] confirms that the decision maker should consider whether any adverse impact is temporary. These short term significant adverse effects on a small number of PRowers during the construction stage are localised and necessary given their proximity to the development site and considered to be in accordance with Paragraph 5.9.8 of NPS EN-1 [RD4].
- 4.3.162 The provision of the Off-Site Power Station Facilities is a major benefit and a requirement of the ONR, and is therefore essential to the delivery of the Wylfa Newydd Project and its associated benefits. The adverse impacts on the landscape which remain following mitigation are considered to be offset by the benefits of the Off-Site Power Station Facilities, in accordance with Paragraph 5.9.15 in NPS EN-1 [RD4].
- 4.3.163 The Off-Site Power Station Facilities have been designed to minimise harm to the landscape, including through the use of reasonable mitigation, as demonstrated in volume 3 of the DAS (Application Reference Number: 8.2.3). The Off-Site Power Station Facilities are therefore considered to be in accordance with paragraph 5.9.17 and 5.9.22 in NPS EN-1 [RD4] and paragraph 2.8.3 in NPS EN-6 [RD5].
- 4.3.164 In terms of the landscape and visual impacts, the Off-Site Power Station Facilities are therefore in accordance with the relevant NPSs in addition to Welsh national and local policy and guidance.

Noise and vibration

Policy context

National Policy Statements

4.3.165 Paragraph 5.11.1 of NPS EN-1 [RD4] states that excessive noise can have wide-ranging impacts on the quality of human life, health (for example owing to annoyance or sleep disturbance) and use and enjoyment of areas of value such as quiet places and areas with high landscape quality. Similar considerations apply to vibration, which can also cause damage to buildings.

4.3.166 Paragraph 5.11.2 in NPS EN-1 [RD4] states that noise resulting from a proposed development can also have adverse impacts on wildlife and biodiversity, which should be assessed by the decision maker in accordance with the 'biodiversity and geological conservation' section of NPS EN-1 [RD4].

4.3.167 Paragraph 5.11.8 of NPS EN-1 [RD4] states that the Project should demonstrate good design through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.

4.3.168 Paragraph 5.11.9 of NPS EN-1 [RD4] states that:

"the decision maker should not grant development consent unless it is satisfied that the proposals will meet the following aims:

- avoid significant adverse impacts on health and quality of life from noise;
- mitigate and minimise other adverse impacts on health and quality of life from noise; and
- where possible, contribute to improvements to health and quality of life through the effective management and control of noise".

4.3.169 Paragraph 5.11.12 of NPS EN-1 [RD4] states that mitigation measures may include one or more of the following:

- engineering: reduction of noise at point of generation and containment of noise generated;
- lay-out: adequate distance between source and noise-sensitive receptors; incorporating good design to minimise noise transmission through screening by natural barriers, or other buildings; and
- administrative: restricting activities allowed on the site; specifying acceptable noise limits; and taking into account seasonality of wildlife in nearby designated sites.

Welsh national and local policy

4.3.170 Paragraph 13.15.1 in PPW [RD8] confirms that noise can be a material planning consideration. Paragraph 13.15.2 in PPW [RD8] states that the effect of noise on the enjoyment of other areas of landscape, wildlife and historic value should also be taken into account.

4.3.171 Policy PCYFF 2 in the JLDP [RD27] states that planning permission will be refused where the proposed development would have an unacceptable adverse impact on:

"...the health, safety or amenity of occupiers of local residences, other land and property uses or characteristics of the locality due to increased activity,

disturbance, vibration, noise, dust, fumes, litter, drainage, light pollution, or other forms of pollution or nuisance”.

- 4.3.172 The Wylfa SPG [RD28] at policy GP 7 states that the applicant should work with IACC and identify any potentially significant health impacts and appropriate mitigation measures. Policy GP 7 also states that Associated Developments should not be proposed where construction activities would give rise to unacceptable impacts on air quality, noise/vibration and light pollution and the amenity of the existing residents, visitors, businesses and construction workers.

Assessment

- 4.3.173 The environmental impact assessment of the Off-Site Power Station Facilities on noise and vibration matters is set out in chapter E6 of the Environmental Statement (Application Reference Number: 6.5.6).
- 4.3.174 The construction period would comprise a number of activities that have the potential to generate noise, such as demolishing the existing buildings, clearing the site and constructing the proposed development. In accordance with Paragraph 5.11.8 of NPS EN-1 [RD4], mitigation is proposed as set out below.
- 4.3.175 To reduce noise levels, the contractor's compound would be located as far from residential properties and other noise receptors as practicable. Construction fencing on the site perimeter would comprise solid site hoarding style fencing increased from 1.8m (embedded design) to 3.6m high to provide additional screening over the embedded design, to reduce noise levels. This hoarding would comprise acoustically reflective materials. In addition, fixed plant would be designed, as far as practicable, to reduce daytime and night-time noise to meet specified noise levels at nearest receptors, as described in volume 3 of the DAS (Application Reference Number: 8.2.3). These measures are considered to be in accordance with the “engineering” and “lay-out” mitigation measures described at Paragraph 5.11.12 in NPS EN-1 [RD4].
- 4.3.176 Noise level monitoring during the construction period would take place at locations representative of noise sensitive receptors to ensure noise levels remain within permitted levels. All monitoring results would be made available to IACC on a weekly basis. These and numerous other mitigation measures would be secured in the Off-Site Power Station Facilities sub-CoCP (Application Reference Number: 8.9).
- 4.3.177 Following mitigation, there remains the potential for moderate and major significant residual effects at eight residential properties located within 150m of the site boundary during the day period (07:00–19:00) for a maximum of 14 months during the construction phase. Given the temporary nature of this noise effect, it is not considered to represent an “unacceptable adverse impact”, thus according with policy PCYFF 2 in the JLDP [RD27].
- 4.3.178 Following mitigation, no residential properties are likely to experience a significant adverse effect from vibration levels. Although vibratory rollers could be used, a vibration risk assessment would first confirm appropriate working distances can be employed in terms of vibration impact. If the appropriate

distances cannot be employed, alternative equipment or working methods would be investigated and vibration levels reduced to the greatest extent practicable. Vibration monitoring would be carried out at the closest receptors to determine the success of these requirements.

- 4.3.179 During the operational stage, existing noise perimeter mounds would be retained and re-landscaped, and new stone walls would be installed to the north and east of the site to provide some noise screening by reducing the likelihood of direct lines of sight between noise sources as embedded mitigation. The layout of the site would also generally seek to use buildings as noise buffers between plant and sensitive receptors such as residential properties. The closest residential properties to the south of the boundary of the site are screened from the fixed plant area and substation by the MEEG.
- 4.3.180 Noise modelling shows that noise levels during the operational stage are not likely to be significant once additional mitigation measures are taken into account, such as restricting the use of the fuel pump to the daytime period only and prescribing the maximum noise limit experienced at the nearest residential properties. Whilst noise levels would increase during a training exercise, this would occur only once or twice per year. Noise levels would also increase during an emergency scenario; however, this is not a reasonably likely occurrence.
- 4.3.181 The proposed development, including mitigation, has sought to avoid significant adverse impacts from construction noise and vibration on health and quality of life in accordance with paragraph 5.11.9 of NPS EN-1 [RD4]. It is noted that residual significant noise effects during the construction period are likely to be short term and unlikely to occur continuously over the duration of the construction period, thus according with Policy PCYFF 2 and AMG 4 in the JLDP [RD27] and Policy GP7 in the Wylfa SPG [RD28].
- 4.3.182 There are no significant residual adverse effects during the operational phase for noise and vibration once embedded mitigation, good practice measures and additional mitigation are taken into account, in accordance with Paragraphs 5.11.9 of NPS EN-1 [RD4] and Policy PCYFF 2 in the JLDP [RD27].
- 4.3.183 Mitigation would be proposed in order to reduce adverse effects during the decommissioning phase, which are likely to be less than during the construction phase.
- 4.3.184 In terms of noise and vibration, the Off-Site Power Station Facilities are therefore in accordance with the relevant NPSs in addition to Welsh national and local policy and guidance.

Socio-economics

- 4.3.185 Socio-economics is identified as a Generic Impact in NPS EN-1 [RD4] and a Nuclear Impact in NPS EN-6 [RD5].

Policy context

National Policy Statements

- 4.3.186 NPS EN-1 [RD4] states at paragraph 5.12.2 that where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake an assessment of these impacts as part of the ES. Relevant socio-economic impacts are listed at paragraph 5.12.3 in NPS EN-1 [RD4] and include, for example, the creation of jobs and training opportunities and the provision of additional local services and improvements to local infrastructure.
- 4.3.187 Paragraph 5.12.6 of NPS EN-1 [RD4] states that the decision maker should have regard to the potential socio-economic impacts of new energy infrastructure identified by the applicant and from any other sources that the decision maker considers to be both relevant and important to its decision.
- 4.3.188 Paragraph 5.12.8 of NPS EN-1 [RD4] states that the decision maker should consider any relevant positive provisions the developer has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts.
- 4.3.189 Paragraph 5.12.9 of NPS EN-1 [RD4] states that the decision maker should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development.
- 4.3.190 NPS EN-6 [RD5] then refers to policy specific to nuclear power stations. Paragraph 3.11.4 of in EN-6 [RD5] states that *“the assessment of socio-economic impacts should demonstrate that the applicant has taken account of, amongst other things, potential pressures on local and regional resources, demographic change and economic benefits”*.
- 4.3.191 It notes that as nuclear power stations involve large scale construction projects *“...there are likely to be positive effects of local economic significance, although these are less significant at the regional scale... There may also be negative effects,”* (paragraph 3.11.2, NPS EN-6 [RD5]).

Welsh national and local policy

- 4.3.192 PPW [RD8] includes planning policies, to promote quality, lasting, environmentally sound and flexible employment opportunities for a low carbon economy, and to protect and, where possible, improve people's health and well-being. Chapter 4 (planning for sustainability) of PPW [RD8] sets out the Welsh government's objectives for achieving sustainable development and chapter 7 confirms the Welsh government's objectives for economic development, i.e. development of land and buildings for activities that generate wealth, jobs and incomes.
- 4.3.193 TAN 23 [RD25] highlights at paragraph 1.2.1 that the geographical distribution of economic benefits associated with development may be far beyond the area where the development is located.
- 4.3.194 Strategic Policy PS 9 in the JLDP [RD27] specifically requires consideration to be given to the nature, scale, range and possible impact of any development. It confirms that local economic and community benefits need to be maximized, where feasible, through agreement of strategies for procurement, employment, education, training and recruitment with the Councils at an early stage of project development.

4.3.195 The Guiding Principles in the Wylfa SPG [RD28] are considered relevant to the socio-economic assessment and include:

- Policy GP1: IACC will require the Wylfa Newydd Project promoter to support the delivery of the Energy Island Programme and Anglesey Enterprise Zone, maximising the economic opportunities available to the Island's local communities.
- Policy GP2: Local job creation and skills development through the implementation of an Employment and Skills Strategy, which should include the maximisation of local labour provision.
- Policy GP5: Supporting the visitor economy and ensuring that the construction and operation of the Power Station and any associated developments do not adversely affect the value and importance of tourism to the Island. One of the key elements of the island's tourism offer being the quality and diversity of its natural and historic environments. This includes the 125 mile coastline and the numerous beaches linked by the Wales Coast Path.
- Policy GP6: Maintaining and Enhancing Community Facilities and Services, including education, healthcare and leisure facilities.

Assessment

4.3.196 The environmental impact assessment of the Off-Site Power Station Facilities on socio-economics matters is set out in chapter E3 of the ES (Application Reference Number: 6.5.3), in accordance with paragraph 5.12.2 in NPS EN-1 [RD4] and paragraph 3.11.4 in NPS EN-6 [RD5].

4.3.197 In accordance with paragraph 5.12.6 of NPS EN-1 [RD4], Horizon has considered the socio-economic effects associated with the Off-Site Power Station Facilities. Chapter E3 of the ES (Application Reference Number: 6.5.3) concludes that no significant socio-economic effects are likely.

4.3.198 The construction phase would occur under controlled conditions to limit changes in air quality, noise and vibration and the site would be secured at all times, with site security and a secure fenced boundary incorporated into the site design as embedded mitigation, according with paragraph 5.12.8 and 5.12.9 in NPS EN-1 [RD4].

4.3.199 Operation of the Off-Site Power Station Facilities would be minimal (outside of times of emergency), which inherently limits potential adverse effects on neighbouring communities and local businesses.

4.3.200 Points of access or other routes to local business or communities would be maintained throughout the construction, operation, and decommissioning phases of the Off-Site Power Station Facilities to ensure there is no disruption of access, thus according with paragraphs 5.12.8 and 5.12.9 in NPS EN-1 [RD4].

4.3.201 As a result, there are no significant direct effects in terms of severance of or access to neighbouring communities, local businesses, public services or other amenities and as such no significant socio-economic effects are

considered likely as a result of the construction, operation, and decommissioning of the Off-Site Power Station Facilities. This is compliant with the principles of JLDP Policy PS 9 in relation to the scale, nature and possible impact of development.

- 4.3.202 The location of the Off-Site Power Station Facilities are supported by the locational guidance in the Wylfa SPG [RD28] for the development of new small scale employment uses. It also supports local jobs creation and skills development in accordance with Policy GP2 of the Wylfa SPG.
- 4.3.203 The main report of this Planning Statement (Application Reference Number: 8.1) assesses the project-wide socio-economic effects, including the significant (major) beneficial effects of the Wylfa Newydd DCO Project on the labour market and the significant (moderate) beneficial effects on the local economy on Anglesey during construction and provides an assessment against the relevant NPSs in addition to Welsh national and local policy.

Public access and recreation

Policy context

National Policy Statement

- 4.3.204 Paragraph 5.10.24 of NPS EN-1 [RD4] states that PRoWs, National Trails and other rights of access to land are important recreational facilities. The decision maker should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails and other PRoWs. Where this is not the case the decision maker should consider what appropriate mitigation requirements might be attached to any grant of development consent.

Welsh national and local policy

- 4.3.205 Paragraph 11.1.13 of PPW [RD8] states that local authorities should seek to protect and enhance the rights of way network as a recreational and environmental resource. Paragraph 11.1.13 also confirms that local authorities are encouraged to promote the national cycle network, long distance footpaths, bridleways, canals, and the use of inland waters and disused railways as greenways for sustainable recreation.
- 4.3.206 Strategic Policy PS 4 in the JLDP [RD27] states that, where possible, PRoW and cycle networks should be safeguarded, improved, enhanced and promoted in order to increase health, leisure, well-being and tourism benefits for both local residents and visitors.
- 4.3.207 Policy GP 5 in the Wylfa SPG [RD28] states that the detailed assessments should consider the impacts on access to the Island's natural and built environmental assets, including on PRoW. Policy GP 8 in the Wylfa SPG [RD28] expects applicants to undertake a comprehensive assessment of the potential impacts of the Project on open space, recreation and leisure provision. Policy GP 20 in the Wylfa SPG [RD28] states that the Project should not have a significant adverse impact on the Wales Coast Path. Policy

GP 26 in the Wylfa SPG [RD28] seeks improvement to the Wales Coast Path and PRoWs.

Assessment

- 4.3.208 The environmental impact assessment of development within the Off-Site Power Station Facilities on public access and recreation is set out in chapter E4 of the ES (Application Reference Number: 6.5.4).
- 4.3.209 There are six PRoW within 250m of the Off-Site Power Station Facilities. As encouraged by GP 5 Wylfa SPG [RD28], a detailed assessment of the impacts on PRoW has been conducted which concludes that the facilities would not require the closure or diversion of any PRoW during the commissioning, operation or decommissioning phases. The Off-Site Power Station Facilities are therefore considered to align with paragraph 11.1.13 of PPW [RD8], Strategic Policy PS 4 in the JLDP [RD27] and policy GP 20 in the Wylfa SPG [RD28].
- 4.3.210 The Off-Site Power Station Facilities would be little used on a day-to-day basis, other than a small number of staff and traffic movements associated with the ESL. Greater numbers of staff and traffic movements would be associated with training and incident response, with the overflow car park being used on these occasions. On a daily basis, there would therefore be no effect on recreational amenity, the training events would be sufficiently infrequent to only result in an intermittent reduction of the tranquil nature of the PRoWs. This is a small magnitude of change which would result in a short term minor adverse effect on walkers using the PRoWs. The woodland planting to the south of the site would screen the visual and noise effects experienced by users of PRoW 29/009/1 during use of the overflow car park, which would ensure that the effect is likely to be negligible.
- 4.3.211 There are no likely significant effects for public access and recreation and the proposal therefore complies with Paragraph 5.10.24 of NPS EN-1 [RD4] and policy GP 8 in the Wylfa SPG [RD28].
- 4.3.212 In terms of public access and recreation, the Off-Site Power Station Facilities are therefore in accordance with the relevant NPSs in addition to Welsh national and local policy and guidance.

Human health and well-being

Policy context

National Policy Statements

- 4.3.213 Paragraph 3.12.7 of NPS EN-6 [RD5] states that the applicant should identify any potentially significant health impacts and appropriate mitigation measures.

Welsh national and local policy

- 4.3.214 Policy PCYFF2 of the JLDP [RD27] states that proposals should not have an unacceptable adverse impact on health.

4.3.215 GP 7 of the Wylfa SPG [RD28] states that the applicant should undertake a comprehensive assessment of health and amenity impact of the project.

Assessment

4.3.216 The Health Impact Assessment Report (Application Reference Number: 8.19) satisfies the requirements of Paragraph 3.12.7 of NPS EN-6 [RD5] and GP 7 of the Wylfa SPG [RD28], concluding that the Off-Site Power Station Facilities would not cause any potentially significant health effects that warrant further assessment, thus according with Policy PCYFF2 in the JLDP [RD27].

4.3.217 Detailed analysis on the project-wide effects is provided in the main report of this Planning Statement (Application Reference Number: 8.1).

Welsh language impact

4.3.218 Welsh language impact is not identified as a Generic or Nuclear Impact in NPS EN-1 [RD4] or NPS EN-6 [RD5].

Policy Context

National Policy Statements

4.3.219 Volume 2 of NPS EN-6 [RD5] provides site assessments which set out why the sites included in NPS EN-6 [RD5] have been found potentially suitable for providing nuclear power. Paragraph C.9.110 of NPS EN-6 [RD5] does however advise that some responses from consultees to the draft NPS expressed concerns that an influx of workers into the area could be damaging to its language, culture and welfare. NPS EN-1 [RD4] and NPS EN-6 [RD5] do not however otherwise provide specific guidance in respect of Welsh language and culture.

Welsh national and local policy

4.3.220 PPW [RD8] and TAN 20 [RD23] identify the Welsh language as being a part of the cultural and social fabric of Wales and that the Welsh Government is committed to ensuring the Welsh language is supported and encouraged to flourish. PPW [RD8] states that Welsh language should be supported by the planning system and that considerations related to the use of Welsh language may be taken into account by decision makers so far as they are material to applications for planning permission (paragraph 4.13.5).

4.3.221 Part B of the TAN 20 [RD23] provides Practice Guidance on planning and the Welsh language and states:

"The planning system can contribute to the future wellbeing of the Welsh language, by establishing the conditions to allow sustainable communities to thrive. For example, creating conditions for well-paid employment opportunities and a range of quality housing options are integral to planning for sustainable communities," (Paragraph 1.7.3, TAN 20 [RD23]).

4.3.222 Furthermore, TAN 20 [RD23] confirms that where the use of Welsh language is a significant part of the social fabric of a community, the interest and needs

of the Welsh language should be taken into account. Paragraph 3.1.2 in TAN 20 [RD23] confirms:

“...in determining individual planning applications and appeals, considerations relating to the use of the Welsh language may be taken into account so far as they are material. Section 70(2) TCPA does not give any additional weight to the Welsh language above any other material consideration and decisions on all applications for planning permission must be based on planning grounds only and be reasonable”.

- 4.3.223 Local planning policy continues the strong support for promoting the Welsh language. Strategic Policy PS 1 of the JLDP [RD27] confirms that the IACC will promote and support the use of the Welsh language in the area and require a WLIA to be submitted as part of the application to show how the proposed development would protect, promote and enhance the Welsh language. Strategic Policy PS 1 also states that proposals will be refused which would cause significant harm to the character and language balance of a community that cannot be avoided or suitably mitigated by appropriate planning mechanisms.
- 4.3.224 Strategic Policy PS 5 in the JLDP [RD27] states that all proposals should protect, support and promote the use of the Welsh language in accordance with Strategic Policy PS 1.
- 4.3.225 Policy GP13 of the Wylfa SPG [RD28] similarly confirms that Welsh language and culture should be maintained and where possible strengthened and that all planning applications for Associated Development will be expected to demonstrate how a Welsh language strategy will be delivered by the proposed development. It also clarifies that a WLIA should be undertaken. Policy GP 13 also sets out several measures which could be deployed to mitigate potential adverse impacts on, and strengthen, Welsh language and culture.
- 4.3.226 Whilst Associated Development can now be included within the DCO application (rather than separate TCPA applications) the principles of protecting and promoting the Welsh language through all proposals are relevant.
- 4.3.227 Cymraeg 2050: Welsh language strategy (2017) [RD50] sets out a goal of having a million Welsh speakers by 2050 and that the Welsh language is used in everyday life. The themes for realising this goal include increasing the use of Welsh in the workplace and creating favourable conditions through infrastructure.

Assessment

- 4.3.228 In line with PPW [RD8] (Paragraph 4.13.5), Strategic Policy PS 1 of the JLDP [RD27] and policy GP 13 in the Wylfa SPG [RD28], which require consideration of Welsh language, the application is accompanied by a WLIA (Application Reference Number: 8.21). The assessment identifies an overall neutral effect on Welsh language and culture during the construction and operation of the Off-Site Power Station facilities with two negligible beneficial effects and only one negligible adverse effect during construction, thus according with Strategic Policies PS1 and PS5 in the JLDP [RD27] and

meeting the objectives of policy GP 13 in the Wylfa SPG [RD28]. In light of this, no additional mitigation and/or enhancement measures are considered to be necessary. Measures to mitigate adverse effects and enhance beneficial effects relating to the project-wide assessment are analysed in the main report of this Planning Statement (Application Reference Number: 8.1).

- 4.3.229 Whilst the Welsh language impact is not identified as a Generic or Nuclear Impact in the relevant NPSs, the Off-Site Power Station Facilities are considered to be in accordance with Welsh national and local policy and guidance.

5 Planning Balance

- 5.1.1 The Off-Site Power Station Facilities are an integral part of the NSIP, rather than Associated Development. It is appropriate to therefore consider the principle of development in the context of the urgent need for new electricity generation including nuclear power, to which the decision maker should give substantial weight (paragraph 3.1.4 of NPS EN-1).
- 5.1.2 It is however necessary to assess the location and form of these essential facilities. This appendix has demonstrated that the Off-Site Power Station Facilities as proposed are appropriate having had regard to the site specific planning issues and the IACC's locational guidance in the adopted Wylfa SPG [RD28] and draft SPG [RD14].
- 5.1.3 The Wylfa SPG was adopted prior to a detailed understanding of the ONR requirements for Off Site Power Station Facilities though provides useful guidance for employment generating uses. This supports the development of new small scale employment uses providing supply chain opportunities related to the Wylfa Newydd Project in or adjoining the main villages in the A5025 corridor.
- 5.1.4 The Wylfa Newydd: SPG Consultation Draft [RD14] provides more up to date guidance which identifies the combined AECC/ESL and MEEG facilities as being an appropriate use within the A5025 corridor in GP31 and acknowledges that the combination of the Off-Site Power Station Facilities on this site *"presents an opportunity to improve the appearance and potentially remediate land presently occupied as a garage/depot"*.
- 5.1.5 The proposals satisfy the requirement of draft Policy GP31 that the project promoter should design and combined facility that is in scale and character with the surrounding landscape.
- 5.1.6 As described in chapter 4, the Off-Site Power Station Facilities site is in close proximity to the Isle of Anglesey AONB. The proposals have the potential to indirectly affect the character of a small part of the AONB, and directly affect a small part of the setting of this designation. The effects of the development on the AONB are localised and are not considered to have an overwhelmingly detrimental effect that would compromise the purpose of the designation in compliance with Paragraph 5.9.12 in NPS EN-1 [RD4] and Policy AMG 1 of the JLDP [RD27].
- 5.1.7 The analysis in chapter 4 has shown that the Off-Site Power Station Facilities, as described in chapter 2, do not cause any other individual potential adverse effect that is so severe that the decision maker should refuse the application. A summary is provided below.
- 5.1.8 It is likely that there would be no significant adverse air quality effects associated with the Off-Site Power Station Facilities, in accordance with NPS EN-1 [RD4]. The scenarios identified in paragraphs 5.2.9 and 5.2.10 of NPS EN-1 [RD4] therefore do not apply.
- 5.1.9 For the reasons set out in chapter 4, the proposals have taken advantage of opportunities to conserve and enhance biodiversity in accordance with Paragraph 5.3.4 of NPS EN-1 [RD4]. The proposals comply with paragraph

5.3.7 of NPS EN-1 [RD4] as the scheme is likely to avoid significant harm to biodiversity interests. The Off-Site Power Station Facilities site is considered to have a minor beneficial effect on terrestrial and freshwater receptors for the following reasons:

- Provision of a surface water drainage system that is attenuated prior to discharge is an improvement to the existing situation, where sediment-laden and potentially polluted runoff can pass in to Hen-shop and East Drains; and
- The native planting proposed would create a greater area of habitat available for breeding birds and foraging bats compared to the existing situation. Both of these groups have species listed in accordance with the requirements of Section 7 of the Environment (Wales) Act 2016 [RD45], so this change could be considered to contribute towards the duty to conserve and enhance species on that list.

- 5.1.10 The proposals would not cause a significant adverse effect on any heritage assets in compliance with Paragraph 5.8.14 of NPS EN-1 [RD4]. The other less than significant residual effects on heritage assets identified would be clearly outweighed by the benefits of the Off-Site Power Station Facilities and the wider Wylfa Newydd Project. The provision of the Off-Site Power Station Facilities represents a major benefit. In addition, the Off-Site Power Station Facilities are a requirement of the ONR and are therefore essential to the delivery of the Wylfa Newydd Project. The proposals are therefore considered to accord with Paragraph 5.8.15 in NPS EN-1 [RD4].
- 5.1.11 The Off-Site Power Station Facilities would not cause any potentially significant health effects and the application satisfies the requirements of Paragraph 3.12.7 of NPS EN-6 [RD5].
- 5.1.12 There are no likely significant effects to public access and recreation and the proposals comply with Paragraph 5.10.24 of NPS EN-1 [RD4].
- 5.1.13 The proposals would not result in the loss of best and most versatile agricultural land and the scheme complies with Paragraph 5.10.8 of NPS EN-1 [RD4]. The Off-Site Power Station Facilities also make good use of previously developed land at the site which in turn can make a “major contribution to sustainable development” by reducing the amount of countryside and undeveloped greenfield land required, aligning with paragraph 5.10.3 in NPS EN-1 [RD4] and Strategic Policy PS 5 in the JLDP [RD27].
- 5.1.14 The proposed development, including mitigation, has sought to avoid significant adverse impacts from construction noise and vibration on health and quality of life in accordance with paragraph 5.11.9 of NPS EN-1 [RD4]. It is noted that residual significant noise effects during the construction period are likely to be short term and unlikely to occur continuously over the duration of the construction period. Due to the temporary nature of this noise effect, it is not considered to represent an “unacceptable adverse impact” and therefore accords with policy PCYFF 2 in the JLDP [RD27].

- 5.1.15 There are no significant residual adverse effects during the operational phase for noise and vibration once embedded mitigation, good practice measures and additional mitigation are taken into account, in accordance with Paragraphs 5.11.9 of NPS EN-1 [RD4].
- 5.1.16 In accordance with paragraph 5.12.6 of NPS EN-1 [RD4], Horizon has considered the socio-economic effects associated with the Off-Site Power Station Facilities. Chapter E3 of the ES (Application Reference Number: 6.5.3) concludes that no significant socio-economic effects are likely.
- 5.1.17 No significant adverse effects on surface water and groundwater were identified, in compliance with Paragraph 4.10.8 of NPS EN-1 [RD4]. The WLIA (Application Reference Number: 8.21) identifies an overall neutral effect on Welsh language and culture.
- 5.1.18 Increased local expenditure is expected as a result of job creation. The potential increase in local expenditure from wage increases associated with the construction of the Off-Site Power Station Facilities, within the Local Area of Influence and the wider Daily Construction Commuting Zone, is assessed as minor beneficial.
- 5.1.19 During the operational phase of the Off-Site Power Station Facilities, the site would have been transformed from the derelict former bus depot to a secure, maintained and operational facility, offering a more positive visual development than is presently the case. Such a potential effect is beneficial in nature and long-term in duration.
- 5.1.20 In summary, the proposed development of the Off Site Power Station Facilities are appropriate in planning terms when considered against the relevant national and local policies, which are important and relevant considerations and represent the positive use of a derelict brownfield site.
- 5.1.21 These facilities are, in any event, also integral to the delivery of the Wylfa Newydd Project (they are a requirement of the ONR) and its associated benefits, and should be considered in the context of the urgent need for nuclear power.
- 5.1.22 This Planning Statement has concluded that the development is acceptable as an individual scheme component, however, its contribution to the Project as a whole weighs further in its favour.

6 Conclusion

- 6.1.1 This appendix considers relevant national and local planning policies within the overarching context of NPS EN-1 and NPS EN-6. It demonstrates that, when assessed against these relevant policies and material considerations, the Off-Site Power Station Facilities benefit from strong policy support and is acceptable in land use planning terms.
- 6.1.2 Whilst the Wylfa Newydd Project as a whole will, in common with any national infrastructure project, result in some adverse effects to the environment and local community, the main report states that these (considered individually or collectively) do not outweigh the important benefits. These benefits would be delivered for the UK as a whole, including a vital role in the provision of safe and secure low carbon electricity, as well as local benefits including jobs creation, investment in the local economy and provision of skills for the local workforce. Together these benefits have the potential to create a significant lasting positive legacy for Anglesey, north Wales and the UK.

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Appendix C Site Campus Planning Statement

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Contents

1	Introduction and purpose	1
1.1	The Site Campus	1
1.2	Report structure	2
2	Proposed Site Campus	3
2.1	Introduction	3
2.2	Description of development	3
2.3	Workforce Accommodation Strategy	5
2.4	Layout and design	7
3	The site and surrounding area	9
3.1	Introduction	9
3.2	Site location	9
3.3	Existing site characteristics.....	10
4	Principal planning issues	11
4.1	Introduction	11
4.2	Principle of development	11
4.3	Other site specific planning issues.....	18
	<i>Good design</i>	18
	<i>Traffic and transport</i>	19
	<i>Socio-economics</i>	21
	<i>Water quality and resources</i>	25
	<i>Biodiversity</i>	26
	<i>Landscape and visual</i>	27
5	Planning Balance	32
6	Conclusion	34

List of Figures

Figure 2-1 Site Campus plan	8
Figure 3-1 Site location.....	9

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1 Introduction and purpose

1.1 The Site Campus

- 1.1.1 This appendix specifically addresses the Site Campus, which is part of the Associated Development for the Wylfa Newydd DCO Project. The proposed location of the Site Campus is entirely within the WNDA, which is covered holistically at Appendix A of this Planning Statement.
- 1.1.2 The delivery of the Site Campus for the provision of Temporary Worker Accommodation (TWA) is integral to the delivery of the Wylfa Newydd DCO Project as a whole.
- 1.1.3 Horizon estimates that at the peak of the construction phase, it will need up to 9,000 workers to build the Wylfa Newydd Project. Horizon will seek to maximise the number of workers recruited locally but many will not already live in and around Anglesey and will therefore require somewhere to live while they work on the Wylfa Newydd Project.
- 1.1.4 Horizon's Workforce Accommodation Strategy (WAS) (Application Reference Number: 8.4) was produced to set out the strategy for providing accommodation for these construction workers, in a way that minimises the impacts on existing residents and local housing and tourism markets.
- 1.1.5 The WAS identified the need to deliver TWA and measures to house people within communities.
- 1.1.6 Horizon has concluded that on balance, the environmental and social effects of the construction workforce on the existing community is best managed through locating a significant proportion of them in a single, temporary purpose-built campus as close as possible to the Power Station Site. The approach and justification in relation to site selection is set out in detail in the Site Selection Report (Application Reference Number: 8.24.4).
- 1.1.7 The impacts of workers not accommodated in the Site Campus will be minimised, managed and mitigated through a range of measures, including the Workforce Accommodation Management Service (WAMS).
- 1.1.8 Other mitigation measures in the WAS will be secured in the Workforce Management Strategy, planning obligations or other 'control documents' (as set out at chapter 7 of this Planning Statement).
- 1.1.9 The temporary accommodation for construction workers would comprise a campus style development to accommodate up to 4,000 construction workers. The Site Campus would occupy some 15ha of land, located to the north-east of the Power Station Site, east of the Existing Power Station.
- 1.1.10 The provision of the Site Campus for a proportion of the construction workforce would reduce travel times, which would increase productivity and reduce health and safety risks. It will also minimise the number of workers traveling on local roads and reduce impacts elsewhere in Anglesey.

- 1.1.11 It would be delivered in phases, to ensure that, in the event that fewer construction workers are required at peak, accommodation blocks are not constructed unnecessarily.
- 1.1.12 As the Site Campus is located within the WNDA, the environmental effects are generally assessed holistically with the Power Station and other development within the WNDA. However, where relevant some topics do consider the specific effects of the Site Campus. The overall conclusions for the WNDA as a whole during construction (which includes the construction, operation and decommissioning of the Site Campus), against the relevant policy context, is provided at appendix A of this Planning Statement. These conclusions are not repeated in full in this appendix, though this appendix does consider site-specific planning issues which are specific or unique to the Site Campus.

1.2 Report structure

- 1.2.1 This appendix is structured as follows:
- Chapter 2 – provides a description of the Site Campus proposal;
 - Chapter 3 – provides a description of the Site Campus site;
 - Chapter 4 – provides the planning analysis of considerations relating to the Site Campus; and
 - Chapter 5 – provides the conclusions to this appendix of the Planning Statement.
- 1.2.2 A more detailed site analysis of the Site Campus proposals and its design evolution is provided in the Design and Access Statement (Application Reference Number: 8.2.1), and assessment of environmental effects considered along with the other development and works in the WNDA in the Environmental Statement (Application Reference Number: 6.1). Full details of the consultation process are provided in the Consultation Report (Application Reference Number: 5.1).

2 Proposed Site Campus

2.1 Introduction

- 2.1.1 The proposed Site Campus is Associated Development that forms part of the Wylfa Newydd DCO Project. It would provide TWA on land in the north-east part of the WNDA.

2.2 Description of development

- 2.2.1 The Site Campus would provide an independent living space for each worker, with shared 'campus-style' amenities. It would be a temporary facility, completed in phases to respond to actual demand, after the use of existing accommodation for workers.

Overview of the Site Campus

- 2.2.2 The proposals for the Site Campus comprise:
- accommodation for up to 4,000 workers in campus-style modular form (providing an independent living space for each worker);
 - amenity building including cafeteria, café, reception area, gym, bar, shop, Medical Centre and other social space;
 - outdoor recreation, including two multi-use games areas, outdoor seating and informal public spaces;
 - Site Campus access road (from the Existing Power Station access road);
 - bus set-down and parking area;
 - disabled parking spaces and parking for light vans/minibuses;
 - temporary parking for workers during the initial phases of construction, consisting of 400 spaces;
 - internal access ways for pedestrians, service vehicles and emergency vehicles;
 - 2.4m high Paladin-type fence around the perimeter;
 - soft landscaping works; and
 - secondary substation, compactor and bin stores and cycle stores.
- 2.2.3 The total 4,000 bed spaces would be provided over 25 buildings, the majority of which would be four storeys, with others at five storeys, six storeys and seven storeys. Each building would provide between 128 and 224 bed spaces.
- 2.2.4 A parameters approach is proposed for the Site Campus, with maximum parameters to be set though a DCO Requirement with detailed design required at a later stage, in accordance with the parameters and the design principles set in volume 1 of the DAS (Application Reference: 8.3.1). This is set out in more detail below at section 2.4. The parameters (dimensions and

heights) of the proposed buildings are shown in the volume 3 of DAS (Application Reference Number: 8.2.3).

- 2.2.5 A medical centre would be located on the Site Campus (the Site Campus Medical Centre) which would be similar in concept to a GP surgery. This would be accessible to all construction workers (including sub-contractors), whether they live in the Site Campus, reside locally or travel to the Wylfa Newydd Development Area from the wider area.
- 2.2.6 The Site Campus Medical Centre would include appropriately equipped space and facilities for primary care services, occupational health services, administrative functions and occupational hygiene facilities and resources, which would then be deployed across the WNDA. The final design of the Site Campus Medical Centre will be prepared in consultation with the local healthcare authorities/representatives and would be operated by a suitable healthcare service provider. Further information is provided in the Health Impact Assessment (HIA) Report (Application Reference Number: 8.19).
- 2.2.7 The Site Campus would be used during the construction phase of the Power Station to accommodate workers on a temporary basis. It is expected that the Site Campus would likely be operational some two years following grant of development consent, and be operational for five years, with peak occupation levels occurring across the last two years of operation. However, the Site Campus would be designed to have a service life of a minimum of 10 years.

Overview of the construction of the Site Campus

- 2.2.8 Construction would be in a phased manner.
- 2.2.9 Connections would be provided from the Power Station's main services, including:
- communication lines, telephones and IT networks;
 - electricity supply; and
 - potable water supply.
- 2.2.10 All surface water during construction of the Site Campus would run into drainage channels, which would discharge into a sedimentation pond east of the Site Campus. Discharge would then be into the sea at Porth Wylfa within Cemaes Bay.

Overview of the operation of the Site Campus

- 2.2.11 Up to 400 members of staff would be required for the on-site management, welfare and security of the full 4,000 beds. These staff members would work in shifts with peak shift numbers being around 200 people.
- 2.2.12 The drainage design for operation of the Site Campus would include attenuation of discharge to surface water, and recharge of storm water runoff via infiltration trenches, in order to reduce potential hydrological effects on the Site of Special Scientific Interest (SSSI) arising from surface water flows.

- 2.2.13 An extension to the existing Cemaes Welsh Water Treatment Plant, operated by Dŵr Cymru Welsh Water, and located to the west of the Site Campus, would treat sewage derived from the Site Campus. This would discharge through the current Dŵr Cymru Welsh Water outfall or otherwise through the new Cooling Water outfall constructed for the Wylfa Newydd Project.
- 2.2.14 External lighting would be a combination of pole and building wall-mounted. A central management system would be utilised, which would be remotely accessible. Light-emitting diode lighting would be used, with a detection system to provide lighting only when required for access.

Overview of decommissioning the Site Campus

- 2.2.15 Following completion of the construction of the Power Station, the Site Campus would be decommissioned and returned to its original state. Public footpaths and access to Fisherman's Car Park would be reinstated after decommissioning.
- 2.2.16 Further details on decommissioning can be found within the Construction Method Statement contained within appendix D1-1 (Application Reference Number: 6.4.17).

2.3 Workforce Accommodation Strategy

- 2.3.1 The WAS (Application Reference Number: 8.4) was produced by Horizon to help to shape the requirements for the accommodation of construction workers. It has informed the nature of the development that is being sought for DCO.

Background to the WAS

- 2.3.2 The WAS was produced by Horizon to ensure the Wylfa Newydd Project takes a balanced approach to accommodating its workers, by seeking to avoid excess demand being placed on existing provision, avoid significant effects on Welsh language and culture and other disruption to local communities, while also attracting a productive workforce.
- 2.3.3 This balance would help to ensure that the Wylfa Newydd Project is efficient and cost effective and can offer economic benefits to local accommodation providers utilising under-used capacity. A key part of Horizon's approach is the provision of the Site Campus.
- 2.3.4 This serves several key purposes: it would ensure excess demand is not placed on existing accommodation, businesses and communities; and, provide a type of accommodation that is both attractive to workers (including due to its location) and which is required for the efficient construction of the Wylfa Newydd Project. The approach to the location of the Site Campus is set out in more detail in volume 4 of the Site Selection Report (Application Reference Number: 8.24.4).

- 2.3.5 Purpose-built accommodation is required to minimise travel and coordination with shift patterns, provide facilities and amenities for workers alongside their accommodation (e.g. catering or sports and leisure facilities) and to manage workers' behaviour and their impacts on local communities.
- 2.3.6 A certain amount of large-scale, purpose-built, accommodation is best suited to meeting these needs. It provides the type of accommodation workers want at a scale and in a format that enables the delivery of associated services (e.g. room cleaning and managing changeover between workers) in a way regular houses cannot.

Scale of temporary accommodation required

- 2.3.7 The key driver of demand for accommodation is the number of workers at the peak of construction and how many of them are recruited from outside the local area. This peak will be the point at which demand is highest and therefore when demands on accommodation will be the greatest. The Wylfa Newydd Project needs to be able to accommodate the numbers at this peak scenario.
- 2.3.8 Horizon anticipates that the peak number of workers will be approximately 8,500. To ensure an appropriate level of contingency Horizon has developed the WAS to accommodate up to 9,000 workers.
- 2.3.9 Of these, Horizon estimates that it will need accommodation for approximately 7,000 temporary non-home based workers. Based on analysis of existing capacity sources (in the tourism sector, private rental, owner occupied and latent supply) the anticipated requirement for temporary accommodation will be a maximum of 4,000.

Locational strategy

- 2.3.10 The TWA would all be delivered at the Site Campus, within the WNDA, next to the Power Station Site. The benefits of this approach are:
- reducing impacts elsewhere on Anglesey, in particular effects on Welsh language and culture;
 - minimises number of construction workers travelling on local roads on a daily basis;
 - reducing travel times for a proportion of workers, which would increase on-site productivity and reduce health and safety risks;
 - allow key workers to have immediate and easy access to the Power Station Site so they can respond to emergencies and out of hours needs; and
 - provision of shared dedicated facilities for all workers enabling a greater opportunity for workers to interact, socialise and bond – all of which improve the workers' well-being.

- 2.3.11 The approach to the siting of the Site Campus within the WNDA is set out in more detail in volume 2 of the Site Selection Report (Application Reference Number: 8.24.2).

2.4 Layout and design

- 2.4.1 The Wylfa Newydd DCO Project has been subject to an extensive process of design development and consultation, as set out in the Design and Access Statement (Application Reference Number: 8.2.1) and final Consultation Report (Application Reference Number: 5.1) respectively.
- 2.4.2 Horizon will, however, have a continuing need to refine the proposals. Flexibility is required in the DCO to reduce the potential need for non-material changes post consent for minor amendments.
- 2.4.3 The approach to flexibility sought in the DCO is set out chapter 1 of this Planning Statement and the parameters approach is set out in detail in chapter B1 of the ES (Application Reference Number 6.2.1). This involves different levels of flexibility for each of the components of the Wylfa Newydd DCO Project.
- 2.4.4 Horizon has proposed a parameter based approach for the construction of the Site Campus, as detailed in table D1-5 in chapter D1 of the accompanying Environmental Statement (Application Reference Number: 6.4.1).
- 2.4.5 These parameters are sufficiently flexible to accommodate a reasonable level of change. These parameters will be fixed in the DCO Requirements.
- 2.4.6 The Design and Access Statement (Application Reference Number: 8.2.1) establishes a series of 'design principles' which the detailed design of the Site Campus would be in accordance, as well as the parameters.
- 2.4.7 The Design and Access Statement (Application Reference Number: 8.2.1) then provides an indicative illustration of how the 4,000 bed spaces can be accommodated on the site based on these parameters and design principles.

Figure 2-1 Site Campus plan



2.4.8 It shows the location of up to 25 accommodation blocks and their maximum heights ranging between four and seven storeys. All 25 blocks would be required, at their maximum heights, to deliver the full 4,000 bed spaces (if required).

3 The site and surrounding area

3.1 Introduction

- 3.1.1 The Site Campus comprises approximately 15 hectares of greenfield land within the WNDA to the north-east of the Power Station Site and to the east of the Existing Power Station. The wider WNDA is described in detail in appendix A of this Planning Statement.

3.2 Site location

- 3.2.1 The proposed temporary Site Campus site lies parallel to the coast on Wylfa Head, between the Existing Power Station and the Wales Coast Path, overlooking Cemaes Bay.
- 3.2.2 Horizon considered a alternative locations within the WNDA to locate the Site Campus. This site was chosen because it meets the requirements of the WAS and maximises the distance of the accommodation from the active construction site, while avoiding constraints on construction activities. This is covered in volume 2 of the Site Selection Report (Application Reference Number: 8.24.2).
- 3.2.3 It is also located away from neighbouring communities, to avoid adverse effects on Welsh language and culture, and in a location which would be partially screened by the landscaping proposals.
- 3.2.4 Whilst the Site Campus is near environmental features including Tre'r Gof SSSI, designated ancient woodland, and an existing bat barn, the proposed layout ensures that impacts are avoided or minimised.

Figure 3-1 Site location



3.3 Existing site characteristics

- 3.3.1 The site is predominantly an area of coastal grassland used for sheep grazing. It includes the following features within the boundary of the site (which are covered in more detail in the Design and Access Statement (Application Reference Number: 8.2.1)):
- a series of large rock outcrops throughout the site surrounded by gorse (reflecting the proximity of the bedrock to the surface);
 - a series of stone walls (cloddiau) in generally poor condition marking field boundaries; and
 - areas of scrub vegetation and more established wooded areas including a section of recorded ancient woodland lie to the south of the site.
- 3.3.2 The development boundary for the Site Campus has had regard to the surrounding landscape features and constraints.
- 3.3.3 The Wales Coast Path runs along the north eastern boundary (with the coastline beyond) and connects to a Public Right of Way that leads through the wooded slopes to a lookout point to the north.
- 3.3.4 The wooded slopes designed by Dame Sylvia Crowe and deciduous parkland tree planting associated with the former Wylfa Hall to the south-west. The existing bat barn is located within this woodland and would be retained.
- 3.3.5 The Existing Power station and Dŵr Cymru Welsh Water Sewage Treatment plant are located directly to the west.
- 3.3.6 To the south and south-east, the extent of the proposed development area has had regard to the existing Fisherman's Car Park which would be retained, a burial ground and the need to provide an appropriate buffer between development on the site and the Tre'r Gof SSSI.
- 3.3.7 The majority of the Anglesey coastline is designated as an Area of Outstanding Natural Beauty. The Site Campus site is located outside of this designation.
- 3.3.8 The site is not located within one of the six Special Landscape Areas on Anglesey defined in the Joint Local Development Plan (JLDP) [RD27].
- 3.3.9 There is a Special Area of Conservation at Cemlyn Bay and one Special Protection Area (consisting of Ynys Feurig, Cemlyn Bay and The Skerries) within 2km of the site boundary.

4 Principal planning issues

4.1 Introduction

- 4.1.1 The purpose of this chapter is to present the site specific planning considerations in relation to the Site Campus. This has regard to the relevant planning policy context, the site characteristics, feedback raised through the Pre-Application Consultation process and technical assessments undertaken to support the DCO application.
- 4.1.2 Given the temporary Site Campus is located within the wider WNDA, the environmental effects are generally considered holistically in the Environmental Statement (Application Reference Number: 6.1.1 to 6.11) along with the Power Station Site and other works within the WNDA during the construction stage. However, where relevant some topics do consider the specific effects of the Site Campus.
- 4.1.3 The planning issues relevant to the Site Campus are generally considered separately in this appendix. However, where combined environmental effects occur between the Site Campus and the Power Station, Marine Works and/or other on-site development (together comprising the works within the WNDA) they are assessed jointly within appendix A of this Planning Statement.
- 4.1.4 These conclusions for the WNDA during the construction stage are applicable to the Site Campus and are not repeated in full in this appendix. This appendix does, however, highlight environmental effects and mitigation where specifically relevant to the Site Campus.
- 4.1.5 This appendix therefore primarily addresses planning matters that specifically relate to the principle of the development - including the need for TWA and the rationale for the location of the Site Campus.
- 4.1.6 The planning issues considered in this chapter need to be considered in the context of the recognised need to deliver the Power Station, and the necessity to ensure an adequate supply of accommodation that is attractive to the workforce required to deliver the Wylfa Newydd Project.

4.2 Principle of development

Policy context

- 4.2.1 Given the urgent need for new (and particularly low carbon) electricity Nationally Significant Infrastructure Project's (NSIP) in the UK (as set out in the Planning Statement) the decision maker should assess applications on the basis that the need for all types of energy infrastructure covered by the NPS has already been demonstrated by the UK Government and that that need is urgent. The 'ministerial statement' [RD 3] is clear that statements concerning need for nuclear power in NPS EN-6 remain important and relevant for projects that will be deployed beyond 2025.

- 4.2.2 The decision maker should also give substantial weight to the contribution which projects would make towards satisfying this need when consideration applications for development consent (EN-1 paragraph 3.1.4) [RD4].
- 4.2.3 Annex C of NPS EN-6 [RD5] provides site assessments for each of the eight potentially suitable sites for new nuclear power stations, including Wylfa.
- 4.2.4 Paragraph 4.2.4 of EN-6 states that the decision maker should have regard to the relevant site assessment in addition to the impacts and general siting considerations set out in part 3 of EN-6 and part 5 of NPS EN-1. The sites identified in EN-6 are sites which the UK Government has identified, based on the Strategic Siting Assessment, as potentially suitable for the deployment of a new nuclear Power Station. The 'ministerial statement' [RD3] is clear that the Government continues to give it's strong in principle support to project proposals at those sites listed in EN-6, including Wylfa.
- 4.2.5 The Site Campus facility is vital to the delivery of the Power Station and is recognised as Associated Development accordingly. It should be considered against the same policy context as the Power Station and other Associated Development.
- 4.2.6 Strategic Objective SO 9 of the JLDP [RD27] highlights the importance of the Wylfa Newydd Project to maximise socio-economic opportunities for local businesses and the labour market. This objective supports the facilitation of a suitable network of Wylfa Newydd Project Associated Development sites while ensuring that adverse effects of the Wylfa Newydd Project on the local communities are appropriately avoided, or mitigated and where appropriate legacy benefits are provided.
- 4.2.7 This is in line with paragraph 5.12.3 of the EN-1 [RD4], and paragraph C.9.111 in annex C of EN-6 [RD5] which sets out the range of socio-economic impacts which should be considered.
- 4.2.8 The need to provide for construction workers for major infrastructure projects is set out as a key issue within the JLDP (KI 4) and the JLDP sets out the need for a Construction Workforce Accommodation Strategy.
- 4.2.9 Policy PS 9 Wylfa Newydd and Related Development in the JLDP states that Councils will take the criteria in this policy into account in their Local Impact Report, including the following criterion:

"The accommodation requirements of construction workers should be met in a way that minimises impact on the local housing market, including the ability of those on low incomes to access the private rented sector, affordable housing and other housing services (taking account of the published Local Housing Market Assessment), and not result in unacceptable adverse economic (including the tourism sector), social, linguistic or environmental impacts. Proposals should form part of a robust construction workers accommodation strategy that has regard to the Plan's Spatial Strategy and any relevant policies in the Plan..."

4.2.10 Strategy Policy PS 10 of the JLDP [RD27], deals specifically with campus style temporary accommodation for construction workers at Wylfa. It states that the Councils will take the following into account in their Local Impact Report:

- the demonstration of need for temporary accommodation for construction workers that cannot be met through either existing residential accommodation, the re-use of existing buildings or the provision of new permanent buildings capable of being adapted for permanent use following their use by construction workers;
- the proposal is located on the Wylfa Newydd Project Site or a site located adjacent to or well related to the development boundary of Holyhead, Amlwch, Llangefni, Gaerwen or Y Fali (and is close to the main highway network where adequate access can be provided without significantly harming landscape characteristics and features);
- the proposal must include appropriate mechanisms to mitigate any adverse impacts of the proposed development on the Welsh language and culture;
- the proposal must include appropriate mechanisms to mitigate negative effects where there is insufficient capacity within existing off-site leisure, recreational, retail and healthcare facilities to meet the needs of occupiers of the site; and
- operators will be required to maintain occupancy information to facilitate the monitoring of the impacts of the development.

4.2.11 Paragraph 6.3.17 in the JLDP confirms that the proposals for accommodation of construction workers should minimise the impact on the local housing market and the tourism sector.

4.2.12 Paragraph 6.3.18 in the JLDP states that purpose built TWA could either be permanent or modular accommodation provided by Horizon or through a third party. Paragraph 6.3.20 states that *"given the scale of the anticipated number of construction workers required during the construction phase, it is considered that modular development will be part of the supply of accommodation but will not be first option except for provision for workers on the Wylfa Newydd Project site. Providing some modular accommodation in temporary buildings on the Wylfa Newydd Project site would be acceptable where it is supported by provision of an appropriate level of community facilities..."*

4.2.13 The JLDP states at paragraph 6.3.21 that: *"project promoters must demonstrate that they have fully considered the re-use of existing buildings and/ or the provision of permanent buildings capable of being adapted for permanent use following use by construction workers, proportionate use of the private rented sector and consideration of existing consents, before proposing modular accommodation in temporary buildings"*.

4.2.14 The draft Wylfa SPG recognises the proposals to accommodate 4,000 workers within the Site Campus and sets out principles that should be met in

order for the IACC to support the proposals. For example draft Guiding Principle GP30 notes that the IACC will support the provision of facilities and services within the main site, which implies that subject to the adequate provision of these services and compliance otherwise with the JLDP and other considerations in the SPG, the accommodation of up to 4,000 workers at the main site could be supported.

Assessment

- 4.2.15 The Site Campus is a fundamental component of the Wylfa Newydd DCO Project, the need for which is already demonstrated as set out in the main body of this Planning Statement.

The need for purpose built TWA

- 4.2.16 The key objectives of Horizon's WAS were to:
- deliver Horizon's commercial and productivity requirements safely and effectively;
 - avoid adverse effects on Anglesey's residents and accommodation markets; and
 - provide a positive legacy.
- 4.2.17 The WAS sets out the strategy to inform the Wylfa Newydd DCO Project, thus ensuring that these goals are achieved through a balanced approach that achieves an adequate supply of accommodation that is attractive and affordable for workers and minimises travel to the site.
- 4.2.18 Alongside this is the aim to provide the opportunity for economic benefits from workers utilising spare capacity in existing accommodation sources - where this would avoid any negative impacts of displacing existing residents or tourists during peak season.
- 4.2.19 The first bullet point of JLDP Policy PS 10 [RD27] stipulates that the developer should be able to demonstrate that the need accommodated by TWA could not be met through existing residential accommodation, reuse of existing buildings, or the provision of new permanent buildings.
- 4.2.20 Permanent new build housing is properly dealt with through the local plan process, to plan for long term housing needs rather than temporary demand. Horizon will consider all opportunities for utilising existing capacity but it is considered inevitable that accommodation will be required through the Site Campus to meet the demand for accommodation demand, and to ensure that adverse effects on the local community and on the tourism sector are mitigated. It is also of note the Planning Act at section 115(2)(b) also makes it clear that a DCO application cannot include the construction of dwellings, though it can include temporary campus accommodation.
- 4.2.21 Proposing permanent homes to facilitate temporary use by workers results in larger homes which do not necessarily meet local need. Therefore, we consider that the requirement for permanent homes is best met through the Housing Fund.

- 4.2.22 Horizon has also considered the ability for the provision of new permanent buildings which could be used for alternative uses following use by construction workers, principally in relation to Cae Glas, which proposes permanent buildings for use as a tourist village as a proposed after-use. Horizon has seriously considered the ability to use these consented sites and for the reasons set out in the Site Selection Report, Volume 4 (Application Reference Number: 8.24.4), they are not technically feasible or financially viable.
- 4.2.23 The Wylfa Newydd DCO Project is therefore based on a strategy that will work with the local authorities to plan, monitor and manage the provision of accommodation. This will involve the provision of purpose building temporary accommodation (to meet anticipated demand that will not be met through existing sources), combined with financial support (through a Housing Fund) for the provision of new accommodation as a project legacy.
- 4.2.24 The amount of accommodation proposed at the Site Campus (i.e. a maximum of 4,000 bed spaces) is driven by the anticipated peak requirement (i.e. 9,000 including contingency), the number of workers not requiring temporary accommodation, and the capacity of existing accommodation sources.
- 4.2.25 These numbers have been subject of detailed discussions between Horizon, Welsh Government and the local Councils. The proposed approach involves the use of 3,000 bed spaces in existing accommodation (across Anglesey and parts of the mainland) and 2,000 workers recruited from existing local residents who do not require temporary accommodation.
- 4.2.26 The residual requirement (up to 4,000) would be accommodated on the Site Campus, delivered in phases to respond to actual demand.
- 4.2.27 There are a number of key benefits of providing the Site Campus as part of the worker accommodation strategy, as outlined below.

Scalable construction

- 4.2.28 The accommodation buildings would be constructed from pre-fabricated modular units delivered to site for rapid assembly. This is supported by the text at 6.3.20 of the JLDP which acknowledges that modular development will be part of the supply of accommodation.
- 4.2.29 The modular construction provides an easily scalable solution that can respond to the variable demand i.e. ensuring that no more accommodation is delivered than is actually required at peak construction (it is not appropriate to construct the entire 4,000 bed spaces if that number is not actually required).
- 4.2.30 This strategy also reduces the construction programme associated with the erection of the Site Campus and therefore associated disruption.
- 4.2.31 Additionally, the modular construction would enable units to be removed from the site once they are no longer required, and provide the opportunity for the reuse of the units elsewhere on other projects. The reuse of these units therefore minimise waste in accordance with Policy PS 5 in the JLDP [RD27] which encourages energy conservation and efficiency. In addition, this

approach aligns with Policy PS 9 which states that where future or legacy uses for any temporary development associated with the Wylfa Newydd Project are not feasible the Council shall require that temporary buildings are removed.

Meeting worker needs

- 4.2.32 Policy PS 9 in the JLDP [RD27] states that community infrastructure facilities should be provided for construction workers. In addition, PS10 states that, where there is insufficient capacity within existing off-site leisure, recreational, retail and healthcare facilities are not available within an acceptable distance which facilitates pedestrian or cycle access to them, proposals for TWA must include appropriate mechanisms to mitigate negative impacts which may include on-site provision of ancillary facilities for the use of the occupiers.
- 4.2.33 High-quality campus-style accommodations will afford all workers who choose to stay in TWA a good environment in which to live. It provides the type of accommodation workers will want at a scale and in a format that enables the delivery of associated services (e.g. room cleaning and managing changeover between workers) in a way regular houses cannot.
- 4.2.34 Specific features of features of the Site Campus, which make it attractive to construction workers include:
- accommodation buildings providing independent accommodation units (containing a bed, desk, chair, wardrobe, toilet, sink and shower), with basic communal kitchenettes on each floor and a lounge area in each block;
 - provision of a central amenity building with catering, leisure and first aid facilities, along with management and general support functions. This would be a key facility for the site providing a range of functions that would encourage residents to stay on-site;
 - provision of communal sports facilities (the two multi-use games areas), recreational areas and communal spaces; and
 - easy and convenient access to the Power Station Site, reducing travel time and therefore improving worker wellbeing.
- 4.2.35 Accommodating workers in a single location at the Site Campus will enable a greater opportunity for workers to interact, socialise and bond – all of which would improve the workers' well-being. The worker welfare and accommodation facilities on the Wylfa Newydd Project will be essential in attracting, caring for and retaining a high-quality, productive and safe workforce. This in turn is integral to the timely delivery of the Wylfa Newydd Project. Any strategy that promoted accommodation that would inhibit the ability to attract a high quality workforce would, therefore, undermine the urgent need to deliver new nuclear power.
- 4.2.36 There are specific benefits of delivering the Site Campus on the WNDA rather than a location or locations remote from the Power Station Site. This is addressed in the Site Selection Report (Application Reference Number: 8.24.4) in detail and summarised below. This sets out the reasons why the

existing consents granted at Cae Glas and Kingsland are not being utilised, and thus complies with Policy PS10.

Location of the Site Campus

- 4.2.37 JLDP Policy PS 10 (second bullet point) [RD27] is supportive of campus style accommodation within the WND A.
- 4.2.38 A key consideration in Horizon's decision to locate the Site Campus in this location (next to the Power Station Site) is the health and well-being of the construction workforce. Locating the Site Campus within the WND A will reduce travel times for a proportion of workers.
- 4.2.39 This will enable longer rest periods for workers, increase on site productivity and reduce health and safety risks.
- 4.2.40 An increased travel period and distance for construction workers would also result in an increase in emissions, undermining the sustainability principles that have informed Horizon's travel strategy and would be contrary to the requirement to minimise the need to travel (which is a key objective Planning Policy Wales [RD8] policy).
- 4.2.41 The benefits of accommodating the Site Campus within the WND A include:
- reducing impacts elsewhere on Anglesey, in particular effects on Welsh language and culture (addressed further below);
 - minimising number of construction works travelling on local roads on a daily basis;
 - enabling key workers to have immediate and easy access to the Power Station Site so they can respond to emergencies and out of hours needs; and
 - efficiencies from sharing utilities and services with the Power Station Site.
- 4.2.42 Volume 2 of the Site Selection Report (Application Reference Number: 8.24.2) assesses locating the Site Campus within the WND A against a number of other potential locations, including those within or adjacent to the settlements identified in JLDP Policy PS 10 [RD27] (which it also supports as a location for campus style accommodation as well as the Wylfa site).
- 4.2.43 The site selection process concludes and demonstrates that the WND A represented the most appropriate location when considered relative to the alternatives; particularly given that EN-1 [RD4] makes the urgency of providing new nuclear power stations clear, and the Site Campus would facilitate delivering the Power Station as early as possible whilst minimising the impacts on local communities and the environment.
- 4.2.44 Section 6.5 in volume 2 of the Site Selection Report (Application Reference Number: 8.24.4) also addresses the rationale for locating the site in the proposed location within the WND A.

4.3 Other site specific planning issues

- 4.3.1 The environmental, social and cultural assessment of the Site Campus is generally considered holistically as part of the WNDA in volume D of the Environmental Statement (Application Reference Number: 6.4). However, where relevant some topics do consider the specific effects of the Site Campus. The development proposed within the WNDA as a whole is assessed against each of the 'generic impacts' and 'Flags for Local Consideration' identified within NPS EN-1 and NPS EN-6 (and relevant national and local planning policy) at appendix A of the Planning Statement.
- 4.3.2 Appendix A, in relation to the construction stage, therefore represents the full planning assessment of all development in the WNDA. This section, however, provides further detail on the following topics where the effects of the Site Campus have been assessed in isolation:
- good design;
 - traffic and transport;
 - socio-economics;
 - water quality and resources;
 - biodiversity;
 - landscape and visual; and
 - Welsh language and culture.
- 4.3.3 Other topics covered by volume D of the Environmental Statement (Application Reference Number: 6.4), including soils and geology, cultural heritage and matters of local amenity are only dealt with only at appendix A.

Good design

- 4.3.4 Section 4.5 of EN-1 [RD4] sets out the principles of good design that should be applied to all NSIPs. Paragraph 4.5.1 states that applying 'good design' to energy projects should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible. It also however clarifies that in relation to good design for energy infrastructure, high-quality design goes beyond aesthetic considerations and that functionality and sustainability are equally important.
- 4.3.5 GP 20 of the Wylfa SPG encourages that, where adverse impacts cannot be avoided appropriate mitigation and/or compensation measures be implemented, including the adoption of high quality design principles. JLDP [RD27] Policy PCYFF 2 also promotes high quality design and set out criteria for achieving this. Policy PS 5 of the JLDP also states that proposals should, where appropriate, promote high standards of design that make a positive contribution to the local area.
- 4.3.6 The Planning Statement, at chapter 6, introduces the approach to good design across the whole Wylfa Newydd DCO Project.

- 4.3.7 Volume 3 of the Design and Access Statement (Application Reference Number: 8.2.1) sets out the design approach for the temporary Site Campus. It also describes how the proposals, including access, have evolved, adopting principles of good design to deliver the Wylfa Newydd Project requirements for the Site Campus.
- 4.3.8 The proposal for the Site Campus has had regard to the site context and compliments the environment of the site, as well as meeting the operational requirements for meeting workers' needs.
- 4.3.9 The need to attract and retain a high quality and productive workforce to deliver the Wylfa Newydd Project requires the delivery of high quality and well-designed living environment, where workers will want to live.
- 4.3.10 The analysis of site context and operational requirements establish a series of 'design principles' and parameters on which the detailed design would be based. These are set out in the Design and Access Statement (Application Reference Number: 8.2.1), which also demonstrates indicatively how the Site Campus could be delivered based on these parameters and principles. These are based on the fundamental principles for the Site Campus, and other Associated Development sites, which are to:
- provide the necessary facilities to ensure the delivery of the Power Station that meets the urgent need for new nuclear power as early as possible in a safe and efficient manner;
 - minimise visual impact as far as possible;
 - respect local communities, and minimise impact on them as far as possible, particularly those very close to the Associated Development sites; and
 - help to create a positive legacy for Anglesey, thinking about each significant investment and how it can create a positive legacy for the area, recognising that this will not always involve retaining the buildings on the Associated Development sites.
- 4.3.11 In summary, the proposals for the Site Campus adhere to the emphasis placed on good design reflected in the NPSs as well as national and local planning policy.
- 4.3.12 The Site Campus is a temporary facility, and the site will be restored once the facilities are no longer required.

Traffic and transport

- 4.3.13 The policy context in relation to traffic and transport is set out at appendix A, in relation to the WNDA as a whole.
- 4.3.14 Project-wide traffic and transport considerations are set out in the main body of the Planning Statement (Application Reference Number: 8.1).
- 4.3.15 In line with NPS EN-1 [RD4] (paragraph 5.13.6) and EN-6 [RD5] (paragraph 3.15.2), Horizon has sought to mitigate the impacts on the surrounding

transport infrastructure, including during the construction phase of the both the Site Campus and the wider Project to ensure that the proposals would not have an unacceptable adverse impact on highways

- 4.3.16 A Transport Assessment (Application Reference Number 6.3.14) has been produced and is provided at appendix C2.04 of the Environmental Statement (Application Reference Number: 6.3.15). Chapter C2 in volume C of the Environmental Statement (Application Reference Number: 6.3.2) also considers project-wide traffic and transport effects. It concludes that the potential transport impacts of the Wylfa Newydd Project are small and, in accordance with planning policy, would have no significant impact on the local road and public transport networks.
- 4.3.17 Project-wide effects of the Wylfa Newydd DCO Project are assessed in the main body of the Planning Statement and this appendix looks specifically at the transport and traffic for the Site Campus.
- 4.3.18 The approach to the integrated approach to traffic and transport is set out in detail in the Transport Assessment. This is based on the promotion of sustainable travel by making fewer journeys and reducing the volume of road-based traffic. This includes measures that are promoted as part of the Wylfa Newydd DCO Project including the Park and Ride at Dalar Hir, the A5025 Highways Improvements and the Site Campus.
- 4.3.19 One of the key benefits of the Site Campus in this regard, and its role within the overall WAS, is to reduce the number of construction workers travelling to and from work each day on local roads.
- 4.3.20 WNDA residents at the Site Campus would generally travel to and from the site via bus transfer. Buses (which would enter the site via the access road at the main entrance at the south of the site) would drop off and pick up workers at one of the bus parking bays along the access road, adjacent to the amenity building.
- 4.3.21 There would also be the opportunity for residents to walk to the Power Station Site via designated footpaths. Covered and secure cycle parking will be provided at the Site Campus to encourage more sustainable travel options for leisure purposes.
- 4.3.22 Pedestrians and cyclists will enter the site through the main entrance or via one of the additional gates around the site perimeter. These gates would allow residents access to the coast.
- 4.3.23 As well as travelling to the Power Station Site each day, at the end of each shift cycle some workers are expected to travel back to their normal home (by road, rail, coach or air to reach their destination). Workers will be incentivised to car share where possible or use shuttle buses to travel to the rail and coach stations in Holyhead and Bangor. The number of these trips will be based on the frequency of return home trips, with workers living nearby in Wales or north-west England expected to make more trips than workers who live in continental Europe.

- 4.3.24 During peak operation (i.e. 4,000 residents) up to 400 members of staff would be employed on-site for management, welfare and security services. These facilities management workers at the Site Campus will be able to use the proposed minibuss service which will link the site with nearby towns and villages.
- 4.3.25 The results of this Transport Assessment demonstrate low levels of residual transport impacts which do not suggest a need for any further mitigation measures beyond those already embedded in the Wylfa Newydd DCO Project, of which the Site Campus is a key component.
- 4.3.26 In summary, the proposal for the Site Campus and its location next to the Power Station Site and the reduction of the need for daily trips is a key element of transport and traffic mitigation set out in the control documents for the Wylfa Newydd Project. The location of the site facilities shortens commutes for construction staff, whether via shuttle bus or on foot. The proposals also provide for cycling to promote sustainable travel choices for leisure use, thus mitigating the impacts on the surrounding transport infrastructure in accordance with paragraph 5.13.6 in EN-1 and paragraph 3.15.2 in EN-6.

Socio-economics

- 4.3.27 The policy context in relation to socio economic effects is set out at appendix A, in relation to the WNDA as a whole.
- 4.3.28 The main report of this Planning Statement assesses the Wylfa Newydd project-wide socio-economic effects, including the significant beneficial effects of the Wylfa Newydd DCO Project on the labour market and the significant beneficial effects on the local economy during construction.
- 4.3.29 The assessment of the development within the WNDA on socio-economics is set out in volume D, chapter 3 of the Environmental Statement (Application Reference Number: 6.4.3). This allows the decision maker to have regard to the impacts in accordance with paragraph 5.12.6 of NPS EN-1 [RD4].
- 4.3.30 This assessment considers the effects on neighbouring communities and local services; potential change in public safety (including crime levels); effects on the local businesses and on the local economy; and potential change in land use.
- 4.3.31 This is considered at appendix A of the Planning Statement (Application Reference Number: 8.1) which concludes that for the WNDA as a whole has the following effects.
- A significant (moderate) adverse effect on community amenity has been identified as a consequence of environmental effects (air quality, noise and vibration, landscape and traffic) even with the implementation of mitigation measures, such as a community fund, and good practice measures.
 - A significant (moderate) adverse effect resulting from changing sources and extent of expenditure in local businesses, even with the implementation of mitigation measures, such as a community fund and

tourism fund, and good practice measures. Such mitigation measures should be considered by the decision maker in accordance with paragraph 5.12.8 of NPS EN-1 [RD4].

- No significant adverse effects have been identified for the operational and decommissioning phases.
- 4.3.32 This section seeks to summarise the socio-economic considerations relating specifically to the Site Campus on a site specific level in the context of these overall findings for the WNDA as a whole.
- 4.3.33 The facilities located within the Site Campus, (leisure and recreational amenities, retail and convenience stores, a bar and medical services) comprise part of the embedded mitigation for both the effects of the Site Campus and for the Wylfa Newydd Project as a whole.
- 4.3.34 The WMS sets out the principles through which worker accommodation demand will be managed and allocated between existing and new housing supply and Horizon's expectations of workforce conduct and their interaction with the local community, as well as specific protocols of those residing at the Site Campus. This responds to the objectives of JLDP [RD27] Policy PS 10.
- 4.3.35 The findings of chapter D3 of the Environmental Statement (Application Reference Number: 6.4.3) are summarised below, where they are specifically relevant to the Site Campus.

Neighbouring communities and local services

- 4.3.36 Cemaes and Tregele are the nearest communities to the WNDA, bordering the site boundary in some places. Both are considered to be highly sensitive receptors in the Environmental Statement.
- 4.3.37 An increase in population at the Site Campus has the potential to affect existing healthcare services if not specifically provided for or mitigated. The Health Impact Assessment (Application Reference Number: 8.19) concludes (section b.6 of the Health Impact Assessment (Application Reference Number: 8.19)) that effects on these services are expected to be not significant given the fact that similar services are to be provided to workers within the Site Campus.
- 4.3.38 The Workforce Management Strategy includes principles for the Code of Conduct which requires workers to use the facilities on the Site Campus in the first instance, before seeking to use community services and that Horizon will require construction workers to register with, and, prioritise the use of the on-site medical and healthcare services rather than using the community NHS services.
- 4.3.39 On the basis that there may still be some overspill (members of the construction workforce that utilise external community and healthcare facilities), the magnitude of such an effect is considered small resulting in the nature of effect being minor adverse, and therefore not significant.

Public safety

- 4.3.40 The Site Campus will result in a phased increase in the resident population by up to 4,000 persons. The services and facilities at the Site Campus will largely remove the requirement to utilise external local services.
- 4.3.41 In addition, the WMS includes provision for the development of a code of conduct which would require its residents to adhere to an expected standard of conduct and behaviour throughout the time at which they are accommodated at the Site Campus.
- 4.3.42 As a result of these measures, the strong likelihood is that there will be very limited interaction between the construction workforce and the local community during the construction phase. Potential effects on actual crime levels are not expected to be significant.
- 4.3.43 A range of measures are proposed to promote community safety. These are detailed in the Wylfa Newydd CoCP (Application Document Reference 8.6).
- 4.3.44 These measures cover mitigation and management to support communities and promote community safety, measures to liaise with emergency services and public services, and points of contact for local communities.
- 4.3.45 Community Safety will be monitored by the Programme Board and Community Liaison Group, through engagement sub-groups, to include a range of issues such as transport, emergency services, and health/wellbeing. As part of the monitoring, the Community Involvement Officers will distribute information packs that include details of how to register any complaints or concerns. A dedicated, free, bilingual telephone hotline will be made available.
- 4.3.46 A Community Safety Management Strategy will be prepared, specifically to address safety in the local area, with a focus on communities within 2.5km of the WNDA. This will detail preparations for any emergency incident, and ensure members of the public are properly informed in advance about what to do.
- 4.3.47 The Community Safety Management Strategy will also set out how Horizon will work with the emergency services to enforce the principles of the Workforce Code of Conduct, to protect community safety.
- 4.3.48 Horizon would make provision for emergency care both on-site, through the provision of one dedicated ambulance based in the WNDA emergency transfer on site, as well as a Community Safety Contribution towards the emergency services. This will include an appropriate financial contribution to the emergency services, including ambulance, fire service and police.
- 4.3.49 Horizon will continue to work collaboratively with the emergency services to maintain community safety and following ongoing discussions with public service providers, it is expected that a package of additional funds would be agreed to enable adequate resources to be provided as required for emergency services. It is therefore expected that detailed service planning

would be conducted to facilitate the identification of detailed criteria under which mitigation is requested and funds released.

- 4.3.50 Horizon would also establish, fund and chair an external Health and Well-being Monitoring Group to improve governance and community confidence. This would include members of the health and emergency services to monitor the implementation of the HIA mitigation strategy.

Local businesses

- 4.3.51 It is likely that local businesses could experience some beneficial effects in terms of an increase in business. The phased construction of the Site Campus and control on transportation makes it difficult, however, to quantify the potential beneficial effect, so this is not assessed further in the Environmental Statement.
- 4.3.52 Whilst some overspill is likely, the provision of on-site commercial services would ensure that the needs of the construction workers are met while also seeking to avoid adversely affecting access to services for the local population.
- 4.3.53 It is recognised that construction could result in a redistribution of visitors away from the north of the island and therefore localised effects on businesses. The Environmental Statement concludes however that local accommodation providers are expected to significantly benefit from increased and more consistent demand for bed spaces with respect to the Wylfa Newydd Project overall. This is likely to, at least partially, off-set the potential loss of visitors.
- 4.3.54 Horizon is proposing the establishment of a 'community fund' and 'tourism fund' to further mitigate specific effects on community and tourism associated with the construction phase of the Power Station.

Land use

- 4.3.55 The land on which the Site Campus will be erected forms part of the land which is owned or leased by Horizon. The use of the land which will accommodate the Site Campus will change temporarily, though will be to its current agricultural use (as set out in volume 3 of the Design and Access Statement (Application Reference Number: 8.2.3)).

Summary

- 4.3.56 The identified significant residual adverse effect on local businesses is related to the need to accommodate the construction workforce during the construction period (whereas the other significant adverse effects during construction relate to environmental impacts across the entire WND). The mitigation measures promoted by Horizon, as set out at section 7.4 of this Planning Statement, including the Community Impact Fund and Tourism Fund, should be considered by the decision maker as a 'relevant positive provision' made by Horizon to mitigate socio-economic effects, in accordance with paragraph 5.12.8 of NPS EN-1 [RD4] and Policy PS 9 and paragraph 6.3.18 in the JLDP [RD27].

Water quality and resources

- 4.3.57 The policy context, and planning analysis, in relation to water quality and resources is set out at appendix A, in relation to the WNDA as a whole.
- 4.3.58 The EIA of development within the WNDA on surface water and groundwater matters is set out in volume D, chapter 8 of the Environmental Statement (Application Reference Number: 6.4.8) and a Flood Consequence Assessment is provided at appendix D8.04.
- 4.3.59 This is summarised with regard to the construction, operation and decommissioning of all development within the WNDA (including the Site Campus), at appendix A of this Planning Statement.
- 4.3.60 This concludes that given the proximity of Tre'r Gof SSSI to the proposed Power Station and its complex hydrology, it is considered to be inevitable that significant harm cannot be ruled at this stage.
- 4.3.61 In locating the Site Campus adjacent to mounding surrounding Tre'r Gof SSSI it was considered that there was no significantly better environmental option that could be constructed within the constraints of the Wylfa Newydd Project. The temporary Site Campus development occupies a small proportion of the Tre'r Gof catchment, in comparison to the permanent mounding, which occupies a significant proportion of the catchment. The presence of mounds A and B are therefore considered to drive the impact on the SSSI and as such specific design alternatives to Site Campus are not considered further. In summary, whilst the construction and operation of the Site Campus contributes to the significance of the effects on Tre'r Gof the effects would occur regardless of the location of the Site Campus.
- 4.3.62 A number of mitigation measures have however been introduced into the design of the Site Campus (in addition to the wider mitigation measures for the WNDA as a whole, as described in Appendix A, including the Ecological Compensation Sites) to reduce adverse effects as far as practicable.
- 4.3.63 Embedded mitigation includes maintaining a 50m minimum buffer zone to the north of the Tre'r Gof SSSI boundary. Although there would be some work inside the buffer this would be limited to the installation of drainage on the northern side of the SSSI associated with the Site Campus (and drainage around the southern side of the SSSI to manage runoff from the landscape mounds unrelated to the Site Campus specifically). The drainage around the northern side of the SSSI would seek to maintain the shallow groundwater flow to the SSSI. Details of the drainage design are set out in the Environmental Statement (Application Reference Number: 6.1.1 to 6.11).
- 4.3.64 The drainage strategy for the operation of the Site Campus includes two main discharge routes, the first is via the watercourse flowing into the SSSI and the second is via infiltration to ground. The direct flow into the SSSI would include attenuation (though an attenuation tank or similar) in order to reduce the potential for flooding and to try to match baseline conditions. The second component would be to recharge rainfall runoff to the northern side of Tre'r Gof via infiltration trenches. This mitigation would reduce potential

hydrological effects on the SSSI arising from changes to land use within the Tre'r Gof Catchment.

- 4.3.65 In addition to the above mitigation, the proposed phasing strategy for the Site Campus is to commence construction to the west of the Site Campus site (i.e. as far as practicable from the Tre'r Gof SSSI) and then construct the blocks to the east if required to meet demand.
- 4.3.66 The embedded and good practice mitigation proposed for the construction phase across the wider WNDA as a whole is set out in detail in the Environmental Statement and summarised in appendix A. This also provides the overall analysis against the policy framework, for the Wylfa Newydd Development as a whole.
- 4.3.67 This concludes that the significant harm identified (which would occur with or without the Site Campus) is necessary to achieve the substantial public benefits of delivering the Power Station, by helping to meet the identified urgent need for new electricity NSIPs in the UK. It is considered that no alternative locations are available for the reasons identified above and that the benefits outweigh the impacts in accordance with paragraph 5.3.11 of NPS EN-1 [RD4].

Biodiversity

- 4.3.68 The policy context, and analysis of effects on terrestrial and freshwater ecology are considered for the WNDA as a whole, as summarised in appendix A of this Planning Statement.
- 4.3.69 Embedded mitigation which specifically relates to the Site Campus includes the minimum buffer of 50m around all of the SSSI excluding all works other than drainage. This buffer will protect the habitats of the SSSI from effects likely to occur as a result of being adjacent to construction works.
- 4.3.70 Chapter D9 of the Environmental Statement (Application Reference Number: 6.4.9) notes that important lichen communities are also located within close proximity to the Site Campus but these would be protected and retained through embedded mitigation design and so would not be affected by habitat loss.
- 4.3.71 The Site Campus would require the temporary removal of approximately 7ha of core foraging habitat for chough. The areas used most by foraging chough during the breeding season are, however, located outside the area directly affected by construction activities. These habitats would be retained and protected through the provision of temporary construction fencing (embedded mitigation). Further embedded mitigation is proposed as part of the mounding works. On completion of the construction period, the Site Campus would be decommissioned and the site reinstated as per the provisions of LHMS.
- 4.3.72 However, the loss and modification of core habitat could be expected to adversely affect breeding success during the construction period. This is considered to result in a moderate adverse effect is predicted. Additional mitigation is therefore proposed through habitat enhancement works at Wylfa Head. This would be undertaken by Horizon throughout the duration of Main

Construction (or until such a time as monitoring could demonstrate that such measures are not necessary).

- 4.3.73 Appendix A of this Planning Statement concludes that major adverse effects on the hydrology of Tre'r Gof SSSI are identified, and sets out the notable species located within the SSSI. Appendix provides details of measures proposed to compensate for the potential major adverse effects on Tre'r Gof SSSI, in accordance with paragraph 5.3.7 of EN-1 [RD4].
- 4.3.74 Appendix A of this Planning Statement concludes that the residual effects on biodiversity, including on chough and Tre'r Gof SSSI are outweighed by the benefits and therefore it is considered that the proposal complies with paragraphs 5.3.14 and 5.3.17 of NPS EN-1 [RD4], as well as Strategic Policy PS 9 and Policy AMG6 in the JLDP [RD27], and GP 20 of the Wylfa SPG [RD28].

Landscape and visual

- 4.3.75 The policy context in relation to landscape and visual effects is set out at Appendix A, in relation to the WNDA as a whole.
- 4.3.76 The EIA of development within the WNDA, as a whole, on landscape and visual is set out in volume D, chapter 10 of the Environmental Statement (Application Reference Number: 6.4.10). This is assessed and summarised at appendix A.
- 4.3.77 With regard to the Site Campus, the landscape and visual impact will be temporary. After it has served its purpose during the construction period the land will be restored incorporating the key environmental assets that would have been identified, enhanced and protected throughout the operation of the site. The assessment of impacts in relation to the construction phase is therefore relevant in relation to the Site Campus.
- 4.3.78 The landscape and visual impacts on the WNDA as a whole would be greatest during the construction phase, to which the Site Campus will represent a contributing factor.
- 4.3.79 Proposed embedded mitigation throughout the WNDA includes the retention of existing hedgerows, trees and stone walls (including where possible within the Site Campus boundary), the retention of most of the wooded mounds designed by Dame Sylvia Crowe (to the south-west of the Site Campus), the provision of mounding and planting to help integrate the Power Station (and also the temporary Site Campus) into the landscape.
- 4.3.80 The assessment of effects on landscape receptors concludes that the land use and character of the local landscape within the WNDA would change to a construction site, to which the Site Campus would be a contributing factor. The Site Campus itself would not directly affect the North Anglesey Heritage Coast. A small part of construction and operation of the Site Campus would directly impact on Local Seascape Character Area 4 (Wylfa Head).
- 4.3.81 With regard to visual receptors a detailed assessment of representative viewpoints in the Environmental Statement (Application Reference Number:

- 6.1.1) has indicated that the most notable visual effects would generally be experienced in views up to approximately 3km distance from the WNDA, with views between approximately 3km to 10km from the WNDA not likely to be significant.
- 4.3.82 It is proposed to complete landscape mounding as soon as practicable, to help visually screen Main Construction activities (which include the Site Campus), limit the geographical extent of visual effects at any given time and limit the duration of effects in a given area.
- 4.3.83 Additional mitigation proposed during construction is set out at table D10-13 of the Environmental Statement (Application Reference Number: 6.4.17), in response to the assessment of impact on landscape and visual receptors in that chapter. This includes, in relation to the Site Campus, the development a colour scheme based on visually recessive natural colours to break down the scale and massing of the Site Campus accommodation buildings and help integrate them into the landscape. The principles for material selection and colour scheme for the Site Campus (to set the principles for the detailed design) are set out in volume 3 of the Design and Access Statement (Application Reference Number: 8.2.3).
- 4.3.84 Other additional mitigation includes the preparation of landscape restoration plan of the site if the clear Site Campus in order to restore it to its pre-existing condition.
- 4.3.85 In summary, the proposal for the Site Campus have had regard to the character of the site and its context and can be accommodated into its surroundings whilst safeguarding the coastline and local landscape in accordance with policy PS19 in the JLDP [RD27].
- 4.3.86 The landscape and visual impact of the Site Campus are considered holistically with all development within the WNDA during the construction stage. As summarised at appendix A, the residual impacts remain significant for nearly all of the landscape and visual receptors. It is, however, considered that the design of the Site Campus proposals has sought to reduce the landscape and visual intrusion as far as reasonably practicable in accordance with the NPSs and informed by local policy. The effects of the construction phase as a whole would occur with or without the Site Campus.
- 4.3.87 Regardless of the presence of the Site Campus the ES would conclude that there were significant effects on landscape and visual receptors. However, the presence of the Site Campus in that location contributes to the significance of the effects reported in the ES. Constructing the Campus in another location on the island would also result in effects on different landscape and visual receptors, so whilst the Site Campus contributes to the significance of the effects, it is likely to minimise the number of receptors that are affected.
- 4.3.88 The Site Campus would be removed following the construction stage and returned to its pre-developed condition.

Welsh language and culture

- 4.3.89 Paragraph C.9.110 of EN-6 [RD5] notes that some responses received from key consultees at the stage of considering whether the Wylfa site could be potentially suitable for providing nuclear power, expressed concerns that an influx of workers into the area could be damaging to its language, culture and welfare. NPS EN-1 [RD4] and EN-6 [RD5] do not however otherwise provide specific guidance in respect of Welsh language and culture.
- 4.3.90 Planning Policy Wales [RD8] states that Welsh language should be supported by the planning system and Technical Advice Note (TAN) 20 (2013) [RD23] confirms that where the use of Welsh language is a significant part of the social fabric of a community, the interest and needs of the Welsh language should be taken into account.
- 4.3.91 Local planning policy, in the JLDP [RD27], also provides strong support for promoting the Welsh language. Strategic Policy PS 1 of the JLDP [RD27] requires a Welsh Language Impact Assessment (WLIA) (Application Reference Number: 8.21) to be submitted (for planning applications) to show how the proposed development will protect, promote and enhance the Welsh language and PS5 links the protection of the Welsh language with principles of sustainable development.
- 4.3.92 The third bullet point of JLDP [RD27] Policy PS 10 specifically requires proposals for campus style TWA to include appropriate measures to mitigate any adverse impact on the Welsh language and culture.
- 4.3.93 Welsh language and culture is considered at a project wide level in the main body of the Planning Statement.
- 4.3.94 The assessment of the strategy for workforce accommodation as a whole, on Welsh language, is considered in the Wylfa Newydd Project wide analysis in volume B of the WLIA (Application Reference Number: 8.21).
- 4.3.95 The provision of the Site Campus and the facilities within it, during the construction of the Wylfa Newydd Project, provides embedded mitigation to reduce adverse effects on the local housing market and public service facilities. The potential localised Welsh language and culture effects specific to the Site Campus development are assessed with volume C of the WLIA (Application Reference Number: 8.21).
- 4.3.96 The presence of up to 4,000 construction workers at the Site Campus is expected to lead to some increase in the demand for public services and facilities within local communities. However, workers would not be dependent on the community for access to such services, as there would be an extensive provision at the Site Campus (including leisure and recreational amenities, retail and convenience stores, a bar and basic medical services). This increased demand would be beneficial for the local communities as it would contribute towards the safeguarding of community facilities which would maintain sustainable rural communities, where the Welsh language forms an integral part of everyday life.

- 4.3.97 The presence of the construction workers, including those residing at the Site Campus, is expected to lead to additional spend within local businesses, which would be a beneficial effect, contributing towards a sustainable, prosperous rural economy and community.
- 4.3.98 These beneficial effects do need to be balanced against potential adverse effects which would arise due the presence of predominantly non-Welsh-speaking construction workers within community services and facilities, which could dilute the use and prominence of the Welsh language within the community. Horizon would, secured through the s106 agreement, provide language and culture awareness training to all construction and operational staff and require staff to demonstrate linguistic courtesy and awareness of Horizon's Welsh language corporate policy.
- 4.3.99 Other good practice mitigation identified in the Environmental Statement (Application Reference Number: 6.1.1) (for example on noise and vibration and landscape and visual etc.) also help to mitigate potential indirect effects on Welsh language and culture as they relate to effects on environmental amenity (and therefore the quality of life).
- 4.3.100 The WMS establishes the control of potentially adverse effects on local communities, Welsh language and culture, that may be caused by operating the temporary Site Campus. This describes the measures that would manage and control construction workers, including the following.
- All personnel will be required to behave in accordance with the Code of Conduct at all times, regardless of whether they are on-site and off-site within the community. All personnel will receive a copy of the Code of Conduct and will be required to comply with it. Horizon will require construction workers, as part of their orientation, to sign a copy of the code of conduct (acknowledging they have read and understood it).
 - All personnel will be required to attend and complete all necessary induction and training programmes prior to the commencement of work. Training programmes will include information on:
 - community relations and expectations of the workforce in the local communities;
 - Welsh language and culture; both awareness and language skills (training level to correspond to job requirements);
 - health and safety, including occupational health and hygiene;
 - key environmental issues (including legal obligations protections); and
 - job specific-requirements and obligations.
 - All personnel must demonstrate a respect and appreciation for the Welsh language and culture and be encouraged to demonstrate basic linguistic courtesy through developing these skills during their induction and use within the community.
 - All personnel must be courteous to members of the public and respect and support the needs of the communities in which they work.

- 4.3.101 Mitigation during the operation of the Site Campus will include ongoing communication with the neighbouring towns and villages to facilitate the integration and interaction of the Wylfa Newydd Project with the local community. The WLIA (Application Reference Number: 8.21) states that it is envisaged that such communication would be undertaken by the Wylfa Newydd Project Liaison Group via the Community Newsletter that is currently circulated at least twice annually.
- 4.3.102 The CoCP (Application Reference Number: 8.6) sets out the site-specific controls to be complied with in relation to communications and community and stakeholder liaison.
- 4.3.103 These measures ensure that the proposal for the Site Campus satisfies the requirements of JLDP [RD27] policy PS 10 for the inclusion of mitigation mechanisms for the development on Welsh language and culture, and with regard to the strong emphasis on the support for the Welsh language in JLDP [RD27] Policy PS5, Planning Policy Wales [RD8] and TAN20 [RD23].

5 Planning Balance

- 5.1.1 The principle of the need for new nuclear power stations, and that this need is urgent, is established in NPS EN-1 [RD4] and NPS EN-6 [RD5].
- 5.1.2 To support the construction of the Power Station, an appropriate strategy is required for the accommodation of the construction workforce. The Site Campus represents a key component of this strategy and will accommodate up to 4,000 workers on a temporary basis, during the construction period.
- 5.1.3 The Site Campus forms part of the WNDAs which is assessed as a whole at appendix A of this Planning Statement (Application Reference Number: 8.1). This identifies the potential adverse impacts and potential benefits of the Power Station, Marine Works and other on-site development (including the Site Campus). This appendix has therefore addressed the planning principles of the Site Campus in this location.
- 5.1.4 The environmental and social effects of the construction workforce on the existing community is best managed through locating all temporary accommodation in a single, purpose-built campus as close as possible to the Power Station Site.
- 5.1.5 The suitability of the Site Campus location has been tested as part of the application for development consent with further information provided within the volume 2 of the Site Selection Report (Application Reference Number: 8.24.2).
- 5.1.6 The development of the Site Campus in this location is in accordance with the principles of Policy PS10 of the JLDP, which supports campus style temporary accommodation for construction workers on the Wylfa Newydd Project site.
- 5.1.7 The Site Campus satisfies a need for temporary worker accommodation that cannot be met through existing capacity sources.
- 5.1.8 The proposals include a number of significant benefits, in particular the improvements to the health and well-being of the construction workforce by reducing travel times for a proportion of workers.
- 5.1.9 The proposals for the Site Campus will also reduce impacts elsewhere on Anglesey, minimise the number of construction workers travelling on local roads on a daily basis, enable key workers to have immediate and easy access to the Power Station Site and facilitate efficiencies from sharing utilities and services with the Power Station Site.
- 5.1.10 The campus style accommodation provides an easily scalable solution which can respond to actual demand, ensuring that no more accommodation is delivered than required. The modular construction would also enable units to be removed easily, allowing for their reuse elsewhere and the restoration of the site following the Main Construction period.
- 5.1.11 In summary, the Site Campus proposals are appropriate in planning terms in their own right, and are supported by local planning policy including Strategic Policy PS 10 of the JLDP.

- 5.1.12 The facility is also integral to the delivery of the Wylfa Newydd Project and its associated benefits, and should be considered in the context of the urgent need for nuclear power.
- 5.1.13 This Planning Statement has concluded that the development of the Site Campus is acceptable as an individual scheme component in planning terms, however, its contribution to the Project as a whole weighs further in its favour.

6 Conclusion

- 6.1.1 This appendix considers relevant national and local planning policies within the overarching context of NPS EN-1 and NPS EN-6. It demonstrates that, when assessed against these relevant policies and material considerations, the Site Campus benefits from strong policy support and is acceptable in land use planning terms.
- 6.1.2 Whilst the Wylfa Newydd Project as a whole will, in common with any national infrastructure project, result in some adverse effects to the environment and local community, the main report states that these (considered individually or collectively) do not outweigh the important benefits. These benefits would be delivered for the UK as a whole, including a vital role in the provision of safe and secure low carbon electricity, as well as local benefits including jobs creation, investment in the local economy and provision of skills for the local workforce. Together these benefits have the potential to create a significant lasting positive legacy for Anglesey, north Wales and the UK.

Appendix D Park and Ride Planning Statement

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Contents

1	Introduction and purpose	1
1.1	Introduction	1
1.2	Report structure	1
2	Proposed Park and Ride facility	2
2.1	Description of development	2
2.2	Layout, design and scale	2
2.3	Construction programme	4
3	The site and surrounding area	5
3.1	Site location	5
3.2	Existing site characteristics	6
3.3	Planning history	6
4	Principal planning issues	7
4.1	Introduction	7
4.2	Principle of development	7
	<i>Policy context</i>	7
	<i>Assessment</i>	9
4.3	Location of the Park and Ride facility	10
4.4	Other site-specific planning issues	12
	<i>Local amenity (including noise and vibration, air quality, health and wellbeing)</i> 13	
	<i>Biodiversity</i>	17
	<i>Soils and geology</i>	21
	<i>Surface water, groundwater and flood risk</i>	25
	<i>Historic Environment</i>	30
	<i>Landscape and visual</i>	32
	<i>Socio-economics</i>	38
	<i>Traffic and transport</i>	41
	<i>Welsh language</i>	44
5	Planning Balance	47
6	Conclusion	51

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1 Introduction and purpose

1.1 Introduction

- 1.1.1 The provision of a dedicated Park and Ride facility at Dalar Hir is a key part of Horizon's overarching transport strategy for the Wylfa Newydd Development Consent Order (DCO) Project. It would assist in minimising travel demand and maximising opportunities to travel by sustainable modes. This has multiple benefits: reducing carbon emissions, reducing impacts on the amenity of local people and reducing potential traffic congestion.
- 1.1.2 The purpose of this appendix is to consider the site-specific planning issues relevant to the Park and Ride facility. It therefore focuses on only those planning issues which are specific or unique to the Park and Ride facility. Overarching planning issues, such as the justification of the Integrated Traffic and Transport Strategy (ITTS) as a whole, are considered elsewhere in the Planning Statement.

1.2 Report structure

- 1.2.1 This appendix is structured as follows:
- chapter 2 - provides a description of the Park and Ride facility;
 - chapter 3 - provides a site description for the Park and Ride facility;
 - chapter 4 - provides the planning analysis of considerations relating to the Park and Ride facility; and
 - chapter 5 - provides the conclusions to the Planning Statement.
- 1.2.2 A more detailed site analysis and description of the Park and Ride facility is provided in the Environmental Statement (ES) (volume F) (Application Reference Number: 6.6.1-6.6.12) and Design and Access Statement (DAS) (Application Reference Number: 8.2.3). Full details of the consultation process are provided in the Consultation Report (Application Reference Number 5.1).

2 Proposed Park and Ride facility

2.1 Description of development

- 2.1.1 The proposed temporary Park and Ride facility at Dalar Hir forms part of the Wylfa Newydd DCO Project to which this application for development consent relates. Provision of a Park and Ride facility is a key component of the Wylfa Newydd DCO Project's ITTS. The strategy outlines Horizon's proposals for managing the transportation of materials and workers to the Power Station Site, and proposed improvements to the local road network.
- 2.1.2 The Park and Ride facility would support the Main Construction phase of the Power Station. It would allow for secure vehicle parking, and the controlled transportation of workers, by bus, to the Wylfa Newydd Development Area, reducing the number of individual car trips travelling on the local road network. It would not be available for use by the public.
- 2.1.3 The Park and Ride facility consists of:
- secure parking for up to 1,900 cars which includes 10 disabled car spaces, as well as spaces for 55 minibuses and 35 motorbikes;
 - a bus waiting pick up and drop off zone for up to 15 buses with additional parking for up to eight buses;
 - a bus transport facility building to provide transport information, a waiting area, welfare facilities, a bus driver canteen and management office facilities;
 - access to the site via a new roundabout located near the existing A55-A5 junction (Junction 4);
 - landscaping and screen planting for visual mitigation; and
 - other ancillary development, including a cycle store for up to 25 bicycles, signage, fencing, lighting, closed-circuit television (CCTV) and utilities.
- 2.1.4 Following construction of the Power Station, the Park and Ride facility would be removed and the land restored to its existing use (agricultural land), preserving the enhanced hedgerows and areas of habitat created along the Nant Dalar Hir and its tributaries. Reinstatement would seek to restore the original field pattern.

2.2 Layout, design and scale

- 2.2.1 The 'parameters approach' adopted by Horizon identifies defined envelopes for the construction of the Wylfa Newydd DCO Project within which future development will be undertaken.
- 2.2.2 The reason for adopting this approach is to ensure that Horizon has sufficient flexibility to accommodate any design changes that may be required between the DCO being granted and construction commencing.

- 2.2.3 The Project as a whole has been developed adopting a parameters approach but for sites where the design flexibility is relatively fixed, or elements have environmental impacts that need to be controlled/limited, the parameters are defined on a limited basis.
- 2.2.4 For the Park and Ride, where detailed drawings are submitted for approval, the DCO Requirements enable revised plans to be submitted for approval by the relevant planning authority in accordance with the Parameter Plan (WN0902-HZDCO-ADV-DRG-00032 Rev 0.5, Application Reference Number: 2.11), and design principles set out in section 3.4 of the DAS (Application Reference Number: 8.2.3).
- 2.2.5 The Parameters Plan proposes that the positions of buildings and structures would be flexible to within a 5m zone relative to the positions shown on the drawings.
- 2.2.6 It is proposed that the length and width of buildings would have a tolerance (as shown on the Parameter Plan (WN0902-HZDCO-ADV-DRG-00032 Rev 0.5, Application Reference Number 2.11) to pre-empt differences in manufacturers' module details and cladding extent.
- 2.2.7 The proposed site for the Park and Ride facility covers 15.61ha of land approximately rectangular in shape. A small strip of land to the south of the site (for screening planting) covers an additional 0.47ha, and a further 3.52ha would be required for Off-Site road works associated with the Park and Ride facility. Figure F1 – 1 of the ES (Application Reference Number: 6.6.1) shows the site location and boundary.
- 2.2.8 The layout of the Park and Ride facility has been developed to maximise the retention of the key characteristics, break down the scale of the areas of parking and to reduce the potential impact of the building and bus transfer area.
- 2.2.9 Vehicular and pedestrian access to the Park and Ride facility would be via a new access, in the form of a new roundabout at A55-A5 Junction 4. This has been designed to minimise congestion on the public roads immediately adjacent to the site.
- 2.2.10 The site will comprise five car parking areas, an accessible parking/staff parking area and a bus waiting/drop off/pick up zone, incorporating a bus storage area with eight spaces. In total, there will be up to 1,900 private car parking spaces divided across the five private parking areas. The two largest of the private car parking areas are located in the south and just beyond the Dalar Hir stream south-east of the site, both running parallel to the A5 and the A55. The three-remaining areas sit to the north of the site.
- 2.2.11 The bus transport facility building would be located centrally on the site in order to minimise the pedestrian route from the furthestmost car parking bay areas, as well as to effectively maximise the distance from this building to sensitive receptors off the site. The bus waiting, pick up and drop off zone would be located next to the bus transport facility in order to reduce boarding time.

- 2.2.12 The environmental context of the site was early in the design process and has been taken into account from the outset. This included the consideration of protected species, existing hedgerows, existing watercourses and drainage ditches, as well as existing boundary habitats and planting. These have influenced the overall layout of the site which is illustrated on the plans (WN0902-HZDCO-ADV-DRG-00033-00047) and in Volume 3 of the Design and Access Statement (Application Reference Number: 8.2.3).
- 2.2.13 There would be ecological protection buffer zones around the Nant Dalar Hir, its main tributary (the wet ditch located near the centre of the site) and around water discharge locations. Further ecological buffer zones would also be created around hedgerows and also around an existing badger set in the north of the site.
- 2.2.14 The proposal identifies, retains and enhances key hedgerows and watercourses and uses these elements to create a layer of separation between the areas of parking and to connect the site visually and physically to the scale and pattern of the surrounding landscape.
- 2.2.15 The hedgerows on the northern, western and eastern boundaries will be bolstered with additional tree and shrub planting and species rich grass sown along the hedgerow. At the vehicle entrance to the site, existing stone walling and hedgerows will be reinstated and the existing tree and shrub planting on the southern boundary will be retained and enhanced to screen views from the A5. Additional planting will be provided, south of the A5 to further reinforce this long-term screen.
- 2.2.16 The overall architectural design approach for the Park and Ride has been driven by the desire to create an unimposing appearance, where the buildings are screened as far as possible, and where visible, they are of an appearance that allows them to harmonise with, and complement, the surroundings. Natural colours would be adopted for the buildings on-site, helping to link them visually, and enabling them to be unimposing within their surroundings.
- 2.2.17 The buildings on-site would be temporary and would be dismantled following construction of the Power Station. They would therefore be pre-fabricated modular units with an external cladding, and designed with simplicity and efficiency of construction and removal as a priority. The final proposed design would be developed to ensure that it responds to the local context, recognising that, although temporary in nature, the developments would be in situ until the construction of the Power Station has ceased.
- 2.2.18 The bus terminal building proposed is a maximum of 13m wide and 30m long and 5m high, with dedicated facilities for bus drivers, staff facilities and toilets for all users.

2.3 Construction programme

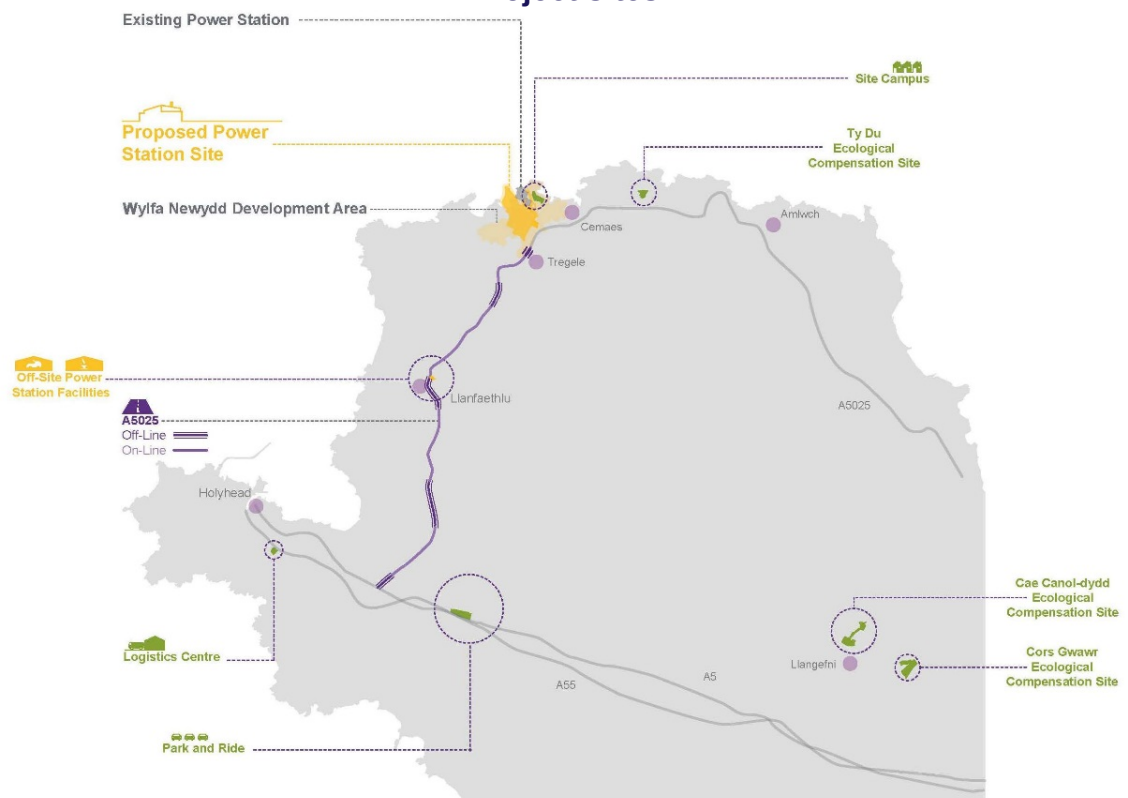
- 2.3.1 It is anticipated that construction of the Park and Ride facility would commence in the first year following grant of development consent and last for approximately 18 months. It is anticipated that the Park and Ride facility would be operated for approximately 10 years.

3 The site and surrounding area

3.1 Site location

- 3.1.1 The site is located immediately to the north-east of Junction 4 on the A55 and approximately 18.5km south-west of the Wylfa Newydd Development Area. See figure 3-1 below for the location of the Park and Ride facility within the context of the other Wylfa Newydd DCO Project sites.
- 3.1.2 The site's location immediately to the north-east of Junction 4 of the A55 allows easy access to the road network. It is bounded to the south by Holyhead Road (the A5), and to the west by the local London Road that links the A55 to the village of Bodedern. To the immediate east is the Cartio Môn go-karting centre, whilst to the west is a Driver and Vehicle Standards Agency (formally known as VOSA) weighbridge and lorry checkpoint. Hedgerows mark the northern and eastern extent of the Park and Ride facility site.
- 3.1.3 The north, east and west of the site are characterised by open countryside with isolated farm properties.
- 3.1.4 The Park and Ride facility site and surrounding area is rural in nature with a number of isolated farm properties nearby, including two farmsteads (the Dalar Hir farmhouse on the site and the Bryngoleu farmhouse approximately 200m east, at the site of the Cartio Môn Go-Karting centre). The Dalar Hir farmhouse is vacant and the development proposals include its demolition. The Bryngoleu farmhouse is the closest residential receptor.

Figure 3-1 Park and Ride facility within the context of the Wylfa Newydd DCO Project sites



3.2 Existing site characteristics

- 3.2.1 The site at Dalar Hir consists of irregular field patterns with hedge boundaries and wet grassland. The Dalar Hir site appears generally flat with a slight fall from north to south and east towards the A5. The ground rises gently at the western and eastern sides of the site, with drier ground reflected in denser planting belts.
- 3.2.2 The closest Special Landscape Areas (SLAs) to the site of the Park and Ride facility are 14: Mynydd Mechell SLA, located approximately 10km to the north of the site; and 11: Maltreath Marsh and Surrounds SLA, located approximately 9km to the south-east. The Llynnau y Fali – Valley Lakes Site of Special Scientific Interest (SSSI) is located 1.2km south-west of the Dalar Hir site. This SSSI consists of a series of small shallow lakes, supporting a variety of aquatic flora and fauna: the northernmost of these (Llyn Dinam) is a designated Special Area of Conservation (SAC). Llyn Traffwl SSSI is located 900m to the south; this is designated for its shallow lake supporting wildfowl.
- 3.2.3 The Dalar Hir stream and tributary flows from north to south, through the eastern section of the site, before flowing under the A5. There are a number of small watercourses both within the site itself, and in the immediate surrounds.
- 3.2.4 There are badger setts located in the north-east and north-west of the site which have been considered in the layout and design of the proposals.

3.3 Planning history

- 3.3.1 The site comprises predominately previously undeveloped agricultural land and therefore has limited planning history. Of a small cluster of buildings making up a former farmstead on the west of the site, only the ground floor slab of a previous house, with an access road from the A5 remains.

4 Principal planning issues

4.1 Introduction

- 4.1.1 The purpose of this section is to present and analyse the site-specific planning considerations that emerge from the planning policy background, site characteristics and issues, as well as the feedback raised through the Pre-Application Consultation process.
- 4.1.2 A detailed assessment of the likely effects of the construction, operation and decommissioning of the Park and Ride facility can be found in volume F of the ES (Application Reference Number: 6.6.1-6.6.12).
- 4.1.3 The parameters are included in Schedule 2 and 3 of the DCO (Application Reference Number: 3.1). Design principles for the Park and Ride facility are set out in Volume 3 of the DAS (Application Reference Number: 8.2.3), alongside details of how the design of the scheme has evolved during pre-application discussions.

4.2 Principle of development

Policy context

National Policy Statements

- 4.2.2 In considering the proposed development and weighing the adverse impacts of the proposed development against its benefits, Paragraph 4.1.3 of National Policy Statement (NPS) EN-1 [RD4] states that the decision maker should take into account:
 - “its potential benefits including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits; and
 - its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts”.
- 4.2.3 The Park and Ride facility is vital to the delivery of the Power Station and is recognised as Associated Development accordingly.

Welsh national and local policy

- 4.2.4 Planning Policy Wales (PPW) [RD8] confirms that Park and Ride facilities should normally be considered as one element of a comprehensive planning and transport strategy designed to reduce the overall dependence on cars (paragraph 8.3.3).
- 4.2.5 Policy TRA1 of the Joint Local Development Plan (JLDP) [RD27] confirms that the Councils will support strategically located park and ride facilities within or adjacent to Centres or in other locations close to the main highway network when it can be demonstrated that no alternative sites closer to Centres are

suitable, supported by frequent bus services between the facility and the destination. The same policy confirms that proposals for high quality driver and passenger facilities including but not limited to, seating, information, toilet facilities will be granted planning permission.

- 4.2.6 Supporting text to Policy TRA1 of JLDP [RD27] confirms that the Councils will work with the promoter of the Wylfa Newydd Project to develop an appropriate scheme of transport solutions to mitigate the effects of the construction and operation of the new Power Station. This includes the development of park and ride schemes to control the numbers and timing of traffic movements to the Power Station Site (paragraph 6.1.34).
- 4.2.7 Strategic Policy PS4 of the JLDP [RD27], confirms that the Councils will endeavour to improve accessibility and seek to change travel behaviour by supporting schemes that will improve Park and Ride/share facilities for areas of employment, new development and freight transfer facilities.
- 4.2.8 Strategic Policy PS9 of the JLDP [RD27] states that where there is insufficient transport linkage, the road network does not have sufficient capacity to accommodate the level of traffic which will result from any development or an adverse impact is predicted appropriate improvements to the transport network and the provision of sustainable transport options shall be provided to mitigate any potential impacts. Strategic Policy 9 also states that *“Community infrastructure facilities will be provided for construction workers, for example, park and ride or park and share facilities, shops, healthcare and sports and leisure facilities”*.
- 4.2.9 Strategic Policy PS 12 of the JLDP [RD27] states that to minimise the need for construction workers and workers that service the facility to travel by private car, the Councils will require that the park and ride facility is located within or adjacent to development boundaries of Centres located along or close to the A5/A55; or in other locations along the A5/A55 where the site is part of a comprehensive approach to mitigating the transport effects of the Project, takes account of the Councils' preference to consider sites closer to Centres, has due regard to landscaping and environmental considerations, and where provision for travel to the site by sustainable means, including public transport and cycling, can be provided.
- 4.2.10 Furthermore, Policy PS12 [RD27] states that proposals should make provision for the enhancement of existing pedestrian and cycle paths and the appropriate siting of buildings and activities and means of access and egress to mitigate negative impacts on the proposed development on the amenity of local communities.
- 4.2.11 Policy GP14 of the New Nuclear Build at Wylfa: Supplementary Planning Guidance (Wylfa SPG) (2014) [RD28] confirms that long distance travel to the Power Station Site should be reduced through the provision of a Park and Ride facility.

Assessment

- 4.2.12 In the context of NPS EN-1 [RD4] and NPS EN-6 [RD5], examination of the Park and Ride facility proposal should take place recognising the nationally significant benefit the Power Station would play and the pivotal function the Park and Ride facility has in achieving this. The principle of the need for the Power Station is established through NPS EN-1 (paragraphs 3.3.3, 3.3.14-15) [RD4] and NPS EN-6 (paragraph 4.1.1) [RD5] and does not need to be debated in the consideration of this DCO application.
- 4.2.13 Although the principle of the development is established as being acceptable in accordance with NPS EN-1 [RD4] and NPS EN-6 [RD5], the principle of a Park and Ride facility is also in accordance national and local planning policies.
- 4.2.14 The Park and Ride facility is in accordance with the aims of PPW (2016, paragraph 8.3.3) [RD8] as it would reduce the overall dependence on cars by reducing the number of individual trips to the Power Station Site being undertaken by construction workers though consolidating journeys using buses.
- 4.2.15 The principle of the development is acceptable as established through Strategic Policies PS4 and PS9 of the JLDP [RD27]. The Park and Ride facility reflects the requirements of these policies as it would improve accessibility to the Power Station Site and would change travel behaviour of the construction workers and encourages sustainable transport by ensuring that rather than many individual trips to site being undertaken, the journeys can be consolidated through the use of buses and therefore cause less impacts on the A5025.
- 4.2.16 In line with PS12 of the JLDP [RD27], the proposals make provision for new and enhanced pedestrian and cycle paths. The siting of the buildings and accesses has been thoroughly considered to minimise negative impacts on the amenity of the local community. This is discussed further in the section below related to local amenity and within the DAS (Application Reference Number: 8.2.3).
- 4.2.17 The Park and Ride facility would provide a frequent bus service for construction workers for the Power Station in line with the aims of Policy TRA1 of the JLDP [RD27]. Workers would be able to leave their cars in a secure location and be transported to the Power Station Site via buses. The proposed driver and passenger facilities would be temporary albeit would be of high quality through the use of sustainable materials on well-designed buildings (as illustrated in detail in the DAS (Application Reference Number: 8.2.3)).
- 4.2.18 The Park and Ride facility would not be available for use by the public during the construction period of the Power Station because the site is only designed to transport construction workers between Park and Ride facility and the Power Station Site.
- 4.2.19 In line with GP14 of the Wylfa SPG [RD28] long distance travel to the Power Station Site would be reduced through the provision of a Park and Ride facility.

4.3 Location of the Park and Ride facility

- 4.3.1 Policy PCYFF 1 of the JLDP [RD27] states that development outside the development boundaries will be resisted unless it is in accordance with specific policies in this Plan or national planning policies or that the proposal demonstrates that its location in the countryside is essential. The proposed site for the Park and Ride facility is located outside development boundaries however as described below, a site selection process has been undertaken and has found that this is the more suitable site for the facility and therefore why its location in the countryside is essential.
- 4.3.2 A four stage site identification, screening and assessment process was undertaken to identify potentially suitable sites for the Park and Ride facility. Details of this process are provided in Volume 5 of the Site Selection Report submitted with this application (Application Reference Number: 8.24.5).
- 4.3.3 The shortlisted sites at stage four were as follows:
- land Adjacent to Dalar Hir;
 - Tir Ty Mawr Land; and
 - land near Ynys Wen.
- 4.3.4 Following the four stage process noted above Horizon considers that, upon review of all material factors, Dalar Hir is the most suitable site to accommodate the Park and Ride facility and this site has therefore been selected as the proposed location for this facility.
- 4.3.5 Further assessment work carried out by Horizon has determined that part of the site at Dalar Hir lies within low, medium and high surface water flood risk zones (pluvial), and there is potentially a greater risk of fluvial flooding than is suggested by the flood risk mapping produced by Natural Resources Wales. Horizon is developing a solution to mitigate flood risk through design at the Dalar Hir site, including undertaking detailed site specific modelling. Please refer to the Flood Consequences Assessment (Application Reference Number: 6.6.16) submitted with the DCO application for more detail.
- 4.3.6 In addition, there are other material considerations which suggest that Dalar Hir should be preferred, including the potential impact on the SSSI associated with the site at Tir Ty Mawr Land and very close proximity to residential properties associated with site and land near Ynys Wen. Although the latter is capable of being mitigated, it is a factor which weighs in the balance against selecting this site.
- 4.3.7 The site selection process referred to above found that those sites closest to settlements should not be preferred for other material reasons. Specifically, that all potentially available sites closer to Valley lie either fully or partly within Flood Zone C1, compared to the preferred Dalar Hir site which falls outside of an area of flood risk as defined on Natural Resources Wales flood risk maps (Flood Zone A does not appear on NRW flood risk maps).

- 4.3.8 The proposed site at Dalar Hir is adjacent to Junction 4 of the A55 meaning that vehicles would not be required to travel along a single carriage highway for any significant distance and neither buses nor private vehicles would need to pass through a settlement, other than on a main road. The Dalar Hir site is also capable of accommodating all vehicle requirements in a single location which also weighs in its favour.
- 4.3.9 The overall spatial approach in the JLDP [RD27] is also to first consider sites within or closest to settlements. Strategic Policy PS12 confirms where a Park and Ride facility is proposed it should be:
- located within or adjacent to development boundaries of Centres located along or close to the A5/A55; or
 - in other locations along the A5/A55 where the site is part of a comprehensive approach to mitigating the transport effects of the Project;
 - takes account of the Councils' preference to consider sites closer to Centres;
 - has due regard to landscaping and environmental considerations; and
 - where provision for travel to the site by sustainable means, including public transport and cycling, can be provided.
- 4.3.10 In accordance with Strategic Policy PS12 of the JLDP [RD27], the site is located along and close to the A5/A55 and is part of a comprehensive approach to mitigating the transport effects of the Project. The site selection process has taken account of the Council's preference to consider sites closer to Centres but as demonstrated in the Site Selection Report (Application Reference Number: 8.24.5), those sites closest to settlements should not be preferred for other material reasons (see paragraph 4.3.5 above). In accordance with PS 12 of the JLDP [RD27] the design of the proposals has had due regard to landscaping and environmental consideration (as set out in Volume 3 of the DAS (Application Reference Number: 8.2.3) and includes provision for travel to the site by sustainable means (a cycle store is proposed at the Park and Ride facility, footway and cycleway improvements are proposed and the public bus stop on the adjacent A5 would be accessible via a short footway/cycleway).
- 4.3.11 Policy TRA 1 of the JLDP [RD27] states that a number of improvements to the strategic transportation network in the Plan area shown on the Proposals Maps will be secured. One such scheme referred to is the improvements to A5025 Valley to Wylfa and other transport infrastructure improvements associated with the new nuclear development at Wylfa Newydd.
- 4.3.12 Locational guidance within the Wylfa SPG [RD28] supports the principle of Park and Ride facilities at Holyhead and environs (policy GP27), Llangefni and environs (policy GP28) and along the A55/A5 Corridor in proximity to Valley, Gaerwen, Llanfairpwll and Menai Bridge (GP30). The Dalar Hir site is located along the A55/A5 corridor, in proximity to Valley and is therefore considered

to comply with the spatial strategy in the JLDP [RD27] and the locational guidance in the Wylfa SPG [RD28].

- 4.3.13 Given that the site is not allocated for a specific use in the JLDP [RD27]. The use of the site for temporary purposes is considered to be preferable rather than providing an employment legacy use on the site.
- 4.3.14 Therefore, given the above consideration of impacts and having regard to planning policy and guidance, Horizon's functional requirements for Park and Ride facilities and land use constraints, Dalar Hir is the proposed location for a Park and Ride facility to transport construction workers to the Wylfa Newydd Development Area.

4.4 Other site-specific planning issues

- 4.4.1 NPS EN-1 [RD4] and NPS EN-6 [RD5] identify "*generic impacts*" and "*flags for local consideration*". Whilst these are not exhaustive, they provide a helpful guide to the principal issues which the decision maker will be expected to take into account when determining the acceptability of the DCO application.
- 4.4.2 In order to determine the overall acceptability of the proposals, assessment against planning policy is undertaken in this section on all matters deemed material to the consideration of this planning application. These matters are:
- Local amenity (including noise and vibration, air quality, health and wellbeing);
 - biodiversity;
 - soils and geology;
 - surface water and groundwater;
 - historic environment;
 - landscape and visual;
 - socio-economics.
 - traffic and transport; and
 - Welsh language;
- 4.4.3 This Planning Statement uses the assessments contained within accompanying supporting application documents in order to make judgements against planning policy. The ES (volume F) (Application Reference Number: 6.6.1-6.6.12) contains assessments on a number of topic areas covering the above material considerations. The Transport Assessment (Application Reference Number: 6.3.14), Welsh Language Impact Assessment (WLIA) (Application Reference Number: 8.21), Health Impact Assessment (HIA) (Application Reference Number: 8.19) and DAS (Application Reference Number: 8.2.3) are also used to make judgements against those specific issues.

Local amenity (including noise and vibration, air quality, health and wellbeing)

Policy context

National Policy Statements

- 4.4.4 Paragraph 4.13.2 of NPS EN-1 [RD4] states that the ES should assess effects on human beings for each element of the project, identifying any adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts as appropriate. The impacts of more than one development may affect people simultaneously, so the applicant and the decision maker should consider the cumulative impact on health.
- 4.4.5 Paragraph 5.6.4 of NPS EN-1 [RD4] advises that applicants should “...*assess the potential for insect infestation and emissions of odour, dust, steam, smoke and artificial light to have a detrimental impact on amenity, as part of the Environmental Statement*”.
- 4.4.6 Paragraph 5.6.7 of NPS EN-1 [RD4] states that the decision maker should be satisfied that an assessment of the potential for artificial light, dust, odour, smoke, steam and insect infestation to have a detrimental impact on amenity has been carried out and that all reasonable steps have been taken, and will be taken, to minimise any such detrimental impacts.
- 4.4.7 Paragraph 5.6.9 of NPS EN-1 [RD4] states that where the decision maker believes it is appropriate, they may consider attaching requirements to the development consent, in order to secure certain mitigation measures.
- 4.4.8 Paragraph 5.11.1 of NPS EN-1 [RD4] states that excessive noise can have wide-ranging impacts on the quality of human life, health (for example owing to annoyance or sleep disturbance) and use and enjoyment of areas of value such as quiet places and areas with high landscape quality. Similar considerations apply to vibration, which can also cause damage to buildings.
- 4.4.9 Paragraph 5.11.8 of NPS EN-1 [RD4] states that the Project should demonstrate good design through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.
- 4.4.10 Paragraph 5.11.9 of NPS EN-1 [RD4] states that:
- “the decision maker should not grant development consent unless it is satisfied that the proposals will meet the following aims:
- avoid significant adverse impacts on health and quality of life from noise;
 - mitigate and minimise other adverse impacts on health and quality of life from noise; and
 - where possible, contribute to improvements to health and quality of life through the effective management and control of noise”.

4.4.11 Paragraph 5.11.12 of NPS EN-1 [RD4] states that mitigation measures may include one or more of the following:

- engineering: reduction of noise at point of generation and containment of noise generated;
- lay-out: adequate distance between source and noise-sensitive receptors; incorporating good design to minimise noise transmission through screening by natural barriers, or other buildings; and
- administrative: restricting activities allowed on the site; specifying acceptable noise limits; and taking into account seasonality of wildlife in nearby designated sites.

4.4.12 Where a project is likely to have adverse effects on air quality, paragraph 5.2.6 in NPS EN-1 [RD4] requires that an assessment of the impacts of the proposed project should be undertaken as part of the ES. Paragraph 5.2.7 of NPS EN-1 [RD4] identifies the air quality and emission requirements that should be assessed within an ES stating:

“The ES should describe:

- any significant air emissions, their mitigation and any residual effects distinguishing between the project stages and taking account of any significant emissions from any road traffic generated by the project;
- the predicted absolute emission levels of the proposed project, after mitigation methods have been applied;
- existing air quality levels and the relative change in air quality from existing levels; and
- any potential eutrophication impacts”.

4.4.13 Paragraph 3.12.8 of NPS EN-6 [RD5] states that the decision maker should consider the positive effects of employment and other socio-economic impacts on human health and wellbeing.

Welsh national and local policy

4.4.14 PPW [RD8] sets out at chapter 13 (Minimising and Managing Environmental Risks and Pollution) that while planning authorities should not seek to control through planning measures, matters that are the proper concern of the pollution control authority, where pollution considerations affect the use and development of land, they can be material planning considerations.

4.4.15 Paragraph 13.15.1 in PPW [RD8] confirms that noise can be a material planning consideration. Paragraph 13.15.2 in PPW [RD8] also states that special consideration is required where noise-generating development is likely to affect a protected species, or is proposed in or near statutorily designated areas, including urban ‘quiet areas’ designated in Noise Action Plans. It continues to state that the effect of noise on the enjoyment of other areas of landscape, wildlife and historic value should also be taken into account.

- 4.4.16 Policy PCYFF 2 in the JLDP [RD27] states that planning permission will be refused where the proposed development would have an unacceptable adverse impact on:
- “...the health, safety or amenity of occupiers of local residences, other land and property uses or characteristics of the locality due to increased activity, disturbance, vibration, noise, dust, fumes, litter, drainage, light pollution, or other forms of pollution or nuisance”.
- 4.4.17 The Wylfa SPG [RD28] at GP 7 states that the applicant should work with IACC and the Betsi Cadwaladr University Health Board to identify any potentially significant health impacts and appropriate mitigation measures.
- 4.4.18 The Wylfa SPG [RD28] at GP 7 states that Associated Developments should not be proposed where construction activities would give rise to unacceptable impacts on air quality, noise/vibration and light pollution and the amenity of the existing residents, visitors, businesses and construction workers.
- 4.4.19 GP 26 of the Wylfa SPG [RD28] states that IACC expect the applicant to assess measures to reduce disturbance-related impacts such as emissions to air from construction activity and HGV movements.

Assessment

- 4.4.20 In line with paragraph 4.13.2, 5.2.6 and 5.6.7 of NPS EN-1 [RD4], chapter F5 of the ES (Application Reference Number: 6.6.5) has assessed effects on human beings for each element of the project, identifying any adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts as appropriate. The cumulative impact of the project on health is provided in volume I of the ES (Application Reference Number 6.9.1).
- 4.4.21 The proposals would avoid unacceptable disturbance to local communities, through noise, smell, vibration, smoke or air pollution, in accordance with paragraph 5.11.1 of NPS EN-1 [RD4] as well as Policy PCYFF1 of the JLDP [RD27] (as confirmed in chapter F5 of the ES (Application Reference Number 6.6.5)).
- 4.4.22 To protect local amenities, and in line with GP7 of the Wylfa SPG [RD28], mitigation measures are proposed to limit adverse impacts. For example, construction works are not proposed during the sensitive evening and/or night-time periods or during Saturday afternoons, Sundays or bank holidays.
- 4.4.23 The construction of the Park and Ride facility would meet the requirements as set out in the CoCP (Application Reference Number: 8.1). In line with paragraphs 5.11.8 and 5.11.12 of NPS EN-1 [RD4], the potential noise emissions from plant and associated mitigation have been considered. Generic noise and vibration control measures include:
- choice of methodology/technique for operations (including site layout) would be considered in order to eliminate or reduce emissions at sensitive locations;
 - fixed items of construction plant would be electrically powered in preference to diesel or petrol driven;

- wherever practicable fabrication would be undertaken Off-Site;
- noisy plant would be kept as far away as practicable from sensitive areas;
- equipment would be well-maintained and would be used in the mode of operation that minimises noise as far as practicable;
- equipment would be shut down when not in use or throttled down to a minimum during any waiting periods;
- vehicles and mechanical plant employed for any activity associated with the construction works would be fitted with effective exhaust silencers/suppression equipment;
- plant employed for any activity associated with the construction works would be operated in a manner such that noise emissions are controlled and limited as far as reasonably practicable;
- vehicles would not wait or queue on the public highway with engines running (unless the engine is required to power the operation of the vehicle e.g. concrete wagon); and
- all materials would be handled in a manner that minimises noise as far as practicable.

4.4.24 The following embedded mitigation has been identified for inclusion in the design and layout of the operation of the Park and Ride facility:

- the proposed Park and Ride facility is positioned in a general location which is of relatively low sensitivity to noise and vibration;
- the proposed Park and Ride facility is positioned relatively far away from residential communities;
- the main bus transfer building is positioned in a central location on the site, and noise sources are therefore likely to be at the furthest location from any point on the site perimeter;
- the bus routes have been designed as a one-way system in order to avoid the need for reversing buses; and
- the bus bays are positioned such that the closest receptors benefit from the screening of the main bus transfer building.

4.4.25 The operation of the Park and Ride facility would meet the requirements set out in CoCP (Application Reference Number: 8.1). Good practice mitigation measures to be implemented during the operation of the Park and Ride facility include:

- where practicable, buses would wait with their engines switched off;
- buses would not wait on the public highway with engines running; and
- the use of horns would not be permitted for non-emergency situations (e.g. to signal the attention of Park and Ride facility staff upon arrival).

- 4.4.26 Paragraph 5.11.9 of NPS EN-1 [RD4] states that the decision maker should not grant consent unless it is satisfied that the proposals will meet the aim of avoiding significant adverse impacts on the health and quality of life from noise and mitigate and minimise other adverse impacts on health and quality of life. In line with this, no significant adverse noise and vibration effects are anticipated during the construction, operation or decommissioning phases of the Park and Ride facility.
- 4.4.27 Chapter 5 of volume F of the ES (Application Reference Number: 6.6.5) considers air quality impacts (excluding air quality effects associated with emissions from traffic, which are covered in chapter C4 which covers project-wide effects of road traffic upon air quality). No potentially significant air quality effects have been identified and there is not a requirement for additional mitigation.
- 4.4.28 The relevant and appropriate measures to mitigate dust emissions generated by the construction works have been taken forward from those set out in appendix F5-1 (Application Reference Number: 6.6.13) to the air quality management strategies within the CoCP (Application Reference Number: 8.6) and Park and Ride sub-CoCP (Application Reference Number: 8.10).
- 4.4.29 During scoping of the EIA, public access and recreation was scoped out of the assessment for the Park and Ride facility on the basis that there are no Public Rights of Way or footpaths within, or near to, the site. The nearest footpath is over 300m to the north of the site.
- 4.4.30 In line with paragraph 3.12.8 of NPS EN-6 [RD5] the effects of employment and other socio-economic impacts on human health and wellbeing have been considered. The conclusion of the rapid HIA screening for the Park and Ride facility (Application Reference Number: 8.19) is however that there are no potentially significant health effects that warrant further assessment.
- 4.4.31 In conclusion, the Park and Ride facility proposals would not result in any unacceptable adverse impacts on local amenities and is therefore considered to accord with NPS EN-1 [RD4], in particular paragraphs 4.13.2, 5.6.7 and 5.11.1 as well as PPW (paragraph 13.5.1) [RD8], Policy PCYFF1 and 2 of the JLDP [RD27] and GP7 and GP26 of the Wylfa SPG [RD28].

Biodiversity

Policy context

National Policy Statements

- 4.4.32 Generic biodiversity conservation impacts of new energy NSIPs are covered in section 5.3 of NPS EN-1 [RD4].
- 4.4.33 Paragraph 5.3.3 in NPS EN-1 [RD4] requires an ES to clearly set out:
“...any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity”.

- 4.4.34 Further, paragraph 5.3.4 in NPS EN-1 [RD4] states that the applicant should show how the proposals have taken advantage of opportunities to conserve and enhance biodiversity interests.
- 4.4.35 Paragraph 5.3.7 NPS EN-1 [RD4] states that as a general principle, and subject to other paragraphs in NPS EN-1 [RD4], development should aim to avoid significant harm to biodiversity interests, including through mitigation and consideration of reasonable alternatives; where significant harm cannot be avoided, then appropriate compensation measures should be sought.
- 4.4.36 Paragraphs 5.3.18 and 5.3.19 of NPS EN-1 [RD4] identify that the applicant should include appropriate mitigation measures as an integral part of the proposed development. Paragraph 3.9.6 of NPS EN-6 [RD5] states that potential mitigation measures could include variations to building layout to avoid ecologically sensitive areas and on-site measures to protect habitats and species and to avoid or minimise pollution and the disturbance of wildlife.

Welsh national and local policy

- 4.4.37 Paragraph 5.2.8 of PPW [RD8] states that the planning system should promote biodiversity objectives and seek to minimise the fragmentation of habitats.
- 4.4.38 The planning system has an important part to play in meeting biodiversity objectives by promoting approaches to development which create new opportunities to enhance biodiversity, prevent biodiversity losses, or compensate for losses where damage is unavoidable. Paragraph 5.2.8 in PPW [RD8] confirms that the adaptation needs of biodiversity could be considered by identifying the scope for minimising or reversing the fragmentation of habitats and improving habitat connectivity through the promotion of wildlife corridors.
- 4.4.39 Policy PCYFF 2 in the JLDP [RD27] states that proposals should include provision for the appropriate management and eradication of invasive species.
- 4.4.40 Strategic Policy PS 5 in the JLDP [RD27] states that development will be supported where it is demonstrated that it is consistent with the principles of sustainable development. It also states that all proposals should protect and improve the quality of the natural environment, its landscapes and biodiversity assets.
- 4.4.41 Strategic Policy PS 9 in the JLDP [RD27] requires all Associated Development to avoid, minimise, mitigate or compensate for potentially adverse ecological impacts in the local and wider area, both in the short and longer term.
- 4.4.42 Strategic Policy PS 19 in the JLDP [RD27] states that the Councils will manage development so as to conserve and where appropriate enhance the distinctive natural environment, countryside and coastline, and that proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area. Strategic Policy PS 19 also states that when determining planning application, consideration should be *inter alia* to the following items.

- Safeguarding habitats and species and geology.
 - Protecting or where appropriate enhancing sites of international, national, regional and local importance and, where appropriate, their settings in line with National Policy.
 - Protecting or enhancing biodiversity through networks of green/blue infrastructure and/or restoring networks of natural habitats.
 - Protecting, retaining or enhancing trees, hedgerows or woodland of ecological value.
 - Having appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with National Policy.
- 4.4.43 Policy AMG 5 in the JLDP [RD27] states that proposals must protect and, where appropriate, enhance biodiversity that has been identified as being important to the local area. This policy also confirms that proposals affecting sites of local biodiversity importance will be refused unless they can conform with all of the following criteria:
- “That there are no other satisfactory alternative sites available for the development.
 - The need for the development outweighs the importance of the site for local nature conservation.
 - That appropriate mitigation or compensation measures are included as part of the proposal”.
- 4.4.44 Section 4.10 of the Wylfa SPG [RD28] relates to the natural environment and GP 20 states that the Wylfa Newydd DCO Project should seek to ensure that the island's unique and distinctive natural environment is conserved and, where possible, enhanced. This includes the consideration of, among other things:
- the integrity of statutory and non-statutory sites for nature conservation;
 - internationally and nationally protected habitats and species; and
 - ecological functionality and relationships within the wider landscape.
- 4.4.45 GP 20 of the Wylfa SPG [RD28] states that *inter alia*; protected species, the ecological functionality of nature conservation sites, SACs, Special Protection Areas (SPAs), SSSIs, Regionally Important Geological/Geodiversity Sites (RIGS) and the Geopark status of Anglesey should not be subjected to significant adverse impacts, or if they are, sufficient mitigation should be implemented. GP 20 of the Wylfa SPG [RD28] goes on to state that where adverse effects cannot be avoided, the Council seeks appropriate mitigation and/or compensation measures.

Assessment

- 4.4.46 In accordance with paragraph 5.3.3 of NPS EN-1 [RD4] volume F of the ES (Application Reference Number: 6.6.9) clearly sets out the effects on site of ecological and geological conservation importance, on protected species and habitats and other species identified as being of principal importance for the conservation of biodiversity.
- 4.4.47 In line with paragraph 5.3.7 of NPS EN-1, PPW (paragraph 5.2.8) [RD8], AMG5 of the JLDP [RD27], the proposals have sought to avoid and minimise adverse impacts on ecology. The design has been developed to retain the most valuable terrestrial habitats: field edges, hedgerows and riparian habitat, with areas of new planting proposed. A minor positive effect on these species groups is predicted as a result of the additional planting.
- 4.4.48 The loss of freshwater habitats would occur in the Nant Dalar Hir where the crossing and the drainage infrastructure are constructed. The loss would however be localised with the majority of the watercourse protected by a buffer and, in line with paragraphs 5.3.18 and 5.3.19 of NPS EN-1 [RD4], construction activities would be controlled by good practice mitigation.
- 4.4.49 Disturbance from noise and vibration could affect fish, breeding birds, badgers and water vole. Paragraph 3.9.6 of NPS EN-6 [RD5] states that mitigation options include variations to building layout to avoid ecologically sensitive areas and on-site measures to protect habitats and species and to avoid or minimise pollution and the disturbance of wildlife. In line with this, proposed embedded mitigation in the form of the buffer zones around ecological features, and good practice mitigation (such as vegetation removal reducing the risk that water voles burrow close to drainage infrastructure installation), result in the effect being predicted to be negligible.
- 4.4.50 Disturbance during the night to fish in watercourses, and commuting and foraging badger and bats is not predicted as there is no night working planned. Furthermore, lighting would be minimised and directed away from watercourses, hedges and the boundary of the Park and Ride facility in general.
- 4.4.51 In line with Policy PCYFF2 of the JLDP [RD27] adherence to the Biosecurity Risk Assessment and Method Statement would ensure that invasive species are safely removed from the Park and Ride facility site, and that their introduction and spread is prevented.
- 4.4.52 The proposed Park and Ride facility does not lie within or adjacent to any statutory or non-statutory designated sites. The Llyn Traffwll SSSI is however located 900m to the south of the site. In accordance with the Wylfa SPG (GP20) [RD28] and Strategic Policy PS5, PS9 and PS19 of the JLDP [RD27], which seek to protect the quality of the natural environment, chapter F9 of the ES (Application Reference Number: 6.6.9) considers impacts on the Llyn Traffwll SSSI. The assessment confirms that there would be negligible effects on it.
- 4.4.53 In accordance with paragraphs 5.3.18 and 5.3.19 of NPS EN-1 [RD4], the embedded and good practice mitigation for the Park and Ride facility is predicted to avoid and reduce potential effects on all receptors to the extent

that no minor, moderate or major adverse effects on ecological receptors are likely. There would therefore be no significant effects on any ecological receptor and the proposals are therefore in accordance with paragraphs 5.3.4, 5.3.7, 5.3.18, 5.3.19 of NPS EN-1 [RD4], PS19 of the JLDP [RD27] and paragraph 3.9.6 of NPS EN-6 [RD5].

Soils and geology

Policy context

National Policy Statements

- 4.4.54 Paragraph 5.10.8 of NPS EN-1 [RD4] states that development should seek to minimise impacts on “*best and most versatile*” agricultural land and preferably use land in areas of poorer quality except where this would be inconsistent with other sustainability considerations. Paragraph 5.10.8 states that applicants should also identify any effects and seek to minimise impacts on soil quality taking into account any mitigation measures proposed. For developments on previously developed land, applicants should ensure that they have considered the risk posed by land contamination.
- 4.4.55 Paragraph 5.10.15 of NPS EN-1 [RD4] states that the decision maker should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. Paragraph 5.10.15 continues to state that decision makers should give little weight to the loss of poorer quality agricultural land (in grades 3b, 4 and 5).
- 4.4.56 NPS EN-1 [RD4] states at paragraph 5.3.3 that, where the development is subject to Environmental Impact Assessment (EIA), the applicant should ensure that the ES clearly sets out any effects on internationally, nationally and locally designated sites of geological conservation importance.
- 4.4.57 NPS EN-6 [RD5] states at paragraph 3.7.8 that “*the contamination of water resources can be mitigated through the EIA process and managed through the possible implementation of Environmental Management Plans*”.

Welsh national and local policy

- 4.4.58 PPW [RD8] states at paragraph 13.7.1 that planning decisions need to take into account:
- the potential hazard that contamination presents to the development itself, its occupants and the local environment; and
 - the results of a specialist investigation and assessment by the developer to determine the contamination of the ground and to identify any remedial measures required to deal with any contamination.
- 4.4.59 PPW [RD8] states at paragraph 4.10.1 that the best and most versatile agricultural land (Grades 1, 2 and 3a) should be conserved as a finite resource for the future and that considerable weight should be given to protecting such land from development, because of its special importance. This paragraph also clarifies that the best and most versatile agricultural land should only be

developed if there is an overriding need for the development, and either previously developed land or land in lower agricultural grades is unavailable, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations. Paragraph 4.10.1 in PPW [RD8] also states that if the best and most versatile agricultural land does need to be developed, and there is a choice between sites of different grades, development should be directed to land of the lowest grade.

- 4.4.60 Strategic Policy PS6 in the JLDP [RD27] states that proposals will only be permitted where it is demonstrated with appropriate evidence that the applicant has fully taken account of and responded to the need to safeguarding the best and most versatile agricultural land.
- 4.4.61 JLDP [RD27] Policy PS 19 states that proposals that have a significant adverse effect on the areas distinctive natural environment, countryside and coastline will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area. This policy also clarifies that consideration should be given to safeguarding the geology of the area.
- 4.4.62 Policy AMG 3 in the JLDP [RD27] confirms that proposals will be granted provided that they do not have a significant adverse impact upon features and qualities which are unique to the local landscape in terms of visual, historic, geological, ecological or cultural aspects.
- 4.4.63 GP 20 of the Wylfa SPG [RD28] states that SSSIs, RIGS and the Geopark status of Anglesey should not be subjected to significant adverse impacts, or if they are, sufficient mitigation should be implemented. GP20 also advocates the remediation of contaminated land at GP 20 as a possible mitigation and compensation measure.
- 4.4.64 GP 26 [RD28] of the Wylfa SPG [RD28] highlights that agricultural land should be reinstated where development is temporary.

Assessment

- 4.4.65 No potential significant adverse effects have been identified in respect of soils and geology (as confirmed in chapter F7 of the ES (Application Reference Number: 6.6.7)). The study area (the site and 250m surrounding the site) is predominantly agricultural in nature, with soils at the site primarily of low fertility that are typically suitable to support pastures and woodland. Surveys have indicated that the soils comprise moderate quality soils for the whole study area (Subgrade 3b).
- 4.4.66 The Park and Ride site is comprised only of Subgrade 3b (moderate quality) agricultural land and therefore in line with paragraph 5.10.8 and 5.10.15 of NPS EN-1 [RD4], paragraph 4.10.1 of PPW [RD8], and Strategic Policy PS6 and PS19 in the JLDP [RD27], “*best and most versatile*” agricultural land is not impacted by the Park and Ride facility proposals.
- 4.4.67 Topsoil is proposed to be stripped throughout the site (with the exception of environmental buffer areas) and removed from site. This would prevent loss

of the resource, although damage could occur to these soils if the works are undertaken inappropriately. In accordance with paragraph 5.3.7 of NPS EN-1 [RD4], the development aims to avoid significant harm to geological conservation interests. Topsoil and subsoil (where necessary) would be stripped from where construction activities would otherwise affect (e.g. compact or seal) it, as identified above. This would be undertaken towards the start of the construction works. The topsoil (and subsoil) would then be reused sustainably within the Wylfa Newydd Project or at a suitable third-party receptor site (e.g. via the Contaminated Land: Applications in Real Environments (CL:AIRE) Register of Materials).

4.4.68 Good practice mitigation during construction would follow guidance on soil management such as the *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites*. The measures would include:

- appropriate procedures for soil handling, such as stopping works when soil moisture exceeds certain limits;
- appropriate segregation of soils, including the segregation of topsoils and subsoils, as well as soils of distinctly different qualities, types or composition;
- soils would be stockpiled using methods appropriate to the soil moisture conditions;
- the height of topsoil storage mounds would be limited to 2m in order to reduce potential adverse effects on topsoil quality and suitability for reuse;
- soil storage mounds would have slopes of 1 in 2 (approximately 25°) or less; and
- where soils would be stored for longer than 60 days, stockpiles would be seeded with an appropriate low-maintenance seed mix.

4.4.69 Implementation of the soil management measures set out within section 9 of the Wylfa Newydd CoCP (Application Reference Number: 8.6) and Park and Ride sub-CoCP (Application Reference Number: 8.10) would reduce effects on soil quality resulting from the stripping, handling and reuse of soil during construction works (this includes soil potentially reused elsewhere within the Wylfa Newydd Project). This would reduce effects on topsoil to residual minor adverse effects. Best practice soil management measures would also be adopted during decommissioning when soils would be imported to return the land to agricultural use.

4.4.70 In accordance with PPW (paragraph 13.7.1) [RD8] Horizon have considered the potential hazard that contamination presents. The IACC has confirmed that there are no statutory areas of Contaminated Land (Part 2A) within the study area, no known landfill sites and no Pollution Prevention and Control Act 1999 permit holders within the study area. Based on the baseline assessment the presence of artificial/made ground is considered unlikely beneath the majority of the site due to its agricultural and pastoral nature, and significant on site contamination is not anticipated.

- 4.4.71 The geology underlying the site comprises mainly glacial tills (clays) overlying metamorphic rocks of the New Harbour Group and undifferentiated Ordovician Rocks to the east. GeoMôn and NRW have confirmed there are no sites of geological importance within the study area, so there are no predicted significant effects on geology.
- 4.4.72 A Category 2 Aggregate Safeguarding Area has been identified in the eastern portion of the site relating to sandstone deposits. These are of local and regional importance, but given that the construction of the Park and Ride facility would not significantly disturb the deposits, and sterilisation (by building over the deposits) would be short lived, the effects on this receptor are considered to be not significant.
- 4.4.73 Paragraph 3.7.8 of NPS EN-6 [RD5] states that contamination of soils and water resources can be mitigated through the EIA process. As such, embedded mitigation is proposed and includes stripping topsoil to a depth of 300mm from all areas of the site where development is taking place, with the exception of the environmental buffer areas. Any topsoil and subsoil removed from site would be reused sustainably, either elsewhere within the Wylfa Newydd Project or at a suitable third-party receptor site.
- 4.4.74 The CoCP (Application Reference Number: 8.6) sets out the overarching management strategies for dealing with land contamination. The sub-CoCP for the Park and Ride (Application Reference Number: 8.1) sets out the specific good practice mitigation measures associated with the construction of the Park and Ride facility.
- 4.4.75 Good practice mitigation during construction would include the implementation of a number of measures to reduce risks to human health and the environment. These would include the following.
- A ground investigation with appropriate sampling for chemical analysis would be undertaken prior to construction, followed by a risk assessment. If the risk assessment identifies the need for remediation, a remediation strategy would be prepared in accordance with the requirements of Contaminated Land Report 11: Model Procedures for the Management of Land Contamination. Any remediation would be designed to mitigate risks from contamination and reduce effects to receptors during construction and operation.
 - Processes and procedures would be put in place for dealing with any areas of unexpected contamination, in order to: manage immediate risks; undertake appropriate sampling and assessment; and identify suitable remediation or disposal options.
- 4.4.76 Contamination effects are expected to be negligible as they have been assessed and identified through the EIA process in line with NPS EN-6 (paragraph 3.7.6) [RD5].
- 4.4.77 In line with GP26 of the Wylfa SPG [RD28] the agricultural land will be reinstated once the site is no longer needed to support the construction of the Power Station.

- 4.4.78 The above measures ensure that the Park and Ride facility would not result in an unacceptable adverse impact on soils and geology and therefore are in line with NPS EN-1 (paragraphs 5.3.3, 5.3.7, 5.10.8) [RD4] and NPS EN-6 (paragraph 3.7.6) [RD5], as well as PPW (paragraph 13.7.1 and 4.10.1) [RD8] and policies PCYFF1, AMG 3 and PS6 of the JLDP [RD27].

Surface water, groundwater and flood risk

Policy context

National Policy Statements

- 4.4.79 Paragraph 5.15.2 of NPS EN-1 [RD4] states that where a project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and impacts of the proposed project on, water quality, water resources and physical characteristics of the water environment as part of the ES (Application Reference Number: 6.6.1-6.6.12).
- 4.4.80 Paragraph 5.15.9 and 5.15.10 of NPS EN-1 [RD4] states that the risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution practice and impacts on local water resources can be minimised through planning and design for the efficient use of water, including water recycling.
- 4.4.81 NPS EN-6 [RD5] states at paragraph 3.6.11 that applicants need to submit a flood risk assessment in accordance with section 5.7 of NPS EN-1 [RD4]. Paragraph 3.6.16 in NPS EN-6 [RD5] states that applicants should set out measures to mitigate the risk of flooding on or from individual sites that may result from the development.
- 4.4.82 Paragraph 5.7.9 of NPS EN-1 [RD4] states that in determining an application for development consent, the decision maker should be satisfied that where relevant:
- the application is supported by an appropriate Flood Risk Assessment;
 - the Sequential Test has been applied as part of site selection;
 - a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;
 - the proposal is in line with any relevant national and local flood risk management strategy;
 - priority has been given to the use of Sustainable Drainage Systems (SuDS); and
 - in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed over the lifetime of the development.
- 4.4.83 Paragraph 5.7.12 in NPS EN-1 [RD4] states that the decision makers should not consent development in Flood Zone 2 in England or Zone B in Wales unless it is satisfied that the Sequential Test requirements have been met. It should not consent development in Flood Zone 3 or Zone C unless it is

satisfied that the Sequential and Exception Test requirements have been met. Paragraph 5.7.12 in NPS EN-1 [RD4] continues to confirm that the technology-specific NPSs set out some exceptions to the application of the Sequential Test. However, when seeking development consent on a site allocated in a development plan through the application of the Sequential Test, informed by a strategic flood risk assessment, paragraph 5.7.12 in NPS EN-1 [RD4] advises that applicants need not apply the Sequential Test, but should apply the sequential approach to locating development within the site.

- 4.4.84 Paragraph 5.7.13 in NPS EN-1 [RD4] describes the Sequential Test, stating:

"Preference should be given to locating projects in Flood Zone 1 in England or Zone A in Wales. If there is no reasonably available site in Flood Zone 1 or Zone A, then projects can be located in Flood Zone 2 or Zone B. If there is no reasonably available site in Flood Zones 1 or 2 or Zones A & B, then nationally significant energy infrastructure projects can be located in Flood Zone 3 or Zone C subject to the Exception Test. Consideration of alternative sites should take account of the policy on alternatives set out in Section 4.4 above".

- 4.4.85 Paragraph 5.7.14 in NPS EN-1 [RD4] then explains the approach to be taken where the Sequential Test cannot be met:

"If, following application of the Sequential Test, it is not possible, consistent with wider sustainability objectives, for the project to be located in zones of lower probability of flooding than Flood Zone 3 or Zone C, the Exception Test can be applied. The test provides a method of managing flood risk while still allowing necessary development to occur".

- 4.4.86 Paragraph 5.7.15 in NPS EN-1 [RD4] clarifies that the exception test is only appropriate for use where the Sequential Test alone cannot deliver an acceptable site, taking into account the need for energy infrastructure to remain operational during floods.

Welsh national and local policy

- 4.4.87 Sections 13.4 of PPW [RD8] sets out the Welsh Government's approach to flood risk and development in areas of high flood risk and dealing with contaminated land such that the development does not impact on the water environment.
- 4.4.88 Paragraph 13.4.2 of PPW [RD8] states that local planning authorities should ensure that development does not increase the risk of flooding elsewhere by loss of flood storage or flood flow route or increase the problem of surface water run-off. Paragraph 13.4.3 of PPW [RD8] confirms that flood risk is a material consideration in the determination of planning applications.
- 4.4.89 Strategic Policy PS 5 in the JLDP [RD27] seeks developments that manage flood risk and maximise use of SuDS.
- 4.4.90 Strategic Policy PS 6 in the JLDP [RD27] asserts that, in order to adapt to effects of climate change, proposals will only be permitted where they are located away from flood risk areas unless it can be clearly demonstrated that there is no risk or that the risk can be managed.

- 4.4.91 Policy PCYFF 3 in the JLDP [RD27] states that proposals would only be permitted where their drainage systems are designed to limit surface water run-off, flood risk and pollution.
- 4.4.92 Policy PCYFF 6 in the JLDP [RD27] requires development to incorporate water conservation measures where practicable, including SuDS. This policy also notes that proposals should use flood minimisation or mitigation measures where possible, to reduce surface water run-off and minimise its contribution to flood risk elsewhere.
- 4.4.93 Strategic Policy PS 5 in the JLDP [RD27] states that proposals should adapt to the unavoidable impacts of climate change, avoiding pollution and reducing the amount of water used and wasted and reducing the effect on water resources and quality.
- 4.4.94 Policy PCYFF 2 in the JLDP [RD27] states that proposals would be refused where they would have an unacceptable adverse impact on the quality of ground or surface water.
- 4.4.95 GP 20 of the Wylfa SPG [RD28] states that the release of potentially polluting substances to air, water or land should be minimised. GP 21 states that the Wylfa Newydd Project should include measures to control surface water runoff where the potential for adverse impacts is identified.

Assessment

- 4.4.96 In accordance with paragraph 5.15.2 of NPS EN-1 [RD4], Horizon has undertaken an assessment of the existing status of, and the impacts of the proposed project on water quality, water resources and physical characteristics of the water environment as part of the ES (see chapter F8 (Application Reference Number 6.6.8)). This assessment found that no residual significant adverse effects were identified for the construction and decommissioning phases.
- 4.4.97 No significant adverse residual effects have been identified for the construction and decommissioning phases or for fluvial geomorphology and groundwater. As such, the proposals are in accordance with Policy PCYFF 2 of the JLDP [RD27]. During the operation phase, prior to additional mitigation measures, there is potential for a moderate adverse effect due to increased flooding (due to change in land levels and impermeable areas).
- 4.4.98 The Park and Ride is classified as being within Flood Zone A, which means that there is considered to be little to no risk of fluvial or tidal flooding to the site. However, the size of Nant Dalar Hir and its catchment means that it will not have been included in the modelling used to produce TAN15's Development Advice Maps. Therefore, site-specific modelling was carried out to assess the fluvial risk.
- 4.4.99 The site-specific modelling showed that there is a high risk of fluvial flooding associated with the Nant Dalar Hir, which is influenced by the culvert under the A55 which acts as a point of constriction thereby limiting flows. This risk area spans approximately 250m across the southern edge of the Park and

Ride facility and through the centre of the site, although the risk lessens towards the northern edge.

4.4.100 Modelling for the pluvial flood risk has shown that there are four high risk areas within the Park and Ride facility. These are as follows:

- the eastern edge of the Park and Ride facility, along the Nant Dalar Hir;
- the southern edge of the Park and Ride facility, where flows pond along both Holyhead Road and the A55 as the Nant Dalar Hir enters culverts under these roads;
- the centre of the Park and Ride facility from north to south; and
- the north-western corner.

4.4.101 There is potential for an increase in surface water flooding within the Park and Ride facility due to the increase in impermeable areas and changes in land levels resulting in an increase in runoff and a reduction in flood storage. Paragraph 5.15.9 and 5.15.10 of NPS EN-1 [RD4] states that the risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution practice and impacts on local water resources can be minimised through planning and design for the efficient use of water, including water recycling. The embedded mitigation to mitigate this includes storage ponds, and installation of a granular sub-base to allow surface flows in permeable car park areas to permeate to the below-ground storage.

4.4.102 Despite this mitigation a flood risk to the Park and Ride facility remains due to the Park and Ride facility being constructed within the natural floodplain of Nant Dalar Hir and the associated loss of flood storage. The magnitude of change to flood risk is considered to be medium (as defined in table B8-11 of Chapter B8 (Application Reference Number: 6.2.8)) as the changes would remain for the lifetime of the Park and Ride and there would be changes in flow paths and rates. In addition, as the Park and Ride would be subject to flooding the significance of impact to this development is considered to be moderate adverse. This is a significant effect and options for additional mitigation are considered below and in section 8.6 of chapter F8 of the ES (Application Reference Number: 6.6.8).

4.4.103 In line with paragraph 3.6.11-3.6.16 of NPS EN-6 [RD5] which state that applicants need to submit a flood risk assessment and that applicants should set out measures to mitigate the risk of flooding on or from individual sites that may result from the development, a flood consequences assessment has been submitted with the DCO (Application Reference Number: 6.4.29) and proposed additional mitigation measures would be implemented to address potential significant flooding effects as identified above for the operational period. This additional mitigation comprises further detailed manipulation of the topography of the Park and Ride to be progressed and redirection of flow paths would be used to manage the flood waters from both fluvial and pluvial sources within the Park and Ride without increasing flood risk elsewhere. This reduces the potential effect to minor adverse. A design principle contained

within the DAS will secure a flood compensation scheme (Application Reference Number: 8.2.3).

- 4.4.104 Paragraph 5.7.9 of NPS EN-1 [RD4] states that decision makers should be satisfied that where relevant the Sequential Test requirements have been applied as part of site selection. The Site Selection Report (Application Reference Number: 8.24.5) confirms that this is the case. This finds that there is no other reasonably available site in Flood Zone 1 or Zone A and therefore the project can be located on the Dalar Hir site. The Exceptions Test does not need to be applied as the site is not located within Flood Zone C.
- 4.4.105 As per paragraph 5.7.9 of NPS EN-1 [RD4], the proposed layout of the Park and Ride facility site has followed a sequential approach at site level to minimise risk. This involves directing the most vulnerable uses to areas of lowest flood risk. The four high-risk areas within the Park and Ride facility site are as set out above in paragraph 4.4.46 and chapter F8 of the ES (Application Reference Number: 6.6.8). The bus terminal building is not proposed in the highest risk area of the site. The development layout has been designed to keep the number of watercourse crossings on the access road to each car park to a minimum by optimising the size of each car park to the number of access points. In addition, the size, shape and orientation of each parking area has been designed to avoid unnecessary watercourse crossings. Buffer strips have been embedded into the design either side of the Nant Dalar Hir and either side of drainage ditches where no development would occur.
- 4.4.106 In line with paragraph 13.4.2 of PPW [RD8] the development will not increase the risk of flooding elsewhere by loss of flood storage or flood flow route or increase the problem of surface water run-off. The detailed design of the Park and Ride facility is required to be designed in accordance with the design principles in the DAS (Application Reference Number: 8.2.3). A design principle which will be need to be adhered states “*further detailed manipulation of the topography of the Park and Ride to be progressed and redirection of flow paths will be used to manage the flood waters from both fluvial and pluvial sources within the Park and Ride without increasing flood risk elsewhere*”. The risk of flooding is capable of being managed and therefore the proposals are in accordance with Strategic Policy PS6 in the JLDP [RD27].
- 4.4.107 In line with Strategic Policy PS 5, and PCYFF 3 and PCYFF 6 of the JLDP [RD27], the Park and Ride facility comprises SuDS including permeable paving used where possible to improve drainage and facilitate the site’s return to agricultural use.
- 4.4.108 The Water Framework Directive (WFD) Compliance Assessment (Application Reference Number 8.26) provides a detailed overview of the potential impacts of the Park and Ride on each quality element of the Crigyll WFD catchment and the Ynys Môn Secondary. The assessment concludes that the Park and Ride facility would be compliant and would not cause a deterioration or prevent the water bodies from achieving Good Status. The impacts are not anticipated to prevent any mitigation measures for the WFD water bodies from being implemented.

Historic Environment

Policy context

National Policy Statements

- 4.4.109 Paragraph 1.7.2 of NPS EN-1 [RD4] states that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects on cultural heritage.
- 4.4.110 Paragraph 5.8.1 of NPS EN-1 [RD4] recognises that the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment.
- 4.4.111 Paragraph 5.8.2 of NPS EN-1 [RD4] confirms that those elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest are called 'heritage assets'.
- 4.4.112 Paragraph 5.8.14 of NPS EN-1 [RD4] states that *"there should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be"*. Paragraph 5.8.14 of NPS EN-1 [RD4] also states:
- "Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II* listed buildings; grade I and II* registered parks and gardens; and World Heritage Sites, should be wholly exceptional".
- 4.4.113 Paragraph 5.8.15 of NPS EN-1 [RD4] states that any harmful impacts on the significance of designated heritage assets should be *"...weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss"*.
- 4.4.114 Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010 states that when considering whether to give permission for development which affects a Listed Building or its setting, the decision maker must have regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

Welsh national and local policy

- 4.4.115 PPW [RD8] identifies objectives including conserving and enhancing the historic environment at section 6.2. PPW [RD8] confirms that the greater the significance and/or impact on the historic environment, then the greater the benefit needed to justify any harm (paragraph 6.5.1).

- 4.4.116 PPW [RD8] also clarifies at paragraph 6.5.5 that where nationally important archaeological remains, whether scheduled or not, and their settings are likely to be affected by proposed development, there should be a presumption in favour of their physical protection in situ.
- 4.4.117 TAN 12 [RD22] sets out advice on good design, including advice on considering the historic environment in design.
- 4.4.118 At the local level, Strategic Policy PS 5 in the JLDP [RD27] confirms that development will be supported where it is consistent with its sustainable development principles, including preserving and enhancing the quality of the built and historic environment assets including their setting.
- 4.4.119 Policy PS 20 in the JLDP [RD27] states that local planning authorities should endeavour to preserve or enhance heritage assets, both designated and undesignated. Policy PS 20 also states that proposals which preserve and where appropriate enhance the heritage assets, their setting and Significant Views into and out of the building/area will be granted.
- 4.4.120 Policy AT 3 in the JLDP [RD27] states that proposals will be required to conserve and seek opportunities to enhance buildings, structures and areas of locally or regionally significant non-designated heritage assets, which create a sense of local character, identity and variation.

Assessment

- 4.4.121 There are no Scheduled Ancient Monuments (SAMs) within the proposed Park and Ride facility site or that would be affected by the proposed works, and therefore there would be no impact on the archaeological features afforded most protection in planning policy (paragraph 5.8.14 and 5.8.15 of NPS EN-1 [RD4]).
- 4.4.122 Construction of the Park and Ride facility would have adverse effects on archaeological remains as topsoil stripping would result in the removal of buried archaeological remains associated with Dalar Hir Possible Burnt Mound (asset 15; medium value) Dalar Hir Burnt Mound and Linear Ditches (Asset 15; medium value) and Dalar Hir Burnt Mound, Pits, Ditches and Postholes (Asset 18; medium value).
- 4.4.123 Proposed additional mitigation measures would be implemented to address the potential significant effects on archaeology and cultural heritage. For example, archaeological excavation and recording, Level 1 Historic building recording and photographic surveys (see chapter 11 of volume F the ES (Application Reference Number: 6.6.11)).
- 4.4.124 After mitigation, no significant effects on any known archaeological remains, historic buildings or historic landscape types are predicted and there would be no substantial harm as a result of the proposals, in compliance with paragraph 5.8.14 and 5.8.15 of NPS EN-1 [RD4] and PPW (6.5.1) [RD8] and policies PS17, PS5, PS20, PCYFF2 and AT3 of the JLDP [RD27] which seek to protect such features.

Landscape and visual

Policy context

National Policy Statements

- 4.4.125 Paragraph 1.7.2 of NPS EN-1 [RD4] states that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects *inter alia* on landscape and visual amenity. In general, it should be possible to mitigate satisfactorily the most significant potential negative effects of new energy infrastructure consented in accordance with the energy NPSs. However, paragraph 1.7.2 of EN-1 [RD4] acknowledges that the impacts on landscape and visual amenity in particular will sometimes be hard to mitigate.
- 4.4.126 Paragraph 1.7.11 of NPS EN-1 [RD4] states that NPS EN-1 [RD4] already contains policies which severely limit the prospects for development of large-scale energy infrastructure in the most attractive landscapes and townscape. Paragraph 1.7.11 of NPS EN-1 [RD4] continues to state that:
- “Tightening the development consent policies in NPS EN-1 to make it harder for energy infrastructure to be consented which would have adverse landscape or townscape effects would be likely to make it significantly more difficult to gain consent for a range of large-scale energy infrastructure projects”.
- 4.4.127 The landscape and visual effects of energy projects will vary on a case by case basis according to the type of development, its location and the landscape setting of the proposed development, as clarified at paragraph 5.9.1 in E NPS N-1 [RD4].
- 4.4.128 NPS EN-1 [RD4] states at paragraph 4.5.1 that the visual appearance of a building is sometimes considered to be the most important factor in good design. But high quality and inclusive design goes far beyond aesthetic considerations. It clarifies that the functionality of an object — be it a building or other type of infrastructure — including fitness for purpose and sustainability, is equally important.
- 4.4.129 Paragraph 5.9.8 of NPS EN-1 [RD4] states that virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.
- 4.4.130 NPS EN-1 [RD4] also clarifies at paragraph 5.9.5 that:
- “The landscape and visual assessment should include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project. The applicant’s assessment should also take account of any relevant policies based on these assessments in local development documents in England and local development plans in Wales”.

- 4.4.131 Paragraph 5.9.12 in NPS EN-1 [RD4] confirms that the duty to have regard to the purposes of nationally designated sites also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints. Importantly, paragraph 5.9.13 in NPS EN-1 [RD4] confirms that the fact that a proposed project will be visible from within a designated area should not in itself be a reason for refusing consent.
- 4.4.132 Paragraph 5.9.14 in NPS EN-1 [RD4] confirms that local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.
- 4.4.133 Paragraph 5.9.15 in NPS EN-1 [RD4] acknowledges that the scale of such projects means that they will often be visible within many miles of the site of the proposed infrastructure. The decision maker should therefore judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the Project.
- 4.4.134 Paragraph 5.9.16 in NPS EN-1 [RD4] states that the decision maker should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the decision maker considers reasonable.
- 4.4.135 Paragraph 5.9.17 in NPS EN-1 [RD4] states that the decision maker “...*should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation*”.
- 4.4.136 Paragraph 5.9.22 in NPS EN-1 [RD4] states that within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project.
- 4.4.137 Paragraph 2.8.3 of NPS EN-6 [RD5] states that the decision maker should consider how good design can act to mitigate the impacts of new nuclear power stations, such as landscape and visual impacts.

Welsh national and local policy

- 4.4.138 Section 5.3 of PPW [RD8] sets out measures to conserve landscape and biodiversity.
- Areas of Outstanding Natural Beauty (AONBs) should be given the highest status of protection from inappropriate development. Great weight should be given to the conservation and enhancement of their natural beauty;
 - Non-statutory designations, such as, SLAs should be protected; and

- LANDMAP Natural Resources Wales (NRW), (2011 and 2013a-2013d) provides an important information resource to use in undertaking landscape assessments which inform decision making.
- 4.4.139 PPW [RD8] states that, while the value of all the landscapes of Wales is recognised local planning authorities should have regard to the relative significance of international, national and local designations in considering the weight to be attached to nature conservation interests and should take care to avoid placing unnecessary constraints on development (paragraph 5.3.2).
- 4.4.140 JLDP [RD27] Strategic Policy PS 5 states that proposals should protect and improve the quality of the natural environment, its landscapes and biodiversity assets.
- 4.4.141 Strategic Policy PS 9 in the JLDP [RD27] states that the design of all the Wylfa Newydd Project and related development should ensure the scheme layout and design and the scale of open spaces, landscaping, planting, waterways and similar features proposed should avoid, minimise, mitigate or compensate for visual and landscape 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. This policy clarifies that proposals will be expected to be commensurate with the scale of the development, and the extent of its impact.
- 4.4.142 Policy PCYFF 4 in the JLDP [RD27] states that all proposals should integrate into their surroundings and clarifies that those proposals that fail to show (in a manner appropriate to the nature, scale and location of the proposed development) how landscaping has been considered from the outset as part of the design proposal will be refused. This policy also requires that landscape schemes for developments should *inter alia*:
- give due consideration to the Landscape Character Area Assessment or Seascape Character Area Assessment;
 - respect the natural contours of the landscape;
 - respect and protects local and strategic views;
 - respect, retain and complement any existing positive natural features, landscapes, or other features on site;
 - identify trees, hedgerows, water courses and topographical features to be retained; and
 - justify circumstances where the removal/loss of existing trees, hedgerows, water courses and topographical features cannot be avoided and provides details of replacements.
- 4.4.143 Strategic Policy PS 19 in the JLDP [RD27] states that development should conserve and where appropriate enhance the distinctive natural environment, countryside and coastline, and confirms that proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area.

4.4.144 This policy also states that when determining planning applications, consideration should be given to:

- Safeguarding the coastline and landscapes;
- Protecting or where appropriate enhance sites of international, national, regional and local importance and, where appropriate, their settings in line with National Policy;
- Having appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with National Policy;
- Protecting, retaining or enhancing the local character and distinctiveness of the individual Landscape Character Areas (LCAs) and Seascape Character Areas; and
- Protecting, retaining or enhancing trees, hedgerows or woodland of visual, ecological, historic cultural or amenity value.

4.4.145 Policy AMG 3 of the JLDP [RD27] requires proposals that would have a significant adverse impact upon landscape character, as defined by the LCAs, to demonstrate how landscape character has influenced the design, scale and nature and site selection of the development.

4.4.146 The Wylfa SPG [RD28] also encourages the project promoter at policy GP20 to demonstrate that the Wylfa Newydd Project either alone or in combination with other proposals, would not have significant adverse impacts on the local landscape character with reference to the SLAs and LCAs. GP 20 also clarifies that where adverse impacts cannot be avoided, IACC expect appropriate mitigation and/or compensation measures to be implemented.

Assessment

4.4.147 The landscape and visual impacts of the Park and Ride facility have been assessed as part of the Environmental Statement (Application Reference Number: 6.6.10), in accordance with paragraph 5.9.5 in NPS EN-1 [RD4]. The design of the proposals has sought to minimise adverse impacts on landscape and reduce any the visual intrusion as far as reasonably practicable, in accordance with paragraphs 5.9.8 in NPS EN-1 [RD4] and 3.10.8 in NPS EN-6 [RD5].

4.4.148 The nature of the proposals would however mean the development would inevitably have some impact upon landscape and visual amenity. Paragraph 5.9.8 of NPS EN-1 [RD4] expects this, stating “*virtually all nationally significant energy infrastructure projects will have effects on the landscape*”.

4.4.149 Chapter F10 of the ES (Application Reference Number: 6.6.10) confirms that the landscape and visual impacts have been assessed and there would be moderate adverse effects on the local landscape character (LCA 5: North West Anglesey and LCA 17: West Central Anglesey).

- 4.4.150 Staff and visitors at the go-karting centre nearby would have direct open, slightly elevated views along the extent of the site. Construction activities and the car parking, fencing and bus facilities would therefore be noticeable in views. This would result in moderate adverse visual effects for the go-karting centre.
- 4.4.151 In line with paragraph 5.9.12 of NPS EN-1 [RD4] consideration has been given to nationally designated sites which the site is not located within but may have impacts on them. The Isle of Anglesey AONB is located approximately 2.5km to the north-west and 2.5km to the south-west of the site of the Park and Ride. Figure F10-1 (Application Reference Number: 6.6.38) shows the potential intervisibility of the Isle of Anglesey AONB is limited to small areas to the north-west and south-west. Site surveys have confirmed that, due to distance and intervening vegetation, activities associated with the construction, operation and decommissioning of the Park and Ride would be imperceptible. Therefore, the Isle of Anglesey AONB has not been included in the assessment of effects.
- 4.4.152 The site was previously located within the Anglesey SLA however following the SLA review this is no longer the case. The nearest SLAs to the Park and Ride Facility site 14: Mynydd Mechell SLA, located approximately 10km to the north of the site, and 11: Maltreath Marsh and Surrounds SLA, located approximately 9km to the south-east. Given the distance from the Park and Ride facility site it is considered that the proposals would not give rise to direct or indirect effects on these SLAs.
- 4.4.153 In accordance with paragraph 4.5.1, 5.9.8 and 5.9.17 of NPS EN-1, 2.8.3 of NPS EN-6 [RD5] and 3.10.8 of NPS EN-6 [RD5], a number of measures designed to mitigate impacts would be delivered with the aim of minimising the effects resulting from the development. This includes embedded mitigation such as the enhancement of existing field boundaries and vegetation on the edge of the site.
- 4.4.154 In line with paragraph 5.9.22 of NPS EN-1 [RD4], policy AMG2, PS9 and PS5 of the JLDP, the design of the proposal has been developed in light of the landscape character of the site and has sought to minimise landscape and visual impacts on the local amenity. The design has sought to break down the scale of the parking areas and reduce the potential impact of the building and bus transfer area through limited building heights and the considered positioning of buildings within the site. The colour and structure of the bus canopies would be chosen to reduce the mass of the canopies and minimise visual intrusion.
- 4.4.155 In order to mitigate potential effects on landscape and visual receptors during construction, the management strategy set out in the Code of Construction Practice (CoCP) (Application Reference Number: 8.6) would be followed. Relevant provisions of the CoCP include the following:
- Protection of existing trees, scrub and hedgerows to be retained in accordance with the recommendations in BS5837: 2012 Trees in

Relation to Design, Demolition and Construction (British Standards Institution, 2012).

- Limiting the height of topsoil storage mounds to 2m to reduce the potential visual impact and reduce the potential adverse impact on topsoil quality and its suitability for re-use.

4.4.156 Additional mitigation measures for the construction, operation and decommissioning phase are set out in volume F10 of the ES (Application Reference Number: 6.6.10) but can be summarised as follows:

Construction phase:

- To help reduce landscape and visual impacts over a shorter time period, advance planting would be implemented within the establishing planting belt parallel with the southern Dalar Hir site boundary and the A5.
- To help reduce landscape and visual impacts over a shorter time period, advance planting would reinforce and enhance existing hedgerows;
- Early phases programme of grass seeding and management would be implemented as areas are completed;
- Planting would be provided to reinforce and enhance existing hedgerows within the earliest appropriate planting season;
- The colour and structure of the bus canopies would be chosen to reduce the mass of the canopies and visual intrusion. Use of visually recessive colours and light structural frames.

Operational phase:

- The colour and structure of the bus canopies would be chosen to reduce the mass of the canopies and visual intrusion. Use of visually recessive colours and light structural frames.

Decommissioning phase:

- External boundaries would be re-instated to pre-development condition or better:
 1. existing boundary hedgerows and stone walls, removed for Park and Ride access and egress, would be restored to the original boundary alignment;
 2. localised openings to internal hedgerows would be restored where previously removed for vehicular access; and
 3. new internal hedgerow, extending east to west, from the location of demolished Dalar Hir farmhouse to the London Road boundary, would restore the existing hedge line removed at construction.

4.4.157 Whilst additional mitigation measures set out in section 10.6 of volume F10 of the ES (Application Reference Number: 6.6.10) would reduce the landscape and visual effects identified, the reduction in effect would not be sufficient to alter the reported significance levels. This is in part due to the scale and nature of the Park and Ride, which means it is only practicable to reduce rather

than eliminate effects and in part due to the relatively broad bandings of significance criteria. As such, the level of residual effects assessed for landscape and visual receptors are the same as those assessed prior to the application of additional mitigation. There would be a moderate adverse landscape and visual effect over the short term on the Cartio Môn Go-Karting Centre and on local landscape character. Paragraph 5.9.14 in NPS EN-1 [RD4] however confirms that local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.

4.4.158 Paragraph 5.9.16 highlights that the decision maker should consider whether any adverse impact is temporary and/or whether any adverse impact on the landscape will be capable of being reversed in a reasonable timescale. The moderate adverse effects are temporary as the site will be returned to its current agricultural use when no longer required.

4.4.159 There is an overriding public need for the Park and Ride facility in order to satisfy the urgent need for low carbon energy such as nuclear power as set out in NPS EN-6 [RD5]. Given this overriding public need, it is considered that the benefits of the proposals overcome the moderate adverse temporary landscape and visual impacts. As such, it is considered that the proposals are in accordance with Strategic Policy PS19 of the JLDP [RD27].

4.4.160 The Park and Ride site would be returned to its existing pastoral use. Therefore, upon completion of the decommissioning activities there would be no residual visual effects.

4.4.161 The Design and Access Statement (Application Reference Number: 8.2.3) demonstrates how the proposals have ensured the scheme layout and design seeks to minimise impacts on the local landscape in the short and long term as required by Strategic Policy PS 9, AMG 3, PCYFF 4 of the JLDP [RD27].

The proposals have therefore had regard to the character of the site and its context and can be accommodated into its surroundings, in accordance with paragraph 5.9.8 of NPS EN1 [RD4] and paragraph 3.10.8 of NPS EN-6 [RD5].

Socio-economics

Policy context

National Policy Statements

4.4.162 NPS EN-1 [RD4] states that where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake an assessment of these impacts as part of the ES (paragraph 5.12.2). Relevant socio-economic impacts are listed at paragraph 5.12.3 in NPS EN-1 [RD4] and include, for example, the creation of jobs and training opportunities and the provision of additional local services and improvements to local infrastructure. Paragraph 5.12.9 in NPS EN-1 [RD4] states that the decision maker should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development.

- 4.4.163 Paragraph 5.12.6 of NPS EN-1 [RD4] states that the decision maker should have regard to the potential socio-economic impacts of new energy infrastructure identified by the applicant and from any other sources that the decision maker considers to be both relevant and important to its decision.
- 4.4.164 Paragraph 5.12.8 of NPS EN-1 [RD4] states that the decision maker should consider any relevant positive provisions the developer has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts.
- 4.4.165 Paragraph 5.12.9 of NPS EN-1 [RD4] states that the decision maker should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development.
- 4.4.166 NPS EN-6 [RD5] then refers to policy specific to nuclear power stations. Paragraph 3.11.4 of in NPS EN-1 [RD4] states that *“the assessment of socio-economic impacts should demonstrate that the applicant has taken account of, amongst other things, potential pressures on local and regional resources, demographic change and economic benefits”*.
- 4.4.167 It notes that as nuclear power stations involve large scale construction projects *“...there are likely to be positive effects of local economic significance, although these are less significant at the regional scale... There may also be negative effects,”* (paragraph 3.11.2, NPS EN-1 [RD4]).
- 4.4.168 The Strategic Siting Assessment (SSA) at annex C of NPS EN-6 [RD5] makes some comments on socio-economic effects. It states that some consultees argued that socio-economic considerations should be a factor in deciding whether a site was potentially suitable, and that it was stated that *“...unemployment in Anglesey is high and that the benefits a new nuclear power station would bring should be a key factor in the decision whether to list the site on the Nuclear NPS,”* (paragraph C.9.110, NPS EN-1 [RD4]). It then clarifies that potential socio-economic effects of development should be considered when assessing development consent applications at a point where it is clearer how many workers would be required for a development, or what proportion would come from outside the local area (paragraph C.9.111, NPS EN-1 [RD4]).

Welsh national and local policy

- 4.4.169 PPW [RD8] includes planning policies, to promote quality, lasting, environmentally sound and flexible employment opportunities for a low carbon economy, and to protect and, where possible, improve people's health and well-being. Chapter 4 (planning for sustainability) of PPW [RD8] sets out the Welsh government's objectives for achieving sustainable development and chapter 7 (economic development) confirms the Welsh government's objectives for economic development, i.e. development of land and buildings for activities that generate wealth, jobs and incomes.

- 4.4.170 TAN 23 [RD25] highlights that the geographical distribution of economic benefits associated with development may be far beyond the area where the development is located.
- 4.4.171 *Economic Renewal: A New Direction (Welsh Government, 2010)* [RD44] clarifies the role the Welsh Government can play in providing the best conditions and framework to enable the private sector to grow and flourish.
- 4.4.172 Several policies within the JLDP [RD27] require proposals to accord with a number of criteria relating to socio-economic impacts. Policy PS 5 in the JLDP [RD27] states that development will be supported where it is demonstrated to be consistent with the principles of sustainable development. It clarifies that proposed developments should; give priority to effective use of land and protect, support and promote the use of Welsh language.
- 4.4.173 Policy PS 9 specifically requires consideration to be given to the nature, scale, range and possible impact of any development. It confirms that local economic and community benefits need to be maximized, where feasible, through agreement of strategies for procurement, employment, education, training and recruitment with the Councils at an early stage of project development.
- 4.4.174 The Guiding Principles in the Wylfa SPG [RD28] are considered relevant to the socio-economic assessment and include the following principles.
- GP1: IACC will require the Wylfa Newydd Project promoter to support the delivery of the Energy Island Programme and Anglesey Enterprise Zone, maximising the economic opportunities available to the Island's local communities.
 - GP2: Local job creation and skills development through the implementation of an Employment and Skills Strategy, which should include the maximisation of local labour provision.
 - GP5: Supporting the visitor economy and ensuring that the construction and operation of the Power Station and any associated developments do not adversely affect the value and importance of tourism to the Island. One of the key elements of the island's tourism offer being the quality and diversity of its natural and historic environments. This includes the 125 mile coastline and the numerous beaches linked by the Wales Coast Path.
 - GP6: Maintaining and enhancing community facilities and services, including education, healthcare and leisure facilities.

Assessment

- 4.4.175 In accordance with NPS EN-1 (paragraph 5.12.2) [RD4], NPS EN-6 (paragraph 3.11) [RD5], NPS EN-6 Volume 2 (C.9.111) and TAN23 [RD25], the socio-economic conditions and likely effects of the Park and Ride facility are considered in chapter F3 of the ES (Application Reference Number 6.6.3).

- 4.4.176 The assessment considered neighbouring communities and local services, public safety, local businesses and effects on the local economy and land use impacts during the construction, operation and decommissioning of the Park and Ride facility.
- 4.4.177 In accordance with Strategic Policy PS9 of the JLDP [RD27], local economic and community benefits have sought to be maximised as part of the proposals. For example, work as part of the Park and Ride facility would be procured and undertaken in accordance with Horizon's Supply Chain and Procurement Strategy. The Strategy seeks to support supplier development in terms of capability and capacity, and places strong emphasis on the use of local suppliers and resources, where appropriate. Potentially increased local economic activity is expected when the number of employed people increases in the local economy.
- 4.4.178 Gwyddfor Residential Home is located to the north-east of the Park and Ride. The proximity of this care home to the Park and Ride, together with the type of residents, would make this a sensitive receptor to be included within the socio-economic assessment. Although Gwyddfor Residential Home is within 1km of the Park and Ride facility, given the nature and scale of the construction, operation and decommissioning phases there is a minimal risk for disturbance of residents during construction. It will not likely be affected in terms of access or severance issues. There is a minimal risk for disturbance of residents with regards to changes in air quality or noise levels, as confirmed in chapter F3 of the ES (Application Reference Number 6.6.3).
- 4.4.179 There are also not expected to be any direct effects on either Llanfihangel-yn-Nhywyn village or Bodedern. There are not expected to be any significant adverse impacts on local businesses or on public safety.
- 4.4.180 In summary, as confirmed in chapter F3 of the ES (Application Reference Number: 6.6.3), no significant socio-economic effects are likely as a result of the construction, operation or decommissioning of the Park and Ride facility and as such, it is considered that the Park and Ride facility proposals comply with NPS EN-1 and NPS EN-6 as well as with the aims of PPW [RD8], Strategic Policy PS5 and PS9 of the JLDP [RD27] and the Guiding Principles in the Wylfa SPG [RD28].

Traffic and transport

Policy context

National Policy Statements

- 4.4.181 NPS EN-1 [RD4] states that *"the consideration and mitigation of transport impacts is an essential part of Government's wider policy objectives for sustainable development..."* (Paragraph 5.13.2).
- 4.4.182 Paragraph 5.13.3 of NPS EN-1 [RD4] requires a Transport Assessment where a project is likely to have significant transport implications. Paragraph 5.13.4 in NPS EN-1 [RD4] confirms that, where appropriate, the applicant should prepare a travel plan including demand management measures to mitigate

transport impacts. With specific regard to nuclear power, the Flags for Local Consideration to be considered by the decision maker includes impacts on “*significant infrastructure and resources*” (paragraph 3.5.2 of NPS EN-6 [RD5]), which include motorways and major highways.

4.4.183 With regard to decision making, NPS EN-1 [RD4] recognises that a new energy Nationally Significant Infrastructure Project (NSIP) may give rise to substantial impacts on the surrounding transport infrastructure and that the decision maker should therefore ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development (paragraph 5.13.6). It requires that these impacts are mitigated in order to “...*reduce the impact on transport infrastructure to acceptable levels...*”, and that providing the applicant “...*is willing to enter into planning obligations or requirements can be imposed to mitigate transport impacts ... then development consent should not be withheld, and appropriately limited weight should be applied to residual effects on the surrounding transport infrastructure,*” (paragraph 5.13.7, NPS EN-1 [RD4]).

4.4.184 An important principle established by NPS EN-1 [RD4] is, therefore, that there is no need for the development to demonstrate “*no impact*”. There is recognition that it is likely that there will be some residual transport impacts from a new NSIP. The requirement is therefore to determine what mitigation is required to reduce impacts to “*acceptable levels*” in accordance with paragraph 5.13.6 in NPS EN-1 [RD4].

4.4.185 NPS EN-6 [RD5] advises at paragraph 3.15.2 that:

“Applications should demonstrate that the proposed development would not have an unacceptable adverse impact on significant infrastructure. The Infrastructure Planning Commission should take into account any local authority impact report, advice from the relevant Nuclear Regulators and relevant policy in NPSs in assessing impacts on significant infrastructure and resources”.

Welsh national and local policy

4.4.186 Paragraph 8.5.7 of PPW [RD8] states that great care should be taken to minimise the adverse impacts of new transport infrastructure, or improvements to existing infrastructure, on the natural, historic and built environment and on local communities, where neighbourhood severance should especially be avoided. It clarifies that routes should make the best use of existing landforms and other landscape features to reduce noise and visual effects, subject to safety and other environmental considerations. Paragraph 8.5.7 of PPW [RD8] states that where no other alternative routes or options are practicable, transport infrastructure schemes should provide mitigation measures to minimise the impacts caused by their construction and operation.

4.4.187 PPW [RD8] also promotes a sustainable and efficient transport system and states that, *inter alia*, the impacts of development on travel demand, transport infrastructure, traffic management measures, safety and user convenience should be considered (paragraph 8.7). PPW [RD8] requires the impacts on travel demand, the level and nature of public transport provision, accessibility

to a range of transport modes and opportunities to promote active travel to be taken into account (paragraph 8.7.1).

- 4.4.188 Policy TRA 4 in the JLDP [RD27] states that proposals should be planned and designed in a manner that promotes the most sustainable modes of transport. Policy TRA 4 also states that proposals that would cause unacceptable harm to the safe and efficient operation of the highway, public transport and other movement networks including pedestrian and cycle routes, public rights of way and bridle routes, will be refused.
- 4.4.189 Strategic Policy PS 4 in the JLDP [RD27] confirms that IACC will support improvements that maximise accessibility for all modes of transport, but particularly by foot, cycle and public transport.
- 4.4.190 Strategic Policy PS 5 in the JLDP [RD27] states that all proposals should be consistent with its sustainable development principles. Proposals should reduce the need to travel and encourage opportunities for all users to use alternative modes.
- 4.4.191 In order to alleviate the effects of climate change, Policy PS 6 in the JLDP [RD27] states that proposals will only be permitted where it is demonstrated with appropriate evidence that they have fully taken account of, *inter alia*, reducing greenhouse gas emissions, helping to reduce waste and encouraging travel other than by car.
- 4.4.192 Strategic Policy PS 9 in the JLDP [RD27] is specific for the Wylfa Newydd Project Associated Developments and requires highways and transport proposals to form part of an ITTS that has regard to Strategic Policy PS 4 and other relevant policies. Strategic Policy PS 4 states that adverse transport impacts should be minimised to an acceptable level at all project stages. It continues to state that proposals should where feasible make a positive contribution to transportation policy objectives in the locality, and should include multi-modal solutions and investment that encourages travel by public transport, walking and cycling and other sustainable forms of transport. Strategic Policy PS 9 also states that IACC will seek the provision of community infrastructure, including park and ride facilities.

Assessment

- 4.4.193 In line with paragraph 5.13.3 on NPS EN-1 [RD4] and PPW (paragraph 8.7) [RD8] a Transport Assessment has been submitted (Application Reference Number: 6.3.14). It concludes that the potential transport impacts of the Wylfa Newydd Project are small and, in accordance with planning policy, would have no significant impact on the local road and public transport networks.
- 4.4.194 In accordance with NPS EN-1 (paragraph 5.13.6 and 5.13.7) [RD4], NPS EN-6 (paragraph 3.15.2) [RD5] and paragraph 8.7 of the PPW [RD8], Horizon has sought to mitigate the impacts on the surrounding transport infrastructure, including during the construction phase of the development to ensure that the proposals would not have an unacceptable adverse impact on highways. The Park and Ride facility is one way in which Horizon seeks to minimise impacts on the existing road infrastructure, safety and user convenience by reducing

the number of traffic movements on the A5025 that are associated with the construction of the Power Station.

- 4.4.195 Project-wide effects of the Wylfa Newydd DCO Project are assessed in the main report of this Planning Statement (Application Reference Number: 8.1).
- 4.4.196 Appendix C2.04 of the Transport Assessment (Application Reference Number: 6.3.22) outlines the results from the junction capacity assessments undertaken to support the Wylfa Newydd Power Station DCO. The new junction for the Park and Ride facility has been modelled and no capacity or queuing issues are forecast.
- 4.4.197 In line with paragraph 8.5.7 PPW [RD8] care has been taken to minimise the adverse impacts of new transport infrastructure, such as the Park and Ride facility, on the natural, historic and built environment and on local communities. Volume 3 of the DAS (Application Reference Number: 8.2.3) explains how the design has evolved to take into account these matters. Furthermore, the Site Selection Report (Application Reference Number: 8.24.5) confirms that there are no alternative options that are practicable.
- 4.4.198 The Park and Ride facility will reduce the number of individual car trips travelling on the local road network. The Park and Ride facility also includes provision of cycle storage and the public bus stop is located on the adjacent A5 would be accessible via a short footway/cycleway. The Park and Ride facility therefore encourages sustainable modes of transport, as promoted in Policy TRA 4 of the JLDP [RD27].
- 4.4.199 Cycle parking is provided at the Park and Ride facility to encourage sustainable travel (in line with paragraph 8.7.1 of PPW [RD8] and Strategic Policy PS4, PS5, PS6 and PS9, PS12 of the JLDP [RD27]).

Welsh language

Policy context

National Policy Statements

- 4.4.200 Volume 2 of NPS EN-6 [RD5] provides site assessments which set out why the sites included in NPS EN-6 [RD5] have been found potentially suitable for providing nuclear power. Paragraph C.9.110 of NPS EN-6 [RD5] does however advise that some responses from consultees to the draft NPS expressed concerns that an influx of workers into the area could be damaging to its language, culture and welfare. NPS EN-1 [RD4] and NPS EN-6 [RD5] do not however otherwise provide specific guidance in respect of Welsh language and culture.

Welsh national and local policy

- 4.4.201 PPW [RD8] and Technical Advice Note (TAN) 20 [RD23] identify the Welsh language as being a part of cultural and social fabric of Wales and that the Welsh Government is committed to ensuring the Welsh language is supported and encouraged to flourish. PPW [RD8] states that Welsh language should be supported by the planning system and that considerations related to the

use of Welsh language may be taken into account by decision makers so far as they are material to applications for planning permission (paragraph 4.13.5).

- 4.4.202 Part B of the TAN 20 [RD23] provides Practice Guidance on planning and the Welsh language and states:

"The planning system can contribute to the future well-being of the Welsh language, by establishing the conditions to allow sustainable communities to thrive. For example, creating conditions for well-paid employment opportunities and a range of quality housing options are integral to planning for sustainable communities," (paragraph 1.7.3, TAN 20 [RD23]).

- 4.4.203 Furthermore, TAN 20 [RD23] confirms that where the use of Welsh language is a significant part of the social fabric of a community, the interest and needs of the Welsh language should be taken into account. Paragraph 3.1.2 in TAN 20 [RD23] confirms:

"...in determining individual planning applications and appeals, considerations relating to the use of the Welsh language may be taken into account so far as they are material. Section 70(2) TCPA does not give any additional weight to the Welsh language above any other material consideration and decisions on all applications for planning permission must be based on planning grounds only and be reasonable".

- 4.4.204 Planning policy continues the strong support for promoting the Welsh language. Strategic Policy PS 1 of the JLDP [RD27] confirms that the Isle of Anglesey County Council (IACC) will promote and support the use of the Welsh language in the area and require a WLIA (Application Reference Number: 8.22) to be submitted as part of the application to show how the proposed development would protect, promote and enhance the Welsh language. Strategic Policy PS 1 also states that proposals will be refused which would cause significant harm to the character and language balance of a community that cannot be avoided or suitably mitigated by appropriate planning mechanisms.

- 4.4.205 Strategic Policy PS 5 in the JLDP [RD27] states that all proposals should protect, support and promote the use of the Welsh language in accordance with Strategic Policy PS 1.

- 4.4.206 Policy GP13 of the Wylfa SPG [RD28] similarly confirms that Welsh language and culture should be maintained and where possible strengthened and that all planning applications for Associated Development will be expected to demonstrate how a Welsh language strategy will be delivered by the proposed development. It also clarifies that a WLIA should be undertaken. GP 13 also sets out several measures which could be deployed to mitigate potential adverse impacts on, and strengthen, Welsh language and culture.

- 4.4.207 Whilst Associated Development can now be included within the DCO application (rather than separate Town and Country Planning Act 1990 (TCPA) applications) the principles of protecting and promoting the Welsh language through all proposals are relevant.

4.4.208 *Cymraeg 2050: Welsh language strategy (2017)* sets out a goal of having a million Welsh speakers by 2050 and that it is used in everyday life. The themes for realising this goal include increasing the use of Welsh in the workplace and creating favourable conditions through infrastructure.

Assessment

4.4.209 Concerns were raised during the consultation associated with volume 2 of NPS EN-6 (paragraph C.9.110) [RD5] that an influx of workers into the area could damage its language, culture and welfare. The Park and Ride facility would not however have a significant impact upon the Welsh language and culture during construction or operation, as confirmed in volume E, chapter 4 of the WLIA (Application Reference Number: 8.21).

4.4.210 The assessment presented in E.4 of the WLIA (Application Reference Number: 8.21) identifies an overall neutral effect on Welsh language and culture during the construction and operation of the Park and Ride facility with two negligible beneficial effects during construction and operation (these relate to benefits to local businesses and local services).

4.4.211 As a result, the Park and Ride facility proposals are considered to address the concerns detailed in paragraph C.9.110 of volume 2 of the NPS EN-6 [RD5]. Given the conclusions of the WLIA (Application Reference Number: 8.21), no additional mitigation and/or enhancement measures are considered to be necessary.

4.4.212 Measures to mitigate adverse effects and enhance beneficial effects relating to the project wide assessment are presented in volume B, chapter 2 of the WLIA (Application Reference Number: 8.21). As part of the project-wide mitigation and enhancement measures in appendix B4-1 of the WLIA (Application Reference Number: 8.21), Horizon would raise awareness of the Welsh language and culture by placing appropriate publicity materials on the Welsh language (e.g. posters or videos) in areas where workers are likely to see them. This would include the Park and Ride and shuttle buses used by workers.

4.4.213 In line with PPW (paragraph 4.13.5) [RD8] and TAN 20 (paragraph 3.1.2) [RD23], which require consideration of Welsh language, the application is accompanied by a WLIA (Application Reference Number: 8.21). Additionally, the provision of a WLIA is also supported by Policy PS1 in the JLDP [RD27], which requires consideration of Welsh language, the application is accompanied by a WLIA. The findings of the WLIA (Application Reference Number: 8.21) demonstrate that the Park and Ride facility also complies with Policy PS5 of the JLDP [RD27] which states that proposals should protect, support and promote the use of the Welsh language.

4.4.214 Through the mitigation measures identified in paragraph 4.4.16 above, the Park and Ride facility is in accordance with the objectives of GP13 in the Wylfa SPG [RD28] which encourages Welsh language and culture to be maintained and where possible strengthened.

5 Planning Balance

- 5.1.1 To support the construction of the Power Station, a Park and Ride facility is required. It would allow for secure vehicle parking, and the controlled transportation of workers, by bus, to the Wylfa Newydd Development Area, reducing the number of individual car trips travelling on the local road network.
- 5.1.2 Horizon has demonstrated that the proposed Park and Ride facility at Dalar Hir is integral to the successful delivery and implementation of the Wylfa Newydd Project.
- 5.1.3 It is however necessary to assess the location and form of this essential facility. This appendix has demonstrated that the Park and Ride facility as proposed is appropriate having had regard to the site specific planning issues and the IACC's locational guidance in the adopted Wylfa SPG [RD28] and draft SPG [RD14].
- 5.1.4 The Dalar Hir site has been demonstrated to be the appropriate location, with no other sites offering a preferable option. This suitability of the site has been rigorously tested as part of the application for development consent with further information on how the site was selected provided in volume 1 of the Site Selection Report (Application Reference Number: 8.24.5) and further design considerations, including how environmental effects have been taken into account within the Dalar Hir DAS (Application Reference Number: 8.2.3) and volume F of ES (Application Reference Number: 6.6.1-6.6.12).
- 5.1.5 Although located on land allocated within the countryside in the JLDP, it should be noted that the site is located adjacent to a major road (the A55) and in proximity to existing development (the Driver and Vehicle Standards Agency (formally known as VOSA) weighbridge and lorry checkpoint and the Cartio Môn go-karting centre). The Park and Ride facility is therefore considered to be appropriate in its context.
- 5.1.6 The principle of the Park and Ride facility is supported in Strategic Policy PS12 of the JLDP [RD27] which confirms that the Councils will require that the park and ride is located along or close to the A5/A55 where the site is part of a comprehensive approach to mitigating the transport effects of the Project, has due regard to landscape and environmental considerations, and where provision for travel to the site by sustainable means can be provided.
- 5.1.7 The Park and Ride facility is in accordance with TRA1 of the JLDP [RD27] which confirms that the Councils will support strategically located park and ride facilities in locations close to the main highway network when it can be demonstrated that no alternative sites closer to Centres are suitable, supported by frequent bus services between the facility and the destination.
- 5.1.8 Furthermore, Policy GP15 of the Wylfa SPG [RD28] confirms that long distance travel to the Power Station Site should be reduced through the provision of a Park and Ride facility.
- 5.1.9 The analysis in chapter 4 has shown that the Park and Ride facility, as described in chapter 2, do not cause any individual potential adverse effect

that is so severe that the decision maker should refuse the application. A summary is provided below.

- 5.1.10 It is likely that there would be no significant adverse air quality effects associated with the Park and Ride facility, in accordance with NPS EN-1 [RD4] as well as Policy PCYFF1 of the JLDP [RD27]. The scenarios identified in paragraphs 5.2.9 and 5.2.10 of NPS EN-1 [RD4] therefore do not apply.
- 5.1.11 For the reasons set out in chapter 4, the proposals have taken advantage of opportunities to conserve and enhance biodiversity in accordance with Paragraph 5.3.4 of NPS EN-1 [RD4] as well as GP20 of the Wylfa SPG [RD28] and Strategic Policy PS5, PS9 and PS19 of the JLDP [RD27]. The proposals comply with paragraph 5.3.7 of NPS EN-1 [RD4] as the scheme is likely to avoid significant harm to biodiversity interests.
- 5.1.12 After mitigation, no significant effects on any known archaeological remains, historic buildings or historic landscape types are predicted and there would be no substantial harm as a result of the proposals, in compliance with paragraph 5.8.14 and 5.8.15 of NPS EN-1 [RD4] as well as policies PS17, PS5, PS20, PCYFF2 and AT3 of the JLDP [RD27].
- 5.1.13 The Park and Ride facility would not cause any potentially significant health effects and the application satisfies the requirements of Paragraph 3.12.7 of NPS EN-6 [RD5].
- 5.1.14 The proposals would not result in the loss of best and most versatile agricultural land and the scheme complies with Paragraph 5.10.8 of NPS EN-1 [RD4] and Strategic Policy PS6 and PS19 in the JLDP [RD27].
- 5.1.15 The proposals would avoid unacceptable disturbance to local communities, through noise, smell, vibration, smoke or air pollution, in accordance with paragraphs 5.11.1 and 5.11.9 of NPS EN-1 [RD4] and Policy PCYFF1 of the JLDP [RD27].
- 5.1.16 In accordance with paragraph 5.12.6 of NPS EN-1 [RD4], Horizon has considered the socio-economic effects associated with the Park and Ride facilities. As confirmed in chapter F3 of the ES (Application Reference Number: 6.6.3), and in accordance with Strategic Policy PS5 and PS9 of the JLDP [RD27], no significant socio-economic effects are likely as a result of the construction, operation or decommissioning of the Park and Ride facility.
- 5.1.17 In accordance with paragraph 5.15.2 of NPS EN-1 [RD4], Horizon has undertaken an assessment of the existing status of, and the impacts of the proposed project on water quality, water resources and physical characteristics of the water environment as part of the ES (see chapter F8 (Application Reference Number 6.6.8)). The assessment found that no residual significant adverse effects were identified for the construction and decommissioning phases.
- 5.1.18 During the operational phase, there is potential for an increase in surface water flooding within the Park and Ride facility site due to the increase in impermeable areas and changes in land levels resulting in an increase in runoff and a reduction in flood storage. With additional mitigation proposed,

the potential effect is reduced from moderate adverse to minor adverse. In accordance with paragraph 5.7.9 of NPS EN-1 [RD4] the Sequential Test has been undertaken and it is confirmed that there are no other reasonably available sites in Flood Zone 1 or Zone A and therefore the Park and Ride facility can be located on the Dalar Hir site.

- 5.1.19 The WLIA (Application Reference Number: 8.21) identifies an overall neutral effect on Welsh language and culture.
- 5.1.20 There would likely be a moderate adverse temporary landscape and visual impact on the local landscape character and the Cartio Mon Go-Karting centre. Paragraph 5.9.14 in NPS EN-1 [RD4] however confirms that local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development. Where significant adverse impacts on landscape character are likely Policy AMG 3 of the JLDP [RD27] requires that a landscape assessment demonstrating how landscape character has influenced design, scale, nature and site selection of the development must be undertaken. The Design and Access Statement (Application Reference Number: 8.2.3) and Site Selection Report (Application Reference Number: 8.24.5) provides this assessment.
- 5.1.21 Furthermore, paragraph 5.9.16 in NPS EN-1 [RD4] highlights that the decision maker should consider whether any adverse impact is temporary. The Park and Ride facility site would be returned to its existing pastoral use and upon completion of the decommissioning activities there would be no residual visual effects.
- 5.1.22 The proposals include a number of significant benefits, in particular the following.
- The principle of a Park and Ride facility to support the construction of the Power Station is acceptable and is supported by adopted planning policy and guidance.
 - The development would provide a reduction in the number of individual car trips travelling on the local road network during the construction of the Power Station.
 - The design of the temporary facility has been carefully considered to be appropriate within its context and the environmental features of the site.
 - The development has been designed to ensure that the site can be successfully returned to its current agricultural use once no longer required to help support the construction of the Power Station.
 - Following the use of the site for a Park and Ride facility the site would benefit from enhanced planting, reinforced hedgerows and bridge to facilitate agricultural access across the site.
- 5.1.23 For the reasons outlined above, the development of the Park and Ride facility as proposed is considered compliant with NPS EN-1 [RD4] and NPS EN-6 [RD5] and national and local planning policy where relevant. In summary, the

proposed development of the Park and Ride facility is appropriate in planning terms in its own right.

- 5.1.24 The provision of a Park and Ride Facility is also integral to the delivery of the Wylfa Newydd Project and its associated benefits, and needs to be considered in the context of the urgent need for nuclear power.
- 5.1.25 This Planning Statement has concluded that the development is acceptable as an individual scheme component, however, its contribution to the Project as a whole weighs further in its favour.

6 Conclusion

- 6.1.1 This appendix considers relevant national and local planning policies within the overarching context of NPS EN-1 and NPS EN-6. It demonstrates that, when assessed against these relevant policies and material considerations, the Park and Ride benefits from strong policy support and is acceptable in land use planning terms.
- 6.1.2 Whilst the Wylfa Newydd Project as a whole will, in common with any national infrastructure project, result in some adverse effects to the environment and local community, the main report states that these (considered individually or collectively) do not outweigh the important benefits. These benefits would be delivered for the UK as a whole, including a vital role in the provision of safe and secure low carbon electricity, as well as local benefits including jobs creation, investment in the local economy and provision of skills for the local workforce. Together these benefits have the potential to create a significant lasting positive legacy for Anglesey, north Wales and the UK.

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Appendix E Logistics Centre Planning Statement

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Contents

1	Introduction and purpose	1
1.1	Introduction	1
1.2	Report structure	1
2	Proposed Logistics Centre	2
2.1	Overview of the development proposals	2
2.2	Design, layout and scale	3
2.3	Construction programme	5
3	The site and surrounding area	6
3.1	Site location	6
3.2	Existing site characteristics	7
3.3	Planning history	8
4	Principal planning issues	9
4.1	Introduction	9
4.2	Principle of development	9
	<i>Policy context</i>	9
	<i>Assessment</i>	10
4.3	Location of the facilities	11
4.4	Other site specific planning issues	12
	<i>Local amenity (including noise and vibration, air quality, health and wellbeing)</i>	13
	<i>Biodiversity</i>	18
	<i>Soils and geology</i>	22
	<i>Surface water, groundwater and flood risk</i>	25
	<i>Historic environment</i>	30
	<i>Landscape and visual</i>	33
	<i>Socio-economics</i>	39
	<i>Traffic and transport</i>	41
	<i>Welsh language</i>	44
5	Planning Balance	47
6	Conclusion	50

List of Figures

Figure 3-1 Logistics Centre within the context of the Wylfa Newydd Project sites	7

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1 Introduction and purpose

1.1 Introduction

- 1.1.1 The proposed Logistics Centre is an integral component of Horizon's Integrated Traffic and Transport Strategy, serving as a temporary secure facility to manage materials deliveries to the Power Station Site by road during the Main Construction phase of the development, thereby reducing impact on the local road network.
- 1.1.2 The Logistics Centre would be operational for a period of approximately ten years. Following construction of the Power Station, the site would no longer be operated by Horizon and would become available for an alternative use or development, subject to any required permissions being obtained by a future occupier.
- 1.1.3 The purpose of this appendix is to consider the site-specific planning issues relevant to the Logistics Centre. It therefore focuses on only those planning issues which are specific or unique to the Logistics Centre. Overarching planning issues, such as the justification of the transport strategy as a whole, are considered elsewhere in the Planning Statement.

1.2 Report structure

- 1.2.1 This appendix is structured as follows:
- Chapter 2 – provides a description of the Logistics Centre;
 - Chapter 3 – provides a site description of the Logistics Centre;
 - Chapter 4 – provides the planning analysis of considerations relating to the Logistics Centre; and
 - Chapter 5 – provides the conclusions to the Planning Statement.
- 1.2.2 A more detailed site analysis and description of the Logistics Centre is provided in Volume H of the Environmental Statement (ES) (Application Reference Number: 6.8.1-6.8.12). The accompanying Design and Access Statement (DAS) (Application Reference Number 8.2.3) outlines the rationale for the design approach of the Logistics Centre and access issues in the context of relevant planning policy requirements. Full details of the consultation process are provided in the Consultation Report (Application Reference Number: 5.1).

2 Proposed Logistics Centre

2.1 Overview of the development proposals

- 2.1.1 The Logistics Centre plays a critical role in the Wylfa Newydd Project. The Logistics Centre would be used during the construction phase of the Power Station to control the flow of goods vehicles along the A5025.
- 2.1.2 The proposals for the Logistics Centre comprise:
- An office/welfare building;
 - security kiosk (at the combined entrance/exit of site);
 - driver instructor point;
 - a covered inspection bay;
 - a heavy goods vehicle (HGV) scanner;
 - parking spaces consisting of 100 parking bays for HGVs; and
 - 12 staff parking bays and one disabled parking space.
- 2.1.3 The construction workforce for the Logistics Centre would consist of a maximum of 50 workers on the construction site at any one time, working in shift patterns 07:00–19:00 Monday to Friday and 07:00–13:00 on Saturdays.
- 2.1.4 The vehicles using the Logistics Centre would consist of light goods vehicles, medium goods vehicles and HGVs.
- 2.1.5 The sequence of activities during this delivery period is expected to be as follows.
- A vehicle would arrive at the Logistics Centre site and would be stacked as required within the footprint of the site (off the public highway) before being directed to proceed through security checks.
 - Delivery documentation would be checked and authorised. The vehicle would be driven through security and would arrive at the inspection bay to be inspected as required (approximately 15 minutes).
 - After the vehicle is accepted, the driver would be issued with delivery documents and allocated a departure time, holding bay number, and a holding bay waiting time.
 - The vehicle would be driven directly from the Logistics Centre to the Power Station Site.
 - Vehicle movements from the Logistics Centre to the Power Station Site would be controlled in order to prevent vehicles leaving in convoy and to avoid sensitive times of the day (such as peak work rush hour and school run). Once released, these vehicles would travel along the A55 to Junction 3 and along the A5025.
- 2.1.6 A covered inspection bay would be provided to allow for the physical inspection of vehicles. Personnel access would be provided down the sides

of the vehicles to access the trailers and inspect loads. Only access to the rear of the vehicle would be needed for any unloading. If unloading is required, the vehicle would park with only its rear third under cover to allow space for materials to be unloaded and temporarily stored on the paved area behind the vehicle. This area would be covered and lit.

- 2.1.7 The Logistics Centre would have an operational workforce of 14 staff and would be operational 24 hours a day, seven days a week.
- 2.1.8 At the peak of the Power Station construction, a maximum of 40 goods vehicles would be arriving at, and departing from, the Logistics Centre per hour. This includes all vehicles travelling to the Logistics Centre and then to the Wylfa Newydd Development Area.
- 2.1.9 The Logistics Centre will operate 24 hours, seven days a week to support the shift pattern on the construction of the Power Station Site.
- 2.1.10 The Logistics Centre would likely have a 24 hour manned security presence. The security guards would monitor access points, Closed-Circuit Television (CCTV) and carry out patrols of the facility.

2.2 Design, layout and scale

- 2.2.1 The 'parameters approach' adopted by Horizon identifies defined envelopes for the construction the Wylfa Newydd Development Consent Order (DCO) Project within which future development will be undertaken.
- 2.2.2 The reason for adopting this approach is to ensure that Horizon has sufficient flexibility to accommodate any design changes that may be required between the DCO being granted and construction commencing.
- 2.2.3 The Project as a whole has been developed adopting a parameters approach but for sites where the design flexibility is relatively fixed, or elements have environmental impacts that need to be controlled/limited, the parameters are defined on a limited basis.
- 2.2.4 For the Logistics Centre at Parc Cybi, where detailed drawings are submitted for approval, the DCO Requirements enables revised plans to be submitted for approval by the relevant planning authority in accordance with the Parameter Plan (WN0902-HZDCO-ADV-DRG-00014 Rev 0.5, Application Reference Number: 2.12) and design principles set out in section 3.4 of the DAS (Application Reference Number: 8.2.3).
- 2.2.5 It is proposed that the positions of buildings and structures would be flexible to within a zone relative to the positions shown on the drawings. It is proposed that the length and width of buildings would have a tolerance (as shown on the Parameter Plan (WN0902-HZDCO-ADV-DRG-00014 Rev 0.5, Application Reference Number 2.12) to pre-empt differences in manufacturers' module details and cladding extent.
- 2.2.6 The layout of the Logistics Centre has been designed to support a clear and swift flow of vehicles through the site, cognisant of relevant design guides and best practice.

- 2.2.7 The office/welfare building would be a single storey facility comprising modular units to provide the area of accommodation space required. It would be located along the west edge of the site and outside of the direct line of sight of the Trefignath Burial Chambers Scheduled Monument.
- 2.2.8 The office/welfare building is located between the access road and vehicle parking bays, so as to optimise the pedestrian route to the building from the vehicle checking area.
- 2.2.9 The security kiosk at the entrance of the site will be a small single storey structure to provide weather protection to the security staff. It would be elevated to bring security staff up to the same level as the Heavy Goods Vehicle (HGV) drivers.
- 2.2.10 The proposed buildings are temporary and are intended to be dismantled once they are no longer required. The buildings are therefore designed with simplicity and efficiency of construction and removal as a priority.
- 2.2.11 The nature of the buildings as essentially temporary features has been used to generate simple building forms that complement the context of the overall site. The design has been developed to ensure that it responds to the brief, recognising that although temporary in nature, the developments would be in situ for a number of years. The size and layout of the buildings have been developed based on the facility operational requirements and people flow requirements of transport interchange.
- 2.2.12 A restricted natural colour palette would be adopted for the buildings/structures on site, helping to link them visually, and to be unimposing within their surroundings, whilst being consistent with the employment nature of the wider area.
- 2.2.13 The office/welfare building is proposed to be a maximum of 16m wide, 29m long and 4m high, with dedicated facilities for HGV drivers, staff facilities and toilets for all users. The covered vehicle inspection bay is proposed to be a maximum of 13m wide, 23m long and 6m high covered tensile fabric structure. The function of this facility is to allow the inspection of the lorries, which will then move to the lorry parking zone prior to onward transfer to the Power Station Site.
- 2.2.14 The access into the Logistics Centre will be via a new entrance off the existing spine road that services Parc Cybi. The access road within the site footprint is proposed to allow for a number of coincident HGV arrivals. The entrance and exit will allow for two vehicles to pass.
- 2.2.15 The parking bays would be arranged in rows. Allocation of vehicles to rows would be controlled to ensure vehicles can be accessed at their allotted times.
- 2.2.16 Staff parking is proposed to be situated close to the office/welfare building to minimise unnecessary walking through routes likely to be used by moving vehicles. Vehicle parking and layout has been designed to minimise the need for reversing. The access road within the site footprint and the setting back of the entrance security point alleviates vehicles queuing on the public road outside the site.

- 2.2.17 Lighting would be required but it would be designed to minimise light spill into the surrounding area. Lighting would be provided within the boundary of the site and would generally be pole mounted (typically at 8m around the perimeter and 12m towards the centre of the site).
- 2.2.18 The boundary of the site will be landscaped in keeping with the character of the local area.
- 2.2.19 The Logistics Centre site would include a 2.4m high mesh panel security fence. Both within and outside the fence line would be a grassed boundary buffer zone, in keeping with the character of the local area. Hardstanding areas would be of concrete or asphalt.
- 2.2.20 Sustainable drainage system principles are to be adopted and it is assumed that the surface water drainage requirements would be based upon a 1 in 100 year storm event (with an additional 20% flow capacity allowance made for climate change). Any surface water attenuation requirements would be provided by a below-ground storage system.
- 2.2.21 All surface water flows from the site will be passed through an interceptor and be collected in an attenuation tank before discharging into a local balancing pond. Attenuation within the new system would ensure that discharge rates would be less than or equal to site greenfield runoff rates. Oil interceptors would be incorporated into the system to protect water quality.
- 2.2.22 The foul drainage systems will connect into the local foul sewer.
- 2.2.23 Utilities (including electricity, water and telecommunications) are proposed to be connected to the site via underground ducts.
- 2.2.24 The proposed buildings would be serviced with a low energy ventilation system and with low energy lighting.

2.3 Construction programme

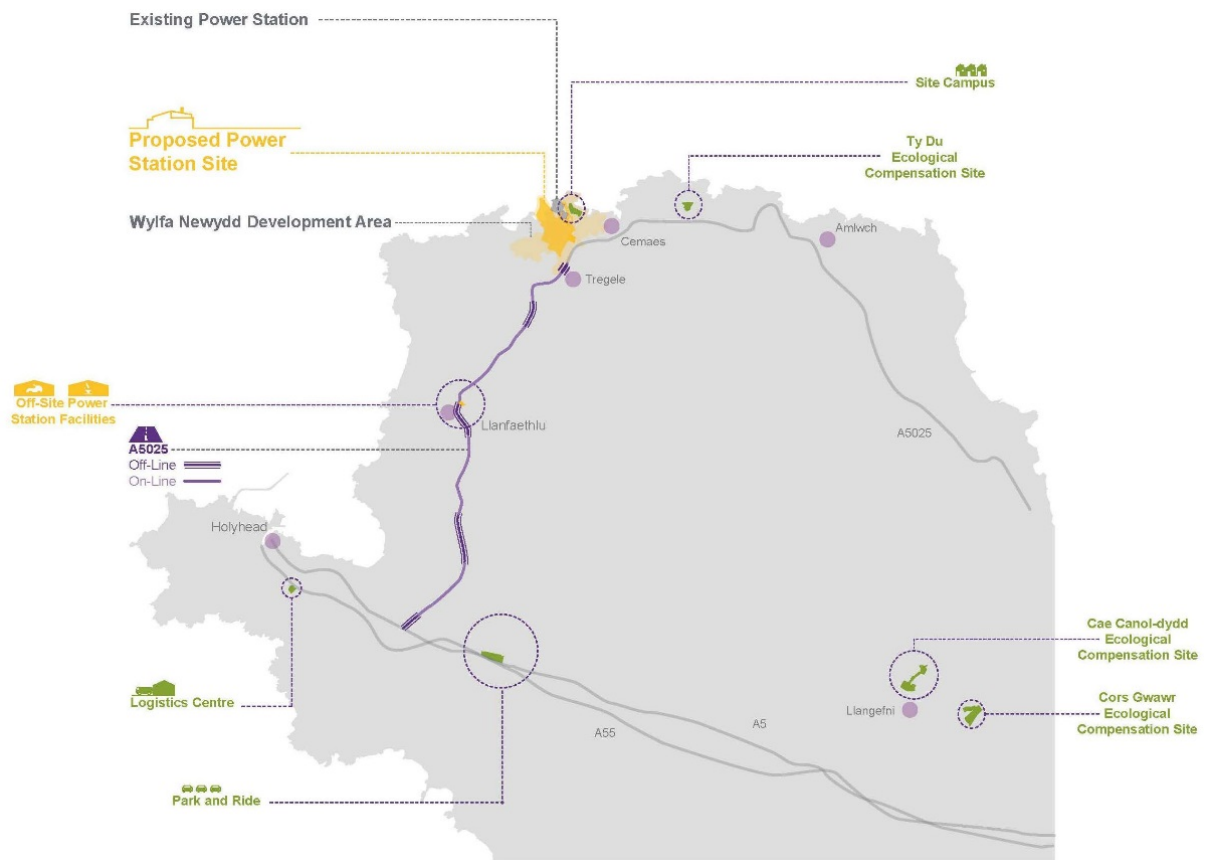
- 2.3.1 It is anticipated that construction of the Logistics Centre would commence in the first year following grant of the DCO and last for approximately 15 months.
- 2.3.2 Following construction of the Power Station, the site would no longer be operated by Horizon and would become available for an alternative use or development, subject to any required permissions being obtained by a future occupier.

3 The site and surrounding area

3.1 Site location

- 3.1.1 The proposed Logistics Centre site is bounded by the A55 to the north, the existing Parc Cybi service road to the south, a substation to the west, and pastoral land to the east (see figure 3-1). The proposed Logistic Centre's footprint is approximately 3.2ha.
- 3.1.2 The site is bounded by the A55 to the north, an existing B-road to the south and open countryside to the east and west. The Logistics Centre site is located within a wider employment area on the edge of Holyhead (as allocated in the Joint Local Development Plan (JLDP)). The area is being supported by the Welsh Government as an Enterprise Zone and has been set aside for strategic employment land by the Isle of Anglesey County Council (IACC).
- 3.1.3 The existing residential area of Kingsland is located approximately 230m to the west of the proposed Logistics Centre site and the residential area of Trearddur Bay is located approximately 700m to the south.
- 3.1.4 The Logistics Centre site is located within Holyhead wards where 41.5% of residents can speak Welsh, compared with 57.2% across Anglesey and 19% across Wales as a whole (Census, 2011).
- 3.1.5 The Lon Trefnath cycle path runs across the wider Parc Cybi employment site. This route provides a link between the Trearddur Farm Caravan Park and Holyhead. Its route follows the main Parc Cybi access road to the south of the Logistics Centre site and the existing site access/egress crosses this. This cycle path is used by residents as an active travel route and by recreational walkers and cyclists as a route between the coast, communities and Holyhead.
- 3.1.6 The Logistics Centre site is located within the Ynys Môn/Anglesey Area of Outstanding Natural Beauty (AONB), which covers the majority of Anglesey's coastline and areas of land which form the backdrop to the coast, Holyhead Mountain and Mynydd Bodafon.
- 3.1.7 The Logistics Centre site is not located within a flood risk zone according to the Development Advice Map in Technical Advice Note 15 (TAN 15): Development and Flood Risk (Welsh Assembly Government, 2004). There are no Sites of Special Scientific Interest (SSSIs) nor Regionally Important Geological Sites within close proximity of the site.
- 3.1.8 The process of the selection of the location of the Logistics Centre site is described in the Site Selection Report (Application Reference Number: 8.24.6).

Figure 3-1 Logistics Centre within the context of the Wylfa Newydd Project sites



3.2 Existing site characteristics

- 3.2.1 The 3.2ha site is approximately square on a north-west to south-east orientation. The land is serviced and available for development. The Logistics Centre site is located in the north-west of the wider Parc Cybi employment area.
- 3.2.2 A pond (100m by 20m), which is understood to be an attenuation pond for the A55, is located near but outside the site boundary (between the north-east site boundary and A55 road).
- 3.2.3 The majority of the site of the proposed Logistics Centre is presently covered by poor semi-improved grassland; however, there are also areas of dense scrub, mixed plantation woodland, rocky outcrops, marshy grassland, and spoil within the site boundary.
- 3.2.4 The site is located between the Ty Mawr Standing Stone (approximately 380m north-west) and the Trefignath Burial Chamber (approximately 30m to the south), both of which are Scheduled Monuments.

- 3.2.5 Land within the southern part of the proposed Logistics Centre site has been assessed to be of high archaeological potential due to its proximity to an area of known prehistoric and Roman period activity.

3.3 Planning history

- 3.3.1 The planning history for the proposed Logistics Centre site demonstrates that it has previously been supported as a suitable location for business and industrial uses. An outline planning permission for the wider Parc Cybi site was granted in March 2005 for the development of a mixed-use scheme comprising employment uses, a hotel, office uses, leisure uses and industrial units (reference: 19/C842A/EIA).
- 3.3.2 In December 2009, a full planning application for the construction and operation of an office complex and industrial/warehousing facilities on two separate plots at Parc Cybi was submitted to the IACC. This included the proposed site for the Logistics Centre. Permission was granted in 2010 on the site of the proposed Logistics Centre for the construction of four units in warehouse and office use (reference: 19/C842J/ECON). An access road to the Logistics Centre site has already been constructed and one of the plots associated with the above 2005 planning permission (ref: 19/C842A/EIA) has been built out (The Road King Truckstop), which is to the west of the proposed Logistics Centre site (reference: 19/C842Y).

4 Principal planning issues

4.1 Introduction

- 4.1.1 This section provides an overview of the relevant national and local planning policy and guidance which specifically applies to the Logistics Centre component of the Wylfa Newydd DCO Project.
- 4.1.2 The purpose of this section is to present and analyse the site-specific planning considerations that have arisen from the planning policy background, site characteristics and issues, as well as the feedback raised through the Pre-Application Consultation process.
- 4.1.3 This section addresses the principal planning issues, although it should be read in conjunction with the overarching Planning Statement (Application Reference Number: 8.1), the Logistics Centre DAS (Application Reference Number: 8.2.3) and the ES [Application Reference Number: 6.8.1-6.8.12).

4.2 Principle of development

Policy context

National Policy Statements

- 4.2.1 In considering the proposed development and weighing the adverse impacts of the proposed development against its benefits, Paragraph 4.1.3 of National Policy Statement (NPS) EN-1 [RD4] states that the decision maker should take into account:
 - “its potential benefits including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits; and
 - its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.”

Welsh national and local policy

- 4.2.2 Planning Policy Wales (PPW) [RD8] encourages an integrated approach to traffic management (paragraph 8.4.1).
- 4.2.3 Strategic Policy PS9 of the JLDP [RD27] seeks to ensure that highways and transport proposals for the Wylfa Newydd Project form part of the integrated traffic and transport strategy that has regard to Strategic Policy PS4 and PS11 and minimises adverse transport impacts to an acceptable level.
- 4.2.4 Strategic Policy PS4 of the JLDP [RD27] states that development will be located so as to minimise the need to travel. The Council will endeavour to improve accessibility and seek to change travel behaviours by, inter alia, supporting freight transfer facilities.

- 4.2.5 Strategic Policy PS11 of the JLDP [RD27] acknowledges that a logistics centre may form part of a DCO application. The policy provides detail on where such a logistics centre should be located and this is addressed further in the section below.
- 4.2.6 Paragraph 6.1.48 of the JLDP [RD27] states that the Councils will work with the promoter of the Wylfa Newydd Project to develop an appropriate scheme of transport solutions to mitigate the effects of the construction and operation of the new power station. Paragraph 6.1.48 goes on to confirm that one such solution is likely to include the development of a Logistics Centre to control the numbers and timing of traffic movements to the power station site.
- 4.2.7 Policy TRA 1 of the JLDP [RD27] states that in order to help to minimise travel demand (providing they conform to relevant policies in the JLDP) strategically located facilities within or adjacent to Centres for overnight lorry parking and freight transfer will be granted.
- 4.2.8 Policy GP3 of the Wylfa Newydd Supplementary Planning Guidance (Wylfa SPG) [RD28] states that the Council will support the provision of employment, logistics and transport uses proposed in support of the Wylfa Newydd Project providing that development accords with national planning policy and the spatial strategy contained within the JLDP and reflects the locational guidance contained within section 5 of the Wylfa SPG [RD28].
- 4.2.9 Policy GP14 of the Wylfa SPG [RD28] seeks to minimise the volume of road traffic that will utilise parts of the road network where congestion and/or environmental impacts may occur.

Assessment

- 4.2.10 In the context of NPS EN-1 [RD4] and National Policy Statement for Nuclear Power Generation (EN-6) (NPS EN-6) [RD5], examination of the Logistics Centre proposal should take place recognising the nationally significant benefit the Power Station will play and the important function the Logistics Centre has in achieving this.
- 4.2.11 The Logistics Centre is part of Horizon's Integrated Traffic and Transport Strategy which seeks to minimise adverse transport impacts of the Wylfa Newydd Project to an acceptable level by reducing HGV movements on the A5025 and to manage the controlled flow of vehicles to the Power Station Site. The Logistics Centre would ensure that deliveries are appropriately managed to minimise impacts on the local road network. This integrated approach is supported by PPW (paragraph 8.4.1) [RD8], Strategic Policies PS9 and PS4, PS11 of the JLDP [RD27], and GP3 and GP14 of the Wylfa SPG [RD28]. Policy TRA1 of the JLDP [RD27] confirms that the Councils will support strategically located facilities within or adjacent to Centres for overnight lorry parking and freight transfer. The Logistics Centre site is located within the designated Holyhead urban service centre as defined on the adopted JLDP proposals map [RD27] and as such, in line with TRA 1, the location of the Logistics Centre would be supported by the Councils.

4.3 Location of the facilities

- 4.3.1 A four-stage site identification, screening and assessment process was undertaken to identify potentially suitable sites for the Logistics Centre. Details of this process are provided in the Site Selection Report submitted with this application (Application Reference Number: 8.24.6).
- 4.3.2 Strategic Policy PS11 of the JLDP [RD27] confirms the criteria that the Councils will take account of in the preparation of a Local Impact Report (LIR) when considering proposals for a Logistics Centre. The site should be located on a safeguarded or allocated employment site, or be within development boundaries of Centres, or be located adjacent to development boundaries of Centres along or close to the A55/A5 (where the applicant can demonstrate that sites in the first two criteria have been considered and discounted and that the impacts of the development in the countryside can be acceptably minimised and mitigated).
- 4.3.3 Locational guidance within the Wylfa SPG [RD28] supports the principle of freight consolidation facilities, which form part of the operations at the Logistics Centre, at Holyhead and environs (GP27), Llangefni and environs (GP28) and along the A55/A5 corridor (GP30).
- 4.3.4 The proposed site at Parc Cybi is allocated in the JLDP [RD27] for employment purposes and, therefore, is preferable in planning terms to unallocated sites outside of the settlement boundaries. The Parc Cybi site lies within Holyhead settlement boundary which the Wylfa SPG [RD28] directs towards logistics/freight uses. It also lies to the west of causeway to Holy Island, which enables HGVs carrying construction materials arriving through the Port of Holyhead to travel via the Logistics Centre to the Power Station Site, without having to travel further east than they need to, and thus reducing traffic movements on the road.
- 4.3.5 Parc Cybi accords with the locational guidance in the Wylfa SPG [RD28]; fully meets Horizon's functional site size (minimum of 3ha) and locational requirements (located on the strategic road network, within the 30-minute drive time area of the Power Station Site); is easily accessible from the A55 and is allocated for employment development so draws clear support from planning policy. The site lies within the Anglesey AONB, but exceptional circumstances, such as wider site economic benefits, have previously been identified to justify employment development here both in previously approved planning applications and through the allocation of the site through development plans.
- 4.3.6 The site is located close enough to the Power Station Site that it allows the accurate timing of deliveries along the A5025. It is located on the strategic road network at an appropriate point to intercept deliveries.
- 4.3.7 In respect of the other sites at Valley and Holyhead, these are not allocated for employment uses and consideration of potential environmental impacts, including impacts on the AONB, residential amenity and flood risk would make development at these locations less desirable than Parc Cybi.

- 4.3.8 Major employment development on Park Cybi is already consented and there would be an impact on the AONB regardless of this site being proposed for redevelopment to accommodate the Logistics Centre.
- 4.3.9 The Logistics Centre could also act as a catalyst to the development of the remainder of the Parc Cybi area, many of the plots of which are still to be developed.
- 4.3.10 Therefore, given the above consideration of impacts and having regard to planning policy and guidance, Horizon's functional requirements the Logistics Centre and land use constraints, Parc Cybi is the proposed location for a Logistics Centre.

4.4 Other site specific planning issues

- 4.4.1 NPS EN-1 [RD4] and NPS EN-6 [RD5] identify "*generic impacts*" and "*flags for local consideration*". Whilst these are not exhaustive, they provide a helpful guide to the principal issues which the decision maker will be expected to take into account when determining the acceptability of the DCO application.
- 4.4.2 In order to determine the overall acceptability of the proposals, assessment against planning policy is undertaken in this section on all matters deemed material to the consideration of this planning application. These matters are:
- local amenity (including noise and vibration, air quality, health and wellbeing); and
 - biodiversity;
 - soils and geology;
 - surface water, groundwater and flood risk;
 - historic environment;
 - landscape and visual;
 - socio-economics;
 - traffic and transport;
 - Welsh language.
- 4.4.3 This Planning Statement uses the assessments contained within accompanying supporting application documents in order to make judgements against planning policy. The ES (volume H) (Application Reference Number: 6.8.1-6.8.12) contains assessments on a number of topic areas covering the above material considerations. The Transport Assessment (Application Reference Number: 6.3.14), Welsh Language Impact Assessment (WLIA) (Application Reference Number: 8.22), Health Impact Assessment (HIA) (Application Reference Number: 8.19) and DAS (Application Reference Number: 8.2.3) are also used to make judgements against those specific issues.

Local amenity (including noise and vibration, air quality, health and wellbeing)

Policy context

National Policy Statements

- 4.4.4 Paragraph 4.13.2 of NPS EN-1 [RD4] states that the ES should assess effects on human beings for each element of the project, identifying any adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts as appropriate. The impacts of more than one development may affect people simultaneously, so the applicant and the decision maker should consider the cumulative impact on health.
- 4.4.5 Paragraph 5.6.4 of NPS EN-1 [RD4] advises that applicants should “...assess the potential for insect infestation and emissions of odour, dust, steam, smoke and artificial light to have a detrimental impact on amenity, as part of the Environmental Statement”.
- 4.4.6 Paragraph 5.6.7 of NPS EN-1 [RD4] states that the decision maker should be satisfied that an assessment of the potential for artificial light, dust, odour, smoke, steam and insect infestation to have a detrimental impact on amenity has been carried out and that all reasonable steps have been taken, and will be taken, to minimise any such detrimental impacts.
- 4.4.7 Paragraph 5.6.9 of NPS EN-1 [RD4] states that where the decision maker believes it is appropriate, they may consider attaching requirements to the development consent, in order to secure certain mitigation measures.
- 4.4.8 Paragraph 5.10.24 of NPS EN-1 [RD4] states that PRoWs, National Trails and other rights of access to land are important recreational facilities. The decision maker should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails and other PRoWs. Where this is not the case the decision maker should consider what appropriate mitigation requirements might be attached to any grant of development consent.
- 4.4.9 Paragraph 5.11.1 of NPS EN-1 [RD4] states that excessive noise can have wide-ranging impacts on the quality of human life, health (for example owing to annoyance or sleep disturbance) and use and enjoyment of areas of value such as quiet places and areas with high landscape quality. Similar considerations apply to vibration, which can also cause damage to buildings.
- 4.4.10 Paragraph 5.11.8 of NPS EN-1 [RD4] states that the Project should demonstrate good design through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.
- 4.4.11 Paragraph 5.11.9 of NPS EN-1 [RD4] states that:

“the decision maker should not grant development consent unless it is satisfied that the proposals will meet the following aims:

- avoid significant adverse impacts on health and quality of life from noise;
 - mitigate and minimise other adverse impacts on health and quality of life from noise; and
 - where possible, contribute to improvements to health and quality of life through the effective management and control of noise”.
- 4.4.12 Paragraph 5.11.12 of NPS EN-1 [RD4] states that mitigation measures may include one or more of the following:
- engineering: reduction of noise at point of generation and containment of noise generated;
 - lay-out: adequate distance between source and noise-sensitive receptors; incorporating good design to minimise noise transmission through screening by natural barriers, or other buildings; and
 - administrative: restricting activities allowed on the site; specifying acceptable noise limits; and taking into account seasonality of wildlife in nearby designated sites.
- 4.4.13 Where a project is likely to have adverse effects on air quality, paragraph 5.2.6 in NPS EN-1 [RD4] requires that an assessment of the impacts of the proposed project should be undertaken as part of the ES. Paragraph 5.2.7 of NPS EN-1 [RD4] identifies the air quality and emission requirements that should be assessed within an ES stating:
- “The ES should describe:
- any significant air emissions, their mitigation and any residual effects distinguishing between the project stages and taking account of any significant emissions from any road traffic generated by the project;
 - the predicted absolute emission levels of the proposed project, after mitigation methods have been applied;
 - existing air quality levels and the relative change in air quality from existing levels; and
 - any potential eutrophication impacts”.

Welsh national and local policy

- 4.4.14 Paragraph 11.1.13 of PPW [RD8] states that local authorities should seek to protect and enhance the rights of way network as a recreational and environmental resource. Paragraph 11.1.13 also confirms that local authorities are encouraged to promote the national cycle network, long distance footpaths, bridleways, canals, and the use of inland waters and disused railways as greenways for sustainable recreation.
- 4.4.15 PPW [RD8] sets out at chapter 13 (Minimising and Managing Environmental Risks and Pollution) that while planning authorities should not seek to control through planning measures, matters that are the proper concern of the pollution control authority, where pollution considerations affect the use and development of land, they can be material planning considerations.

- 4.4.16 Paragraph 13.15.1 in PPW [RD8] confirms that noise can be a material planning consideration. Paragraph 13.15.2 in PPW [RD8] also states that special consideration is required where noise-generating development is likely to affect a protected species, or is proposed in or near statutorily designated areas, including urban 'quiet areas' designated in Noise Action Plans. It continues to state that the effect of noise on the enjoyment of other areas of landscape, wildlife and historic value should also be taken into account.
- 4.4.17 Policy PCYFF 2 in the JLDP [RD27] states that planning permission will be refused where the proposed development would have an unacceptable adverse impact on:
- “...the health, safety or amenity of occupiers of local residences, other land and property uses or characteristics of the locality due to increased activity, disturbance, vibration, noise, dust, fumes, litter, drainage, light pollution, or other forms of pollution or nuisance”.
- 4.4.18 Strategic Policy PS 4 in the JLDP [RD27] states that, where possible, PRoW and cycle networks should be safeguarded, improved, enhanced and promoted in order to increase health, leisure, well-being and tourism benefits for both local residents and visitors.
- 4.4.19 GP 5 in the Wylfa SPG [RD28] states that the detailed assessments should consider the impacts on access to the Island's natural and built environmental assets, including on PRoW. GP 8 in the Wylfa SPG [RD28] expects applicants to undertake a comprehensive assessment of the potential impacts of the Project on open space, recreation and leisure provision. GP 20 in the Wylfa SPG [RD28] states that the Project should not have a significant adverse impact on the Wales Coast Path. GP 26 in the Wylfa SPG [RD28] seeks improvement to the Wales Coast Path and PRoWs.
- 4.4.20 The Wylfa SPG [RD28] at GP 7 states that the applicant should work with IACC and the Betsi Cadwaladr University Health Board to identify any potentially significant health impacts and appropriate mitigation measures. It also states that Associated Developments should not be proposed where construction activities would give rise to unacceptable impacts on air quality, noise/vibration and light pollution and the amenity of the existing residents, visitors, businesses and construction workers.

Assessment

- 4.4.21 In line with paragraphs 4.13.2, 5.6.4 and 5.6.7 of NPS EN-1 [RD4], chapter H4, H5 and H6 of the ES (Application Reference Number: 6.8.4, 6.8.5 and 6.8.6) have assessed effects on human beings for each element of the project, identifying any adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts as appropriate. The cumulative impact of the Wylfa Newydd Project on health is provided in volume I of the ES (Application Reference Number: 6.9.1-6.9.5).
- 4.4.22 To protect local amenities, and in line with paragraphs 5.11.8 and 5.11.12 of NPS EN-1 [RD4], Policy PS11 of the JLDP [RD27] and GP7 of the Wylfa SPG [RD28], mitigation measures are proposed to limit adverse impacts. For

example, the construction of the Logistics Centre will meet the requirements as set out in the Wylfa Newydd CoCP (Application Reference Number: 8.6). Generic noise and vibration control measures include:

- choice of methodology/technique for operations (including site layout) would be considered in order to eliminate or reduce emissions at sensitive locations;
- fixed items of construction plant would be electrically powered in preference to diesel or petrol driven;
- wherever practicable fabrication would be undertaken off-site;
- noisy plant would be kept as far away as practicable from sensitive areas;
- equipment would be well-maintained and would be used in the mode of operation that minimises noise as far as practicable;
- equipment would be shut down when not in use or throttled down to a minimum during any waiting periods;
- vehicles and mechanical plant employed for any activity associated with the construction works would be fitted with effective exhaust silencers/suppression equipment;
- plant employed for any activity associated with the construction works would be operated in a manner such that noise emissions are controlled and limited as far as reasonably practicable;
- vehicles would not wait or queue on the public highway with engines running (unless the engine is required to power the operation of the vehicle e.g. concrete wagon); and
- all materials would be handled in a manner that minimises noise as far as practicable.

4.4.23 In line with paragraph 5.2.6 of NPS EN-1 [RD4], an air quality assessment has been conducted and in light of the above measures, chapter H5 of the ES [Application Document Reference: 6.8.5] confirms that no potentially significant adverse air quality effects have been identified in association with the Logistics Centre.

4.4.24 The proposals will avoid unacceptable disturbance to local communities, through noise, smell, vibration, smoke or air pollution, in accordance with paragraph 5.11.1 of NPS EN-1 as well as paragraph 13.15.1 of PPW [RD8] and Policy PCYFF2 of the JLDP [RD27] (as confirmed in chapter H5 of the ES).

4.4.25 Paragraph 4.13.5 in NPS EN-1 [RD4] does confirm that decision makers will want to take account of health concerns when setting requirements relating to a range of impacts such as noise. The conclusion of the Health Impact Assessment (HIA) Report (Application Reference Number: 8.18) for the Logistics Centre is that there are no potentially significant health effects that warrant further assessment.

- 4.4.26 Chapter H6 of the ES (Application Reference Number: 6.8.6) confirms that no significant adverse effects were identified for noise and vibration.
- 4.4.27 There are no PRoWs within the site (or within 250m from the site boundary). In line with Policy PS4 of the JLDP the design of the proposals has however sought to be considerate of public access. For example, when a section of wall would be demolished in order to provide a new site access, the existing site entrance would be stopped up and a wall constructed alongside the Lôn Trefignath cycle path. The design of the new site entrance would accommodate the Lôn Trefignath cycle path and the existing dual use cycleway/footway. Unlike the layout of the existing site entrance, the Lôn Trefignath cycle path and the shared use cycleway/footway crossing would be co-located and clearly demarcated across the site entrance by a zebra crossing.
- 4.4.28 The following good practice measures would also be implemented to minimise impacts on local amenity as far as possible:
- access along the shared use cycleway/footway that runs along the north side of the spine road for Parc Cybi industrial estate and Lôn Trefignath cycle path for cyclists and pedestrians would be maintained throughout construction (subject to a diversion);
 - the effects of dust on recreational amenity would be mitigated in accordance with the management strategy set out in the CoCP and described in more detail in chapter H5 – air quality (Application Reference Number: 6.8.5) and chapter H4 – Public access and recreation (Application Reference Number: 6.8.4);
 - the effects of noise on recreational amenity would be mitigated in accordance with the management strategy set out in the CoCP and described in more detail in chapter H6 – noise and vibration (Application Reference Number: 6.8.6) and chapter H4 – Public access and recreation (Application Reference Number: 6.8.4);
 - traffic management to mitigate effects on recreational amenity and active travel would be in accordance with the requirements set out in the CoCP (Application Reference Number: 8.6); and
 - all signage for the shared use cycleway/footway that runs along the north side of the spine road for Parc Cybi industrial estate removed during demolition of the existing site entrance would be replaced in a suitable position during the construction and operation of the Logistics Centre.
- 4.4.29 In conclusion, the Logistics Centre will not result in any unacceptable adverse impacts on local amenities and is therefore considered to accord with paragraphs 4.13.2, 4.6.4, 5.6.7 and 5.11.1, 5.11.8, 5.11.9 of NPS EN-1 [RD4] as well as, PPW (paragraphs 13.5.1 and 11.1.13) [RD8] and Policies PS4 and PCYFF2 of the JLDP [RD27].

Biodiversity

Policy context

National Policy Statements

- 4.4.30 Generic biodiversity conservation impacts of new energy NSIPs are covered in section 5.3 of NPS EN-1 [RD4].
- 4.4.31 Paragraph 5.3.3 in NPS EN-1 requires an ES to clearly set out:
“...any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity”.
- 4.4.32 Further, paragraph 5.3.4 in NPS EN-1 [RD4] states that the applicant should show how the proposals have taken advantage of opportunities to conserve and enhance biodiversity interests.
- Paragraph 5.3.7 NPS EN-1 [RD4] states that as a general principle, and subject to other paragraphs in EN-1 [RD4], development should aim to avoid significant harm to biodiversity interests, including through mitigation and consideration of reasonable alternatives; where significant harm cannot be avoided, then appropriate compensation measures should be sought.
- 4.4.33 Paragraphs 5.3.18 and 5.3.19 of NPS EN-1 [RD4] identify that the applicant should include appropriate mitigation measures as an integral part of the proposed development. Paragraph 3.9.6 of NPS EN-6 [RD5] states that potential mitigation measures could include variations to building layout to avoid ecologically sensitive areas and on-site measures to protect habitats and species and to avoid or minimise pollution and the disturbance of wildlife.

Welsh national and local policy

- 4.4.34 Paragraph 5.2.8 of PPW [RD8] states that the planning system should promote biodiversity objectives and seek to minimise the fragmentation of habitats.
- 4.4.35 The planning system has an important part to play in meeting biodiversity objectives by promoting approaches to development which create new opportunities to enhance biodiversity, prevent biodiversity losses, or compensate for losses where damage is unavoidable. Paragraph 5.2.8 in PPW [RD8] confirms that the adaptation needs of biodiversity could be considered by identifying the scope for minimising or reversing the fragmentation of habitats and improving habitat connectivity through the promotion of wildlife corridors.
- 4.4.36 Policy PCYFF 2 in the JLDP [RD27] states that proposals should include provision for the appropriate management and eradication of invasive species.
- 4.4.37 Strategic Policy PS 5 in the JLDP [RD27] states that development will be supported where it is demonstrated that it is consistent with the principles of sustainable development. It also states that all proposals should protect and

improve the quality of the natural environment, its landscapes and biodiversity assets.

- 4.4.38 Strategic Policy PS 9 in the JLDP [RD27] requires all Associated Development to avoid, minimise, mitigate or compensate for potentially adverse ecological impacts in the local and wider area, both in the short and longer term.
- 4.4.39 Strategic Policy PS 19 in the JLDP [RD27] states that the Councils will manage development so as to conserve and where appropriate enhance the distinctive natural environment, countryside and coastline, and that proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area. Strategic Policy PS 19 also states that when determining planning application, consideration should be *inter alia* to the following items.
- Safeguarding habitats and species and geology.
 - Protecting or where appropriate enhancing sites of international, national, regional and local importance and, where appropriate, their settings in line with National Policy.
 - Protecting or enhancing biodiversity through networks of green/blue infrastructure and/or restoring networks of natural habitats.
 - Protecting, retaining or enhancing trees, hedgerows or woodland of ecological value.
 - Having appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with National Policy.
- 4.4.40 Section 4.10 of the Wylfa SPG [RD28] relates to the natural environment and GP 20 states that the Wylfa Newydd DCO Project should seek to ensure that the island's unique and distinctive natural environment is conserved and, where possible, enhanced. This includes the consideration of, among other things:
- the integrity of statutory and non-statutory sites for nature conservation;
 - internationally and nationally protected habitats and species; and
 - ecological functionality and relationships within the wider landscape.
- 4.4.41 GP 20 of the Wylfa SPG [RD28] states that *inter alia*; protected species, the ecological functionality of nature conservation sites, Special Areas of Conservation, Special Protection Areas, SSSIs, RIGS and the Geopark status of Anglesey should not be subjected to significant adverse impacts, or if they are, sufficient mitigation should be implemented. GP 20 of the Wylfa SPG [RD28] goes on to state that where adverse effects cannot be avoided, the Council seeks appropriate mitigation and/or compensation measures.

Assessment

- 4.4.42 As confirmed in chapter H9 of the ES (Application Reference Number: 6.8.9), the Logistics Centre would not impinge upon any statutory or non-statutory designated site. North Anglesey Marine/Gogledd Môn Forol candidate Special Area of Conservation is located approximately 0.85km north of the Logistics Centre site, Anglesey Terns/Morwenoliaid Ynys Môn Special Protection Area is located approximately 1.2km north of the boundary and Beddmanarch-Cymyran SSSI is located approximately 1.1km east of the site. Chapter H9 of the ES (Application Reference Number: 6.8.9) confirms that there are no significant adverse effects on these receptors. This satisfies Policy GP20 of the Wylfa SPG [RD28] which seeks to avoid significant adverse impacts on SSSIs, Special Areas of Conservation or Special Protection Areas.
- 4.4.43 In line with paragraph 5.3.7 of NPS EN-1 [RD4] and PPW (paragraph 5.2.8) [RD8] the proposals have sought to minimise adverse impacts on ecology. Paragraph 3.9.6 of NPS EN-6 [RD5] states that mitigation options include variations to building layout to avoid ecologically sensitive areas and on-site measures to protect habitats and species and to avoid or minimise pollution and the disturbance of wildlife. The design has been developed to do this by including the following measures as embedded mitigation:
- the design of the Logistics Centre has retained as many existing features as practicable e.g. hedgerows, boundary features, exposed rock, marshy grassland, and the waterbody to the north-east;
 - the design of the Logistics Centre has restored existing stone walls and hedgerows along site boundaries;
 - the design of the Logistics Centre has mitigated the effects of the lighting that would be required during construction through positioning buildings and construction activities away from habitats of most value to sensitive ecological receptors; and
 - drainage has been designed to avoid any effect on the attenuation pond.
- 4.4.44 Strategic Policies PS5, PS9 and PS19 [RD27] all seek to avoid adverse ecological impacts and improve the quality of the natural environment. Further, paragraph 5.3.4 of NPS EN-1 [RD4], states that the applicant should show how the proposals have taken advantage of opportunities to conserve and enhance biodiversity interests. As such, good practice during the construction phase would include the following measures which would be implemented via the Wylfa Newydd CoCP (Application Reference Number 8.6) and Logistics Centre sub-CoCP (Application Reference Number:8.11) .
- Habitat manipulation will be used to encourage dispersal of reptiles from habitats that will be removed during construction of the Logistics Centre into areas of adjacent habitat that will not be affected.
 - Supervision of destructive works by an Ecological Clerk of Works (ECOW) to capture and move any reptiles discovered, and release them into areas of adjacent habitat that will not be affected.

- A pre-construction survey will be completed before any works in close proximity to the attenuation pond will take place to search for evidence of water vole, including burrows, latrines and feeding remains. This will include areas up to 50m from the locations of the drainage infrastructure connection. This will be secured through a DCO requirement, Draft Development Consent Order (Application Reference Number: 3.1).
 - In the event that water vole burrows are identified in areas that are planned to be directly affected, Natural Resources Wales will need to be consulted with regards to the need to obtain a Conservation Licence to allow works to continue.
 - Should the pre-construction survey identify water vole burrows in the areas of the attenuation pond affected by works, then a Conservation Licence from Natural Resources Wales will need to be obtained.
 - Avoidance of nesting habitat removal during the bird breeding season (March to August inclusive). If not possible, then works would be supervised by an ECoW with appropriate protection measures put in place should active nests be found. These would include exclusion zones around active nests until chicks had fledged or nests had become inactive, as determined through monitoring by the ECoW.
 - Pre-construction surveys will be undertaken for invasive non-native species in order to inform construction decisions. Good practice biosecurity measures would provide the control and, if necessary, eradication of the invasive species, using guidance publications such as Guidance: Prevent harmful weeds and invasive non-native plants spreading.
 - The Wylfa Newydd CoCP (Application Reference Number: 8.6) and the Logistics Centre sub-CoCP (Application Reference Number: 8.11) set out the overarching pollution management principles that would be applied across the Logistics Centre site through the construction period. This includes good working practices and measures to protect the water environment, including management of sediment and pollution response plans. The Wylfa Newydd CoCP (Application Reference Number: 8.6) and the Logistics Centre sub-CoCP (Application Reference Number: 8.11) also set out good working practices to control fugitive dust during the construction phase.
- 4.4.45 Following construction of the Power Station, the site would no longer be operated by Horizon and would become available for an alternative use or development, subject to any required permissions being obtained by a future occupier.

Soils and geology

Policy context

National Policy Statements

- 4.4.46 Paragraph 5.10.8 of NPS EN-1 [RD4] states that development should seek to minimise impacts on “best and most versatile” agricultural land and preferably use land in areas of poorer quality except where this would be inconsistent with other sustainability considerations. Paragraph 5.10.8 states that applicants should also identify any effects and seek to minimise impacts on soil quality taking into account any mitigation measures proposed. For developments on previously developed land, applicants should ensure that they have considered the risk posed by land contamination.
- 4.4.47 Paragraph 5.10.15 of NPS EN-1 [RD4] states that the decision maker should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. Paragraph 5.10.15 continues to state that decision makers should give little weight to the loss of poorer quality agricultural land (in grades 3b, 4 and 5).
- 4.4.48 NPS EN-1 [RD4] states at paragraph 5.3.3 that, where the development is subject to EIA, the applicant should ensure that the ES clearly sets out any effects on internationally, nationally and locally designated sites of geological conservation importance.

Welsh national and local policy

- 4.4.49 PPW [RD8] states at paragraph 13.7.1 that planning decisions need to take into account:
- the potential hazard that contamination presents to the development itself, its occupants and the local environment; and
 - the results of a specialist investigation and assessment by the developer to determine the contamination of the ground and to identify any remedial measures required to deal with any contamination.
- 4.4.50 PPW [RD8] states at paragraph 13.7.2 that where acceptable remedial measures can overcome contamination, permission may be granted subject to requirements specifying the necessary measures.
- 4.4.51 PPW [RD8] states at paragraph 4.10.1 that the best and most versatile agricultural land (Grades 1, 2 and 3a) should be conserved as a finite resource for the future and that considerable weight should be given to protecting such land from development, because of its special importance. This paragraph also clarifies that the best and most versatile agricultural land should only be developed if there is an overriding need for the development, and either previously developed land or land in lower agricultural grades is unavailable, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations. Paragraph 4.10.1 in PPW [RD8] also states that if the best and most versatile agricultural land does need to be developed, and

there is a choice between sites of different grades, development should be directed to land of the lowest grade.

- 4.4.52 Strategic Policy PS6 in the JLDP [RD27] states that proposals will only be permitted where it is demonstrated with appropriate evidence that the applicant has fully taken account of and responded to the need to safeguarding the best and most versatile agricultural land.
- 4.4.53 GP 20 of the Wylfa SPG [RD28] states that SSSIs, RIGS and the Geopark status of Anglesey should not be subjected to significant adverse impacts, or if they are, sufficient mitigation should be implemented. GP20 also advocates the remediation of contaminated land.

Assessment

- 4.4.54 During topsoil stripping, storage and handling, the effects set out below may occur:
- soil deformation could occur through compaction and smearing, as a result of trafficking and handling of the soil;
 - stripping topsoil too deeply, thereby incorporating subsoil, or stripping to too shallow a depth could respectively lead to a degradation of soil quality or result in the loss of valuable topsoil;
 - if soils of different types or quality are found to be present and are mixed during topsoil stripping and storage, higher quality soils may be degraded; and
 - if topsoil is stored incorrectly, there is a potential for degradation to occur as a result of physical, chemical or biological changes due to compaction or anaerobism.
- 4.4.55 The implementation of the good practice soil management measures identified in section 7.4 of chapter H7 of the ES (Application Reference Number: 6.8.7) and listed in the paragraph below, would reduce the potential for these effects to occur, such that there would only be a small magnitude of change. This would result in a minor adverse effect on the high value (Subgrade 3a) and low value (Grade 4) topsoils identified on-site. Justification for the site location is set out within the Site Selection Report [Application Reference Number: 8.24.6]. The proposals accord with paragraph 5.10.8 and 5.10.15 of NPS EN-1 which seek to minimise impacts on best and most versatile agricultural land, as well as with Policies PS6 of the JLDP [RD27] and paragraph 4.10.1 of PPW [RD8] which seek to avoid unacceptable adverse impacts on agricultural land.
- 4.4.56 Good practice mitigation would include:
- the preparation of an unexpected contamination scheme of measures prior to the commencement of any activities that involve ground disturbance in order to address any areas of unexpected contamination encountered;
 - good equipment maintenance and repair and containment systems for all fuel storage areas to reduce leaks and spills;

- implementation of materials management measures in accordance with the materials management strategy set out in section 9 of the Wylfa Newydd CoCP (Application Reference Number: 8.6);
 - The reuse of materials would be managed in accordance with The Definition of Waste: Development Industry Code of Practice;
 - appropriate procedures for soil handling, such as stopping works when soil moisture exceeds certain limits;
 - appropriate segregation of soils, including the segregation of topsoils and subsoils, as well as soils of distinctly different qualities, types or composition;
 - soils would be stockpiled using methods appropriate to the soil moisture conditions;
 - the height of topsoil storage mounds would be limited to 2m in order to reduce potential adverse effects on topsoil quality and suitability for reuse;
 - soil storage mounds would have slopes of one in two (approximately 25°) or less wherever practicable;
 - where soils would be stored for longer than 60 days, stockpiles would be seeded with an appropriate low-maintenance seed mix; and
 - Pollution prevention strategies would be implemented during operation in accordance with the surface water and groundwater strategy (section 10) of the Wylfa Newydd Code of Operational Practice (Application Reference Number: 8.13).
- 4.4.57 As set out in PPW (paragraph 13.7.1) [RD8] the hazards that contamination could cause need to be thoroughly considered. The Wylfa Newydd CoCP (Application Reference Number: 8.6) sets out the overarching management strategies for dealing with land contamination. The sub-CoCP for the Logistics Centre (Application Reference Number: 8.11) sets out the specific requirements associated with the construction of the Logistics Centre.
- 4.4.58 The above stated good practice mitigation ensure that the proposals are in compliance with paragraph 13.7.2 of PPW [RD8] and paragraph 3.7.8 of NPAS WEN-6 [RD5].
- 4.4.59 In accordance with paragraph 5.3.3 of NPS EN-6, chapter H7 of the ES (Application Reference Number: 6.8.7) has considered designated sites of geological important but it was found that no sites of geological importance are present within the study area.
- 4.4.60 Chapter H7 of the ES (Application Reference Number: 6.8.7) confirms that no residual significant adverse soil and geology effects were identified for the Logistics Centre and as such, and as explained above, the proposals are in accordance with paragraph 5.10.8 of NPS EN-1 [RD4].

Surface water, groundwater and flood risk

Policy context

National Policy Statements

- 4.4.61 Paragraph 5.15.2 of NPS EN-1 [RD4] states that where a project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and impacts of the proposed project on, water quality, water resources and physical characteristics of the water environment as part of the ES.
- 4.4.62 Paragraph 5.15.9 and 5.15.10 of NPS EN-1 [RD4] states that the risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution practice and impacts on local water resources can be minimised through planning and design for the efficient use of water, including water recycling.
- 4.4.63 NPS EN-6 [RD5] states at paragraph 3.6.11 that applicants need to submit a flood risk assessment in accordance with section 5.7 of NPS EN-1 [RD4]. Paragraph 3.6.16 in EN-6 [RD5] states that applicants should set out measures to mitigate the risk of flooding on or from individual sites that may result from the development.
- 4.4.64 Paragraph 5.7.9 of NPS EN-1 [RD4] states that in determining an application for development consent, the decision maker should be satisfied that where relevant:
- the application is supported by an appropriate Flood Risk Assessment;
 - the Sequential Test has been applied as part of site selection;
 - a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;
 - the proposal is in line with any relevant national and local flood risk management strategy;
 - priority has been given to the use of Sustainable Drainage Systems; and
 - in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed over the lifetime of the development.
- 4.4.65 Paragraph 5.7.12 in NPS EN-1 [RD4] states that the decision makers should not consent development in Flood Zone 2 in England or Zone B in Wales unless it is satisfied that the sequential test requirements have been met. It should not consent development in Flood Zone 3 or Zone C unless it is satisfied that the Sequential and Exception Test requirements have been met. Paragraph 5.7.12 in NPS EN-1 [RD4] continues to confirm that the technology-specific NPSs set out some exceptions to the application of the sequential test. However, when seeking development consent on a site allocated in a development plan through the application of the Sequential Test, informed by a strategic flood risk assessment, paragraph 5.7.12 in NPS EN-1 [RD4]

advises that applicants need not apply the Sequential Test, but should apply the sequential approach to locating development within the site.

4.4.66 Paragraph 5.7.13 in NPS EN-1 describes the Sequential Test, stating:

"Preference should be given to locating projects in Flood Zone 1 in England or Zone A in Wales. If there is no reasonably available site in Flood Zone 1 or Zone A, then projects can be located in Flood Zone 2 or Zone B. If there is no reasonably available site in Flood Zones 1 or 2 or Zones A & B, then nationally significant energy infrastructure projects can be located in Flood Zone 3 or Zone C subject to the Exception Test. Consideration of alternative sites should take account of the policy on alternatives set out in Section 4.4 above".

Welsh national and local policy

4.4.67 Sections 13.4 of PPW [RD8] sets out the Welsh Government's approach to flood risk and development in areas of high flood risk and dealing with contaminated land such that the development does not impact on the water environment.

4.4.68 Paragraph 13.4.2 of PPW [RD8] states that local planning authorities should ensure that development does not increase the risk of flooding elsewhere by loss of flood storage or flood flow route or increase the problem of surface water run-off. Paragraph 13.4.3 of PPW [RD8] confirms that flood risk is a material consideration in the determination of planning applications.

4.4.69 Strategic Policy PS 5 in the JLDP [RD27] seeks developments that manage flood risk and maximise use of Sustainable Drainage Systems.

4.4.70 Strategic Policy PS 6 in the JLDP [RD27] asserts that, in order to adapt to effects of climate change, proposals will only be permitted where they are located away from flood risk areas unless it can be clearly demonstrated that there is no risk or that the risk can be managed.

4.4.71 Policy PCYFF 3 in the JLDP [RD27] states that proposals would only be permitted where their drainage systems are designed to limit surface water run-off, flood risk and pollution.

4.4.72 Policy PCYFF 6 in the JLDP [RD27] requires development to incorporate water conservation measures where practicable, including Sustainable Drainage Systems. This policy also notes that proposals should use flood minimisation or mitigation measures where possible, to reduce surface water run-off and minimise its contribution to flood risk elsewhere.

4.4.73 Strategic Policy PS 5 in the JLDP [RD27] states that proposals should adapt to the unavoidable impacts of climate change, avoiding pollution and reducing the amount of water used and wasted and reducing the effect on water resources and quality.

4.4.74 Policy PCYFF 2 in the JLDP [RD27] states that proposals would be refused where they would have an unacceptable adverse impact on the quality of ground or surface water.

- 4.4.75 GP 20 of the Wylfa SPG [RD28] states that the release of potentially polluting substances to air, water or land should be minimised. GP 21 states that the Wylfa Newydd Project should include measures to control surface water runoff where the potential for adverse impacts is identified.

Assessment

- 4.4.76 In accordance with paragraph 5.15.2 of NPS EN-1 [RD4], Horizon has undertaken an assessment of the existing status of, and the impacts of the proposed project on water quality, water resources and physical characteristics of the water environment as part of the ES (see chapter H8 of the ES).
- 4.4.77 In accordance with paragraphs 5.15.9 and 5.15.10 of NPS EN-1 [RD4] which state that the risk of impacts on the water environment can be reduced through careful design, all surface runoff will be passed through an oil/water interceptor before passing through a below ground geocellular attenuation tank. This will serve to reduce the risk of pollution in accordance with Policy PS5 in the JLDP [RD27] and GP20 and GP21 in the Wylfa SPG [RD28], and will control surface runoff as required by Policies PCYFF3 and PCYFF6 of the JLDP [RD27] and GP21 in the Wylfa SPG [RD28].
- 4.4.78 The vehicle hardstanding would be constructed using impermeable paving and surface runoff would be routed through a below-ground geocellular storage system, providing up to 1,100m³ of storage. This would be used to attenuate flood events.
- 4.4.79 Policy PS5 in the JLDP [RD27] requires all proposals adapt to the unavoidable impacts of climate change. In line with this, the maximum discharge has been calculated to reduce the 1% Annual Exceedance Probability event to the greenfield mean annual maximum flow runoff using methods from the Sustainable Drainage Systems Manual. The maximum discharge into the pond would be 9.14l/s. Calculations incorporate a 20% increase in rainfall intensity to account for future climate change, in accordance with Policy PS5 in the JLDP [RD27].
- 4.4.80 There would be no fuel storage or vehicle refuelling on-site during operation of the Logistics Centre in line with Policies PS5 and PCYFF2 in the JLDP [RD27] and GP20 of the Wylfa SPG [RD28] which seek to minimise the release of potentially polluting substances to air, water or land.
- 4.4.81 Policy PCYFF2 of the JLDP [RD27] seeks to ensure that unacceptable adverse impacts on the quality of ground or surface water are avoided. In light of this, the Wylfa Newydd Code of Operational Practice (Application Reference Number: 8.13) would be developed for the Logistics Centre. This would outline the operational standards and measures, along with the site-specific operational mitigation measures, including procedures to follow in the event of a fuel leak or spillage, the maintenance schedule for the oil separator and checking the outfall structure. This will again reduce the risk of pollution in accordance with Policies PS5 and PCYFF2 in the JLDP [RD27].

4.4.82 The design of any drainage outfall structures for discharge of rainfall runoff would follow good practice design guidelines and the size and extent of structures would be appropriate to the volume of water to be discharged. The proposed outfall may require an application for ordinary watercourse consent from the Isle of Anglesey County Council. The drainage system will be implemented as soon as practicable in the construction programme to receive any increase in runoff rates and to alleviate the increase in sediment loading and any surface water pollutants.

4.4.83 In accordance with paragraph 3.6.16 in NPS EN-6 [RD5], the good practice mitigation measures that would be of relevance include the list below:

- A risk assessment would be undertaken for use of any cementitious materials within 50m of any active watercourse. Appropriate controls, proportionate to the level of risk identified, would be applied to the works.
- All refuelling, oiling and greasing would take place above drip trays or on impermeable surfaces (e.g. plant nappy) with sealed drainage and an oil interceptor, which provides protection to underground strata and watercourses, and away from drains as far as is reasonably practicable. Vehicles and plant would not be left unattended during refuelling. Appropriate spill kits would be easily accessible during these activities. Only construction equipment and vehicles free of oil/fuel leaks which could cause material contamination would be permitted on-site. Drip trays would be placed below static mechanical plant.
- Measures would be taken to prevent the deposition of silt or other material arising from work operations in existing watercourses or catchment areas. The measures would accord with the principles set out in industry guidelines, including NRW's Works and maintenance in or near or water: GPP 5. Measures include use and maintenance of temporary lagoons, tanks, bunds, silt fences or silt screens, as well as consideration of the type of plant used and the time of year for working in watercourses.
- Surface water drainage from all parking areas where there is a potential of leaks of fuels, oils or other liquids would incorporate attenuation and appropriate pollution treatment.
- Regular inspection, maintenance and management of the oil interceptors and the drainage system would take place.
- There would be regular inspection of the parking area for fuel and oils.
- Spill response and clean-up procedures would be implemented to prevent pollution of watercourses.

4.4.84 Taking into account the embedded and good practice mitigation detailed in this chapter, no significant residual surface water or groundwater effects have been identified associated with the construction, operation or

decommissioning of the proposed Logistics Centre and as such the proposals are in accordance with section 13.4 of PPW [RD8].

- 4.4.85 In line with 3.6.11 of NPS EN-6 [RD5] a Flood Consequence Assessment has been undertaken and is included at appendix H8-01 (Application Reference Number: 6.8.16). In accordance with PS6 of JLDP [RD27], the proposed Logistics Centre would be located within Flood Zone A of the TAN 15 Development Advice Map, implying that there is little to no risk of fluvial flooding. There have been no recorded flood events in the area and surface water discharges will be restricted by culverts within the study area. Therefore, the risk of fluvial flooding is considered to be low and the sequential and exceptions tests in NPS EN-1 do not need to be applied (paragraphs 5.7.12-15 of NPS EN-1 [RD4]). The key issues relating to the construction phase of the Logistics Centre on flood risk include:
- high sediment loading within watercourses from construction activities causing a reduction in conveyance in culverts downstream;
 - localised flooding within the site in areas where direct rainfall and/or runoff from off-site exceeds the design standard of the construction drainage system; and
 - increase in surface water flooding risk within the Logistics Centre as a result of soil compaction and an increase in impermeable areas causing greater rates of surface runoff.
- 4.4.86 Due to the current low risk of surface water flooding to the site, the proposed drainage system would be sufficient to capture surface flows and prevent an increase in surface water flooding to both on-site and off-site receptors (more details are provided in appendix H8-01). As such the proposals are in accordance with paragraph 13.4.2 of PPW [RD8]. The drainage system has been designed to manage surface water runoff above greenfield rates for all events up to the 1 in 100 year event incorporating anticipated climate change, which, combined with the levelling of the site for HGV parking means that the risk from surface water is considered to be low. Therefore, the magnitude of change is considered to be small and the significance of effect is considered to be minor.
- 4.4.87 Flood risk within the study area may be affected by the increase in impermeable areas, as there would be increased runoff from the site. Furthermore, the installation of any outfall for discharge of rainfall runoff to the existing pond may increase flood risk as flow is passed directly to the pond, altering the flow regime. Given the design of the outfall, the presence of a below ground attenuation facility, the drainage system, plus the fact that runoff rates will be restricted to the greenfield rate, the magnitude of change is considered to be negligible, as is the significance of impact.
- 4.4.88 There is not considered to be any increase in flood risk to the off-site receptors either, due to the incorporation of the attenuation system and the discharge at greenfield rates. As a result, there is considered to be a negligible but positive benefit for more severe storm events and the proposals are in accordance

with paragraph 5.7.9 of NPS EN-1 [RD4] and Strategic Policy PS 6 in the JLDP [RD27].

Historic environment

Policy context

National Policy Statements

- 4.4.89 Paragraph 1.7.2 of NPS EN-1 [RD4] states that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects on cultural heritage.
- 4.4.90 Paragraph 5.8.1 of NPS EN-1 [RD4] recognises that the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment.
- 4.4.91 Paragraph 5.8.2 of NPS EN-1 [RD4] confirms that those elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest are called 'heritage assets'.
- 4.4.92 Paragraph 5.8.14 of NPS EN-1 [RD4] states that *"there should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be"*. Paragraph 5.8.14 of NPS EN-1 [RD4] also states:
- 4.4.93 *"Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II* listed buildings; grade I and II* registered parks and gardens; and World Heritage Sites, should be wholly exceptional"*.
- 4.4.94 Paragraph 5.8.15 of NPS EN-1 [RD4] states that any harmful impacts on the significance of designated heritage assets should be "...weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss".
- 4.4.95 Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010 states that when considering whether to give permission for development which affects a Listed Building or its setting, the decision maker must have regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

Welsh national and local policy

- 4.4.96 PPW [RD8] identifies objectives including conserving and enhancing the historic environment at section 6.5 PPW [RD8] confirms that the greater the

significance and/or impact on the historic environment, then the greater the benefit needed to justify any harm (paragraph 6.5.1).

- 4.4.97 PPW [RD8] also clarifies at paragraph 6.5.5 that where nationally important archaeological remains, whether scheduled or not, and their settings are likely to be affected by proposed development, there should be a presumption in favour of their physical protection *in situ*. Paragraph 6.5.5 in PPW [RD8] states:

"It will only be in exceptional circumstances that planning permission will be granted if development would result in an adverse impact on a Scheduled Monument (or an archaeological site shown to be of national importance) or has a significantly damaging effect upon its setting. In cases involving less significant archaeological remains, local planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development".

- 4.4.98 TAN 12 [RD22] sets out advice on good design, including advice on considering the historic environment in design.
- 4.4.99 TAN 24 [RD26] sets out a presumption in favour of preservation *in situ* of Scheduled Monuments or other nationally significant archaeological remains. Where the significance of archaeological remains does not merit preservation *in situ*, a programme of archaeological recording may be undertaken, including analysis and publication of the results.
- 4.4.100 At the local level, Strategic Policy PS 5 in the JLDP [RD27] confirms that development will be supported where it is consistent with its sustainable development principles, including preserving and enhancing the quality of the built and historic environment assets including their setting.
- 4.4.101 Policy PCYFF 3 in the JLDP [RD27] states that all proposals will be expected to demonstrate high quality design taking into account the historic environmental context and to contribute to the creation of attractive, sustainable places.
- 4.4.102 Policy PS 20 in the JLDP [RD27] states that local planning authorities should endeavour to preserve or enhance heritage assets, both designated and undesignated. Policy PS 20 also states that proposals which preserve and where appropriate enhance the heritage assets, their setting and Significant Views into and out of the building/area will be granted.
- 4.4.103 Strategic Policy PS 9 in the JLDP [RD27] relates to Wylfa Newydd Project and states that the scheme layout and design of the Power Station and associated developments, and the scale of open spaces, landscaping, planting (including hedging and tree belts), waterways and similar features should avoid, minimise, mitigate or compensate for impacts on cultural and historic aspects of the landscape, both in the short and longer term.
- 4.4.104 Policy AT 1 in the JLDP [RD27] states that any proposal within or assessed to affect the setting of Conservation Areas, World Heritage Sites, Registered Historic Landscapes and Parks and Gardens should have regard to relevant

character appraisals, management plans, delivery strategies and assessments adopted by the Local Planning Authority.

Assessment

- 4.4.105 No effects of moderate significance or greater have been identified for archaeological remains during either construction, operation or the decommissioning of the Logistics Centre. Effects of minor adverse significance are predicted for two archaeological remains, comprising Trefignath Burial Chamber (Asset 21) and Ty Mawr Standing Stone, Holyhead (Asset 22).
- 4.4.106 No effects on historic buildings are predicted as a result of construction, operation or decommissioning of the Logistics Centre.
- 4.4.107 No effects of moderate significance or greater have been identified for Historic Landscape Types. The construction, operation and decommissioning phases of the Logistics Centre would all have an effect of negligible adverse significance on Penrhos Historic Landscape Type (Historic Landscape Type 1).
- 4.4.108 In line with paragraph 5.5.20 of NPS EN-1 [RD4], the effects associated with the construction of the Logistics Centre have been mitigated by proposing the following additional mitigation measures:
- Development of an archaeological mitigation strategy which would be developed in consultation with relevant stakeholders, to undertake a series of mitigation works which could potentially include targeted archaeological watching brief, targeted excavation and targeted strip map and sampling; and
 - photographic survey to record the current settings of Trefignath Burial Chamber (Asset 21) and Ty Mawr Standing Stone, Holyhead (Asset 22).
- 4.4.109 There is the potential that any unknown archaeological remains that may be present within previously undisturbed areas of the Logistics Centre would be removed by construction. Additional mitigation as noted above is therefore proposed.
- 4.4.110 Paragraph 5.8.15 of NPS EN-1 [RD4] states that “any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss”. No significant adverse effects are expected and it is considered that the minor adverse harm potentially to be caused to archaeological remains is outweighed by the public benefit of the development supporting new nuclear power. The proposal would facilitate the effective management of delivery vehicles arriving at the Power Station Site, staggering influx and reducing congestion. For example, vehicle movements from the Logistics Centre to the Power Station Site would be controlled in order to prevent vehicles leaving in convoy and to avoid sensitive times of the day (such as peak work rush hour and school run).

- 4.4.111 In line with Policy PS 9 and PCYFF 3 of the JLDP [RD27] and TAN12 [RD22] the design of the Logistics Centre has evolved to take into account the historic environmental context. The design of the Logistics Centre has sought to preserve the sight line between the Trefignath Burial Chamber and Ty Mawr Standing Stone by the office/welfare building and inspection tent being located away from this sightline.
- 4.4.112 In summary, embedded, good practice and additional mitigation measures have sought to minimise impacts on the cultural heritage environment. No significant adverse effects have been identified for cultural heritage, in accordance with NPS EN-1 (paragraph 5.8) [RD4], PPW (paragraph 6.5.1) [RD8] and Policies PS5, PS20, PCYFF 3, and AT1 in the JLDP [RD27].

Landscape and visual

Policy context

National Policy Statements

- 4.4.113 Paragraph 1.7.2 of NPS EN-1 [RD4] states that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects inter alia on landscape and visual amenity. In general, it should be possible to mitigate satisfactorily the most significant potential negative effects of new energy infrastructure consented in accordance with the energy NPSs. However, paragraph 1.7.2 of NPS EN-1 [RD4] acknowledges that the impacts on landscape and visual amenity in particular will sometimes be hard to mitigate.
- 4.4.114 Paragraph 5.9.8 of NPS EN-1 states that *"landscape effects depend on the existing character of the local landscape, its current quality, how highly it is valued and its capacity to accommodate change. All of these factors need to be considered in judging the impact of a project on landscape. Virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate"*.
- 4.4.115 NPS EN-1 [RD4] states at paragraph 4.5.1 that the visual appearance of a building is sometimes considered to be the most important factor in good design. But high quality and inclusive design goes far beyond aesthetic considerations. It clarifies that the functionality of an object — be it a building or other type of infrastructure — including fitness for purpose and sustainability, is equally important.
- 4.4.116 Paragraph 5.9.12 in NPS EN-1 [RD4] confirms that the duty to have regard to the purposes of nationally designated sites also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints.

Importantly, paragraph 5.9.13 in NPS EN-1 [RD4] confirms that the fact that a proposed project will be visible from within a designated area should not in itself be a reason for refusing consent.

- 4.4.117 Paragraph 5.9.14 in NPS EN-1 [RD4] confirms that local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.
- 4.4.118 Paragraph 5.9.15 in NPS EN-1 [RD4] acknowledges that the scale of such projects means that they will often be visible within many miles of the site of the proposed infrastructure. The decision maker should therefore judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the Project.
- 4.4.119 Paragraph 5.9.16 in NPS EN-1 [RD4] states that the decision maker should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the decision maker considers reasonable.
- 4.4.120 Paragraph 5.9.17 in NPS EN-1 [RD4] states that the decision maker “...*should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation*”.
- 4.4.121 Paragraph 5.9.22 in NPS EN-1 [RD4] states that within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project.

Welsh national and local policy

- 4.4.122 Section 5.3 of PPW [RD8] sets out measures to conserve landscape and biodiversity.
- AONBs should be given the highest status of protection from inappropriate development. Great weight should be given to the conservation and enhancement of their natural beauty;
 - Non-statutory designations, such as, Special Landscape Areas (SLAs) should be protected; and
 - LANDMAP NRW, (2011 and 2013a-2013d) provides an important information resource to use in undertaking landscape assessments which inform decision making.
- 4.4.123 PPW [RD8] states that, while the value of all the landscapes of Wales is recognised local planning authorities should have regard to the relative significance of international, national and local designations in considering the weight to be attached to nature conservation interests and should take care to avoid placing unnecessary constraints on development (paragraph 5.3.2).

4.4.124 JLDP [RD27] Strategic Policy PS 5 states that proposals should protect and improve the quality of the natural environment, its landscapes and biodiversity assets.

4.4.125 Strategic Policy PS 9 in the JLDP [RD27] states that the design of all the Wylfa Newydd Project and related development should ensure the scheme layout and design and the scale of open spaces, landscaping, planting, waterways and similar features proposed should avoid, minimise, mitigate or compensate for visual and landscape 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. This policy clarifies that proposals will be expected to be commensurate with the scale of the development, and the extent of its impact.

4.4.126 Policy PCYFF 4 in the JLDP [RD27] states that all proposals should integrate into their surroundings and clarifies that those proposals that fail to show (in a manner appropriate to the nature, scale and location of the proposed development) how landscaping has been considered from the outset as part of the design proposal will be refused. This policy also requires that landscape schemes for developments should *inter alia*:

- give due consideration to the Landscape Character Area Assessment or Seascape Character Area (SCA) Assessment;
- respect the natural contours of the landscape;
- respect and protects local and strategic views;
- respect, retain and complement any existing positive natural features, landscapes, or other features on site;
- identify trees, hedgerows, water courses and topographical features to be retained; and
- justify circumstances where the removal/loss of existing trees, hedgerows, water courses and topographical features cannot be avoided and provides details of replacements.

4.4.127 Strategic Policy PS 19 states that development should conserve and where appropriate enhance the distinctive natural environment, countryside and coastline, and confirms that proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area.

4.4.128 This policy also states that when determining planning application, consideration should be given to:

- Safeguarding the coastline and landscapes;
- Protecting or where appropriate enhance sites of international, national, regional and local importance and, where appropriate, their settings in line with National Policy;
- Having appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to

acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with National Policy;

- Protecting, retaining or enhancing the local character and distinctiveness of the individual Landscape Character Areas (LCAs) and Seascape Character Areas; and
- Protecting, retaining or enhancing trees, hedgerows or woodland of visual, ecological, historic cultural or amenity value.

4.4.129 Policy AMG1 of the JLDP [RD27] states that proposals within or affecting the setting and/or Significant Views into and out of the AONB must, where appropriate, have regard to the relevant AONB management plan.

4.4.130 Policy AMG 2 of the JLDP [RD27] states that proposals within SLAs will need to appropriately consider the scale and nature of the development ensuring that there is no significant adverse detrimental impact on the landscape, adding that such development should aim to maintain, enhance or restore the recognised character and qualities of the SLA. However, this policy clarifies that in exceptional circumstances, where development is necessary and could result in significant impacts on the landscape, appropriate mitigation and compensation measures should be provided.

4.4.131 Policy CCC 3.1 of the Isle of Anglesey AONB Management Plan 2015-2020 [RD47] states that all development proposals within and up to 2km adjacent to the Isle of Anglesey AONB should be subjected to rigorous assessment to reduce inappropriate development.

4.4.132 Policy CCC 3.2 [RD47] 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.

4.4.133 Policy AMG 3 of the JLDP [RD27] requires proposals that would have a significant adverse impact upon landscape character, as defined by the LCAs, to demonstrate how landscape character has influenced the design, scale and nature and site selection of the development.

4.4.134 The Wylfa SPG [RD28] also encourages the project promoter at policy GP20 to demonstrate that the Wylfa Newydd Project either alone or in combination with other proposals, would not have significant adverse impacts on the local landscape character with reference to the SLAs and Local LCAs. GP20 also expects that the project promoter to demonstrate that the Project would not have significant adverse impacts on the AONB. GP 20 also clarifies that where adverse impacts cannot be avoided, IACC expect appropriate mitigation and/or compensation measures to be implemented.

Assessment

4.4.135 The landscape and visual impacts of the Logistics Centre have been assessed as part of the ES (chapter H10 of the ES, Application Reference Number: 6.8.10). The design of the proposals has sought to minimise adverse impacts

on landscape and reduce any visual intrusion as far as reasonably practicable, in accordance with paragraphs 5.9.8 in NPS EN-1 [RD4].

- 4.4.136 The nature of the proposals would however mean the development will inevitably have some impact upon the landscape and visual amenity, as explained in chapter H10 of the ES (Application Reference Number: 6.8.10). Paragraph 5.9.8 of NPS EN-1 [RD4] acknowledges this, stating “*virtually all nationally significant energy infrastructure projects will have effects on the landscape*”.
- 4.4.137 The construction works would result in a change in land use and localised impacts on the topography of the area. There would be the loss of woodland, field boundaries including hedgerows and a small section of stone wall, and an area of rock outcrop. Topsoil stripping, installation of construction fencing and compounds together with the movement of plant and the construction of the welfare/security building and concrete/asphalt hardstanding would appear out of character with the predominantly pastoral landscape and would further urbanise the area’s landscape character. As explained in paragraph 4.4.48 below a number of measures designed to mitigate impacts would be delivered with the aim of minimising the effects.
- 4.4.138 In line with paragraph 5.9.12 of NPS EN-1 [RD4] regard has been had to nationally designated sites. The construction of the Logistics Centre would have a localised moderate adverse impact in the short term on the AONB. However, the effects on the overall AONB, taking into account effect on setting, would be negligible and would not be significant, due to the relatively small part of the AONB that would be affected. During the operation of the Logistics Centre the directly affected AONB would experience a moderate adverse effect, which would be significant. It is considered that the effect on the wider AONB, as a whole, would be negligible adverse and not significant. This would reduce to a minor adverse effect, during the decommissioning of the Logistics Centre. Paragraph 5.9.13 in NPS EN-1 [RD4] confirms that the fact that a proposed project will be visible from within a designated area should not in itself be a reason for refusing consent.
- 4.4.139 The proposals have taken account of the Isle of Anglesey AONB Management Plan 2015-2020 [RD47], in accordance with Policy AMG1 in the JLDP. The Logistics Centre is a key element required in order to deliver the Power Station for which there is an overriding public need in order to satisfy the urgent need for low carbon energy such as nuclear power as set out in NPS EN-6. These reasons constitute exceptional circumstances for the facility to be located in the AONB. The Site Selection Report (Application Reference Number: 8.24.6) identified this site as the most appropriate location for the Logistics Centre and the land is also within an employment allocation and employment uses have previously been granted on the site. The location of the proposed Logistics Centre within the AONB is considered to be acceptable and as exceptional circumstances exist the proposals are therefore consistent with PPW [RD8].
- 4.4.140 During the construction and operation of the Logistics Centre, users of the Public Right of Way (PRoW) along the A5153 to the south of the A55 Junction 2 would experience a minor adverse effect from the limited section where the

site would be visible, which would not be significant. During the decommissioning of the Logistics Centre, these PRoW users would experience a negligible adverse effect from the limited section where the decommissioning activities would be visible, which would not be significant.

- 4.4.141 The construction activities would be out of character with the predominantly rural landscape and would therefore be uncharacteristic of the area. However, undulating topography and surrounding vegetation would limit effects on the wider landscape. The temporary loss of landscape features, loss of agricultural land and disruption of construction activities would result in a moderate adverse effect on local landscape character both during construction and operational phases. The presence of the decommissioned site within the landscape would continue to have a direct effect on the setting of the directly affected local landscape character. Paragraph 5.9.14 of NPS EN-1 [RD4] however confirms that local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.
- 4.4.142 During construction and operation, travellers on the A55 and on the A5153 would experience a minor adverse effect from the limited sections where the construction activities would be visible, which would not be significant.
- 4.4.143 During construction and operation, travellers on the B4545 and the Parc Cybi service road would experience a moderate adverse effect, which would be significant. This would reduce to a minor adverse effect during decommissioning, which would not be significant.
- 4.4.144 It is assumed that the construction works associated with the Logistics Centre site would take place during normal working hours and that there would be minimal lighting required during hours of darkness. Due to the surrounding context of existing lighting, the proposed on-site lighting is not likely to significantly impact on visual receptors within the surrounding landscape during construction.
- 4.4.145 In accordance with paragraph 5.9.8 of NPS EN-1 [RD4] and 3.10.8 of NPS EN-6 [RD5], a number of measures designed to mitigate impacts would be delivered with the aim of minimising the effects resulting from the Logistics Centre. For example, during operation, cabin height would be restricted to two storeys and during operation, the lighting for the Logistics Centre site would be designed to minimise light spill into the surrounding area and be restricted to the welfare and security buildings and adjacent to the parking area at night. The lit site would also be viewed within the context of sky glow from Kingsland and the former aluminium works and industrial and retail parks to the north. It is assumed that no site lighting would be used upon completion of the decommissioning activities.
- 4.4.146 As secured through the design principles in the DAS (Application Reference Number: 8.2.3) and in line with paragraph 5.9.22 and 4.5.1 of NPS EN-1 [RD4] the landscape and visual effects have sought to be minimised through ensuring the architectural design uses simple building forms to recognise the function of the facility whilst still complementing its surroundings and integrating with the landscape.

- 4.4.147 In line with Strategic Policy PS 9, Policy PCYFF 4 and Policy AMG3 in the JLDP [RD27], and as explained further in the DAS (Application Reference Number: 8.2.3) hard and soft landscaping will be used to help integrate the Logistics Centre appropriately into the surrounding landscape. For example, where practicable, existing hedgerows and stone walls will be retained and enhanced and a landscape management strategy will be implemented during the operation of the facility to ensure successful establishment of proposed landscaping and long term viability of planting, for the duration of Horizon's tenancy.
- 4.4.148 In with paragraph 5.9.16 of NPS EN-1 [RD4] and Strategic Policy PS 19 of the JLDP [RD27] the decision maker should consider whether the adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the Project. It is considered that appropriate mitigation is proposed to limit these (as shown in paragraph 4.4.50) and the benefits of the Project do offset any residual adverse effects. Horizon has demonstrated that the proposed Logistics Centre is integral to successful delivery and implementation of the Wylfa Newydd Project. The proposal would facilitate the effective management of delivery vehicles arriving at the Power Station Site, staggering influx and reducing congestion.
- 4.4.149 The design of the Logistics Centre has considered the character of the application site and its context, as detailed in the DAS (Application Reference Number: 8.2.3), and can be accommodated into its surroundings, in accordance with paragraph 5.9.8 of NPS EN-1 [RD4], paragraph 3.10.8 of NPS EN-6 [RD5], Policies PS5, PS9 and AMG1, AMG2 and AMG3 in the JLDP [RD27] and GP20 of the Wylfa SPG [RD28].

Socio-economics

Policy context

National Policy Statements

- 4.4.150 NPS EN-1 [RD4] states that where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake an assessment of these impacts as part of the ES (paragraph 5.12.2). Relevant socio-economic impacts are listed at paragraph 5.12.3 in NPS EN-1 [RD4] and include, for example, the creation of jobs and training opportunities and the provision of additional local services and improvements to local infrastructure. Paragraph 5.12.9 in NPS EN-1 [RD4] states that the decision maker should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development.
- 4.4.151 Paragraph 5.12.6 of NPS EN-1 [RD4] states that the decision maker should have regard to the potential socio-economic impacts of new energy infrastructure identified by the applicant and from any other sources that the decision maker considers to be both relevant and important to its decision.
- Paragraph 5.12.8 of EN-1 [RD4] states that the decision maker should consider any relevant positive provisions the developer has made or is

proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts.

Welsh national and local policy

- 4.4.152 PPW [RD8] includes planning policies, to promote quality, lasting, environmentally sound and flexible employment opportunities for a low carbon economy, and to protect and, where possible, improve people's health and well-being. Chapter 4 (planning for sustainability) of PPW [RD8] sets out the Welsh government's objectives for achieving sustainable development and chapter 7 (economic development) confirms the Welsh government's objectives for economic development, i.e. development of land and buildings for activities that generate wealth, jobs and incomes.
- 4.4.153 TAN 23 [RD25] highlights that the geographical distribution of economic benefits associated with development may be far beyond the area where the development is located.
- 4.4.154 Several policies within the JLDP [RD27] require proposals to accord with a number of criteria relating to socio-economic impacts. Policy PS 5 in the JLDP [RD27] states that development will be supported where it is demonstrated to be consistent with the principles of sustainable development. It clarifies that proposed developments should; give priority to effective use of land and protect, support and promote the use of Welsh language.
- 4.4.155 Policy PS 9 specifically requires consideration to be given to the nature, scale, range and possible impact of any development. It confirms that local economic and community benefits need to be maximized, where feasible, through agreement of strategies for procurement, employment, education, training and recruitment with the Councils at an early stage of project development.
- 4.4.156 The Guiding Principles in the Wylfa SPG [RD28] are considered relevant to the socio-economic assessment and include the following principles.
- GP1: IACC will require the Wylfa Newydd Project promoter to support the delivery of the Energy Island Programme and Anglesey Enterprise Zone, maximising the economic opportunities available to the Island's local communities.
 - GP2: Local job creation and skills development through the implementation of an Employment and Skills Strategy, which should include the maximisation of local labour provision.
 - GP5: Supporting the visitor economy and ensuring that the construction and operation of the Power Station and any associated developments do not adversely affect the value and importance of tourism to the Island. One of the key elements of the island's tourism offer being the quality and diversity of its natural and historic environments. This includes the 125 mile coastline and the numerous beaches linked by the Wales Coast Path.

- GP6: Maintaining and enhancing community facilities and services, including education, healthcare and leisure facilities.

Assessment

4.4.157 In accordance with paragraph 5.12.2 of NPS EN-1 [RD4], paragraph 3.11 of NPS EN-6 [RD5], C.9.110-111 of NPS EN-6 [RD5] and TAN 23 [RD25], Horizon has considered the socio-economic effects associated with the Logistics Centre. Chapter H3 of the ES (Application Reference Number: 6.8.3) provides this assessment. It concludes that there are no likely significant socio-economic effects.

4.4.158 Paragraph 5.12.8 of NPS EN-1 [RD4] states that the decision maker should consider any relevant positive provisions the developer has made or is proposing to make to mitigate impacts. As good practice mitigation, the construction of the Logistics Centre will accord with the Wylfa Newydd DCO Project's overarching CoCP (Application Reference Number: 8.6) and sub-CoCPs (Application Reference Number: 8.11). These set out the standards and measures of work ensuring compliance with legislation and the effective planning, management and control of construction activities with the aim of controlling adverse effects on the local community and the environment. The Wylfa Newydd CoCP (Application Reference Number: 8.6) sets out project-wide strategies supported by sub-CoCPs (Application Reference Number: 8.11) that provide additional standards and measures specifically relevant to a particular site or location. For example, good practice mitigation measures during the operation of the Logistics Centre will include the following:

- where practicable, HGV engines will be switched off, or whilst queuing to use the scanner facility;
- HGVs would not wait or queue on the public highway with engines running (unless the engine is required to power the operation of the vehicle e.g. concrete wagon); and
- the use of horns (i.e. to signal the attention of Logistics Centre staff upon arrival) will not be permitted.

4.4.159 In line with Strategic Policy PS9 of the JLDP [RD27] and GP1-GP 4 of the Wylfa SPG [RD28], which seeks to maximise local economic and community benefits, services required as part of the construction, operation and decommissioning of the Logistics Centre would be procured and undertaken in accordance with the Supply Chain Charter. The Strategy seeks to support supplier development in terms of capability and capacity, and places strong emphasis on the use of local suppliers and resources, where appropriate and available.

Traffic and transport

Policy context

National Policy Statements

- 4.4.160 NPS EN-1 [RD4] states that “the consideration and mitigation of transport impacts is an essential part of Government’s wider policy objectives for sustainable development...” (Paragraph 5.13.2).
- 4.4.161 Paragraph 5.13.3 of NPS EN-1 [RD4] requires a Transport Assessment to be submitted where a project is likely to have significant transport implications. Paragraph 5.13.4 in EN-1 [RD4] confirms that, where appropriate, the applicant should prepare a travel plan including demand management measures to mitigate transport impacts. With specific regard to nuclear power, the Flags for Local Consideration to be considered by the decision maker includes impacts on “significant infrastructure and resources” (paragraph 3.5.2 of NPS EN-6 [RD5]), which include motorways and major highways.
- 4.4.162 With regard to decision making, NPS EN-1 [RD4] recognises that a new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure and that the decision maker should therefore ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development (paragraph 5.13.6). It requires that these impacts are mitigated in order to “...reduce the impact on transport infrastructure to acceptable levels...”, and that providing the applicant “...is willing to enter into planning obligations or requirements can be imposed to mitigate transport impacts ... then development consent should not be withheld, and appropriately limited weight should be applied to residual effects on the surrounding transport infrastructure,” (paragraph 5.13.7, NPS EN-1 [RD4]).
- 4.4.163 An important principle established by NPS EN-1 [RD4] is, therefore, that there is no need for the development to demonstrate “no impact”. There is recognition that it is likely that there will be some residual transport impacts from a new NSIP. The requirement is therefore to determine what mitigation is required to reduce impacts to “acceptable levels” in accordance with paragraph 5.13.6 in NPS EN-1 [RD4].
- 4.4.164 NPS EN-6 [RD5] advises at paragraph 3.15.2 that:
- “Applications should demonstrate that the proposed development would not have an unacceptable adverse impact on significant infrastructure. The Infrastructure Planning Commission should take into account any local authority impact report, advice from the relevant Nuclear Regulators and relevant policy in NPSs in assessing impacts on significant infrastructure and resources”.

Welsh national and local policy

- 4.4.165 Paragraph 8.5.7 of PPW [RD8] states that great care should be taken to minimise the adverse impacts of new transport infrastructure, or improvements to existing infrastructure, on the natural, historic and built environment and on local communities, where neighbourhood severance should especially be avoided. It clarifies that routes should make the best use of existing landforms and other landscape features to reduce noise and visual effects, subject to safety and other environmental considerations. Paragraph 8.5.7 of PPW [RD8] states that where no other alternative routes or options

are practicable, transport infrastructure schemes should provide mitigation measures to minimise the impacts caused by their construction and operation.

- 4.4.166 PPW [RD8] also promotes a sustainable and efficient transport system and states that, inter alia, the impacts of development on travel demand, transport infrastructure, traffic management measures, safety and user convenience should be considered (paragraph 8.7). PPW [RD8] requires the impacts on travel demand, the level and nature of public transport provision, accessibility to a range of transport modes and opportunities to promote active travel to be taken into account (paragraph 8.7.1).
- 4.4.167 Strategic Policy PS 9 in the JLDP [RD27] is specific for the Wylfa Newydd Project Associated Developments and requires highways and transport proposals to form part of an Integrated Traffic and Transport Strategy that has regard to Strategic Policy PS 4 and other relevant policies. Strategic Policy PS 4 states that adverse transport impacts should be minimised to an acceptable level at all project stages. It continues to state that proposals should where feasible make a positive contribution to transportation policy objectives in the locality, and should include multi-modal solutions and investment that encourages travel by public transport, walking and cycling and other sustainable forms of transport.
- 4.4.168 GP14 of the Wylfa SPG [RD28] confirms assessment of potential impacts on road infrastructure is required and seeks to ensure highway improvements are provided where appropriate to minimise congestion, ensure safety and minimise environmental impacts.

Assessment

- 4.4.169 In line with paragraph 5.13.3 of NPS EN-1 [RD4], 3.15.2 of NPS EN-6 [RD5] and PPW (paragraph 8.5.7) [RD8] (and GP14 of the Wylfa SPG), a Transport Assessment has been submitted (Application Reference Number: 6.3.14). It concludes that the potential transport impacts of the Wylfa Newydd Project are small and, in accordance with planning policy, would have no significant impact on the local road and public transport networks.
- 4.4.170 In accordance with NPS EN-1 (paragraph 5.13.6 and 5.13.7), NPS EN-6 (paragraph 3.15.2), paragraph 8.7 of the PPW [RD8] and Strategic Policy 9 of the JLDP [RD27], Horizon has sought to mitigate the impacts on the surrounding transport infrastructure, including during the construction phase of the Project to ensure that the proposals would not have an unacceptable adverse impact on highways. The Logistics Centre is one way in which Horizon seeks to minimise impacts on the existing road infrastructure, safety and user convenience by managing the traffic movements on the A5025 that are associated with the construction of the Power Station. For example, vehicle movements from the Logistics Centre to the Power Station Site would be controlled in order to prevent vehicles leaving in convoy and to avoid sensitive times of the day (such as peak work rush hour and school run).
- 4.4.171 Project-wide effects of the Wylfa Newydd DCO Project are assessed in the main report of this Planning Statement.

- 4.4.172 Appendix C2.04 of the Transport Assessment (Application Reference Number: 6.3.22) outlines the results from the junction capacity assessments undertaken to support the Wylfa Newydd Power Station DCO. Of relevance is Junction 2 of the A55 which is located near to the proposed Logistics Centre. The junction capacity analysis shows that there will likely be increases in traffic flows above the capacity of Junction 2 in 2033 only, but this change is not related to Wylfa Newydd Project. There will not be Wylfa Newydd Project related traffic using the Logistics Centre or Junction 2 of the A55 in 2033. The detailed junction modelling process shows that no further junction modifications beyond those already incorporated are required to accommodate the additional traffic forecast to be generated by the Wylfa Newydd Project.
- 4.4.173 In line with paragraph 8.5.7 PPW [RD8] care has been taken to minimise the adverse impacts of new transport infrastructure, such as the Logistics Centre, on the natural, historic and built environment and on local communities. The Design and Access Statement (Application Reference Number: 8.2.3) explains how the design has evolved to take into account these matters. Furthermore, the Site Selection Report (Application Reference Number: 8.24.6) confirms that there are no alternative options that are practicable.

Welsh language

Policy context

National Policy Statements

- 4.4.174 Volume 2 of NPS EN-6 [RD5] provides site assessments which set out why the sites included in NPS EN-6 have been found potentially suitable for providing nuclear power. At paragraph C.9.110 it is noted that some responses received from key consultees at the stage of considering whether the Wylfa site could be potentially suitable for providing nuclear power expressed concerns that an influx of workers into the area could be damaging to its language, culture and welfare. NPS EN-1 [RD4] and NPS EN-6 [RD5] do not however otherwise provide specific guidance in respect of Welsh language and culture.

Welsh national and local policy

- 4.4.175 Paragraph 4.13.5 of PPW [RD8] and TAN 20 [RD23] identify the Welsh language as being a part of cultural and social fabric of Wales and that the Welsh Government is committed to ensuring the Welsh language is supported and encouraged to flourish. PPW [RD8] states that Welsh language should be supported by the planning system and that considerations related to the use of Welsh language may be taken into account by decision makers so far as they are material to applications for planning permission.
- 4.4.176 Part B of the TAN 20 [RD23] provides Practice Guidance on planning and the Welsh language and states:
- "The planning system can contribute to the future well-being of the Welsh language, by establishing the conditions to allow sustainable communities to

thrive. For example, creating conditions for well-paid employment opportunities and a range of quality housing options are integral to planning for sustainable communities," (paragraph 1.7.3, TAN 20 [RD23]).

- 4.4.177 Furthermore, TAN 20 [RD23] confirms that where the use of Welsh language is a significant part of the social fabric of a community, the interest and needs of the Welsh language should be taken into account. Paragraph 3.1.2 in TAN 20 [RD21] confirms:

"...in determining individual planning applications and appeals, considerations relating to the use of the Welsh language may be taken into account so far as they are material. Section 70(2) TCPA does not give any additional weight to the Welsh language above any other material consideration and decisions on all applications for planning permission must be based on planning grounds only and be reasonable".

- 4.4.178 Planning policy continues the strong support for promoting the Welsh language. Strategic Policy PS 1 of the JLDP [RD27] confirms that the IACC will promote and support the use of the Welsh language in the area and require a WLIA (Application Reference Number: 8.22) to be submitted as part of the application to show how the proposed development would protect, promote and enhance the Welsh language. Strategic Policy PS 1 also states that proposals which would cause significant harm to the character and language balance of a community that cannot be avoided or suitably mitigated by appropriate planning mechanisms, will be refused.
- 4.4.179 Strategic Policy PS 5 in the JLDP [RD27] states that all proposals should protect, support and promote the use of the Welsh language in accordance with Strategic Policy PS 1.
- 4.4.180 Policy GP13 of the Wylfa SPG [RD28] similarly confirms that Welsh language and culture should be maintained and where possible strengthened and that all planning applications for Associated Development will be expected to demonstrate how a Welsh language strategy will be delivered by the proposed development. It also clarifies that a WLIA should be undertaken. GP 13 also sets out several measures which could be deployed to mitigate potential adverse impacts on, and strengthen, Welsh language and culture.
- 4.4.181 Whilst Associated Development can now be included within the DCO application (rather than as separate Town and Country Planning Act 1990 (TCPA) applications) the principles of protecting and promoting the Welsh language through all proposals are relevant.
- 4.4.182 Cymraeg 2050: Welsh language strategy [RD50] sets out a goal of having a million Welsh speakers by 2050 and that it is used in everyday life. The themes for realising this goal include increasing the use of Welsh in the workplace and creating favourable conditions through infrastructure.

Assessment

- 4.4.183 In line with PPW (paragraph 4.13.5) [RD8], TAN 20 (paragraph 4.1.2), Strategic Policy PS1 and PS5 of the JLDP [RD27] and GP 13 of the Wylfa

SPG [RD28], which requires consideration of Welsh language, the application is accompanied by a WLIA (Application Reference Number: 8.2).

- 4.4.184 Concerns were raised during the consultation associated with volume 2 of NPS EN-6 (paragraph C.9.110) [RD5] that an influx of workers into the area could damage its language, culture and welfare. The Logistics Centre would not however have a significant impact upon the Welsh language and culture during construction and operation, as confirmed in chapter G4 of the WLIA (Application Reference Number: 8.21).
- 4.4.185 The assessment of effects does not identify any adverse or beneficial effects on Welsh language and culture, therefore no mitigation/enhancement measures are considered necessary. As a result, the Logistics Centre proposals are considered to address the concerns detailed in paragraph C.9.110 of volume 2 of the NPS EN-6 [RD5].
- 4.4.186 It is also considered that the Logistics Centre proposals are in accordance with GP13 of the Wylfa SPG [RD28] and the aspirations of Cymraeg 2050: Welsh language strategy [RD50] which confirms that Welsh language and culture should be maintained and where possible strengthened and Policy PS5 of the JLDP [RD27] which states that proposals should protect, support and promote the use of the Welsh language.
- 4.4.187 Measures to mitigate adverse effects and enhance beneficial effects relating to the project-wide assessment are presented in section B.7 of the WLIA (Application Reference Number: 8.2.1) and in the Welsh Language and Culture Mitigation and Enhancement Strategy (WLCMES) (Application Reference Number: 8.2.1) and are discussed in the main body of the Planning Statement (Application Reference Number: 8.1).

5 Planning Balance

- 5.1.1 Horizon has demonstrated that the proposed Logistics Centre is integral to successful delivery and implementation of the Wylfa Newydd Project. The proposal would facilitate the effective management of delivery vehicles arriving at the Power Station Site, staggering influx and reducing congestion.
- 5.1.2 It is however necessary to assess the location and form of this essential facility. This appendix has demonstrated that the Logistics Centre as proposed is appropriate having had regard to the site specific planning issues and the IACC's locational guidance in the adopted Wylfa SPG [RD28] and draft SPG [RD14].
- 5.1.3 The site at Parc Cybi has been demonstrated to be the appropriate location, with no other sites offering a preferable option. This suitability of the site has been rigorously tested as part of the application for development consent with further information provided within the DAS (Application Reference Number: 8.2.3), volume H of the ES (Application Reference Number: 6.8.1-6.8.12) and the Site Selection Report (Application Reference Number: 8.24.6).
- 5.1.4 The proposals for the Logistics Centre have been assessed against the relevant National Policy Statements (NPS EN-1 [RD4] and NPS EN-6 [RD5]) and as explained in the sections above, have been found to be in accordance.
- 5.1.5 The principle of a Logistics Centre to support the construction of the Power Station is acceptable and is supported by adopted and emerging planning policy and guidance.
- 5.1.6 The planning history for the proposed Logistics Centre site demonstrates that it has previously been supported as a suitable location for business and industrial uses. The proposed site at Parc Cybi is also now allocated in the JLDP [RD27] for employment purposes and, therefore, the location of the proposed use is appropriate in planning terms. The Parc Cybi site lies within Holyhead settlement boundary which the SPG [RD28] directs towards logistics/freight uses. It also lies to the west of causeway to Holy Island, which enables HGVs carrying construction materials arriving through the Port of Holyhead to travel via the Logistics Centre to the Power Station Site, without having to travel further east than they need to, and thus reducing traffic movements on the road.
- 5.1.7 The draft Wylfa SPG is supportive of employment and logistics uses proposed in support of the Wylfa Newydd Project (draft policy GP3).
- 5.1.8 The design of the temporary facility has been carefully considered to be appropriate within its context and the environmental features of the site.
- 5.1.9 The development has been designed to ensure that the site can be utilised for other business/employment uses once no longer required to help support the construction of the Power Station.
- 5.1.10 The analysis in chapter 4 has shown that the Logistics Centre, as described in chapter 2, does not cause any individual potential adverse effect that is so

severe that the decision maker should refuse the application. A summary is provided below.

- 5.1.11 In line with paragraph 5.2.6 of NPS EN-1 [RD4] an air quality assessment has been conducted and chapter H5 of the ES (Application Document Reference: 6.8.5) confirms that no potentially significant adverse air quality effects have been identified in association with the Logistics Centre.
- 5.1.12 As confirmed in chapter H9 of the ES (Application Reference Number: 6.8.9), the Logistics Centre would not impinge upon any statutory or non-statutory designated area. This satisfies Policy GP20 of the Wylfa SPG [RD28] which seeks to avoid significant adverse impacts on SSSIs, Special Areas of Conservation or Special Protection Areas.
- 5.1.13 No effects of moderate significance or greater have been identified for archaeological remains during with the construction, operation or decommissioning of the Logistics Centre. No effects on historic buildings are predicted. No effects of moderate significant or greater have been identified for Historic Landscape Types. In summary, no significant adverse effects have been identified for cultural heritage, in accordance with NPS EN-1 (paragraph 5.8) [RD4], PPW (paragraph 6.5.1) [RD8] and Policies PS5, PS20, PCYFF 3, and AT1 in the JLDP [RD27].
- 5.1.14 The conclusion of the HIA Report (Application Reference Number: 6.8.6) confirms that there are no potentially significant health effects that warrant further assessment.
- 5.1.15 Chapter H7 of the ES (Application Reference Number: 6.8.7) confirms that no residual significant adverse soil and geology effects were identified for the Logistics Centre and the proposals are in accordance with paragraph 5.10.8 of NPS EN-1 [RD4].
- 5.1.16 The proposals would avoid unacceptable disturbance to local communities, through noise, smell, vibration, smoke or air pollution, in accordance with paragraph 5.11.1 of NPS EN-1 [RD4] and Policy PCYFF1 of the JLDP [RD27].
- 5.1.17 In accordance with paragraph 5.12.2 of NPS EN-1 [RD4], paragraph 3.11 of NPS EN-6 [RD5], C.9.110-111 of NPS EN-6 [RD5] and TAN 23 [RD25], Horizon has considered the socio-economic effects associated with the Logistics Centre. Chapter H3 of the ES (Application Reference Number: 6.8.3) provides this assessment. It concludes that there are no likely significant socio-economic effects.
- 5.1.18 Taking into account the embedded and good practice mitigation, no significant residual surface water or groundwater effects have been identified associated with the construction, operation or decommissioning of the proposed Logistics Centre and as such the proposals are in accordance with section 13.4 of PPW [RD8].
- 5.1.19 The assessment of effects does not identify any adverse or beneficial effects on Welsh language and culture, therefore no mitigation/enhancement measures are considered necessary. As a result, the Logistics Centre

proposals are considered to address the concerns detail in paragraph C.9.110 of volume 2 of the NPS EN-6 [RD5].

- 5.1.20 The landscape and visual impacts of the Logistics Centre have been assessed as part of the ES (chapter H10 of the ES, Application Reference Number: 6.8.10). The design of the proposals has sought to minimise adverse impacts on landscape and reduce any visual intrusion as far as reasonably practicable, in accordance with paragraphs 5.9.8 in NPS EN-1 [RD4]. The effects of the Logistics Centre on the overall AONB, taking into account the effect on setting, would be negligible and would not be significant, due to the relatively small part of the AONB that would be affected. In accordance with Policy AMG1 of the JLDP [RD27], the proposals have taken account of the Isle of Anglesey AONB Management Plan 2015-2020 [RD47]. The Site Selection Report (Application Reference Number: 8.24.6) identifies this site as the most appropriate location for the Logistics Centre and the land is also within an employment allocation and employment uses have previously been granted on the site.
- 5.1.21 For the reasons outlined above, the development of the Logistics Centre as proposed is considered compliant with NPS EN-1 [RD4] and NPS EN-6 [RD5] and national and local planning policy where relevant. The proposed development of the Logistics Centre is appropriate in planning terms in its own right.
- 5.1.22 The Logistics Centre is also integral to the delivery of the Wylfa Newydd Project and its associated benefits, and needs to be considered in the context of the urgent need for nuclear power.
- 5.1.23 This Planning Statement has concluded that the development is acceptable as an individual scheme component, however, its contribution to the Project as a whole weighs further in its favour.

6 Conclusion

- 6.1.1 This appendix considers relevant national and local planning policies within the overarching context of NPS EN-1 and NPS EN-6. It demonstrates that, when assessed against these relevant policies and material considerations, the Logistics Centre benefit from strong policy support and is acceptable in land use planning terms.
- 6.1.2 Whilst the Wylfa Newydd Project as a whole will, in common with any national infrastructure project, result in some adverse effects to the environment and local community, the main report states that these (considered individually or collectively) do not outweigh the important benefits. These benefits would be delivered for the UK as a whole, including a vital role in the provision of safe and secure low carbon electricity, as well as local benefits including jobs creation, investment in the local economy and provision of skills for the local workforce. Together these benefits have the potential to create a significant lasting positive legacy for Anglesey, north Wales and the UK.

Appendix F Off-line Highway Improvement Works Planning Statement

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Contents

1	Introduction and Purpose.....	1
1.1	Introduction	1
1.2	Report Structure	2
2	Proposed A5025 Off-line Highway Improvements	3
2.1	Description of Development.....	3
2.2	Overview of the development proposals.....	4
	Section 1 - A5 east of Valley Junction to north of Valley Junction	4
	Section 3 - north of Llanynghenedl to north of Llanfachraeth	5
	Section 5 - south of Llanfaethlu to north of Llanfaethlu.....	5
	Section 7 - north of Llanrhyddlad to north of Cefn Coch	6
	Power Station Access Road junction	6
2.3	Design, layout and scale.....	6
2.4	Construction Programme.....	8
3	The Site and Surrounding Area	9
3.1	Site Location	9
3.2	Existing Site Characteristics	9
	Section 1 - A5 east of Valley Junction to north of Valley Junction	10
	Section 3 - north of Llanynghenedl to north of Llanfachraeth	13
	Section 5 - south of Llanfaethlu to north of Llanfaethlu.....	17
	Section 7 - north of Llanrhyddlad to north of Cefn Coch	21
	New Power Station Access Road junction.....	25
4	Principal Planning Issues.....	29
4.1	Introduction	29
4.2	Principle of development	29
	Policy Context.....	29
	Assessment	30
4.3	Other Site-Specific Planning Issues.....	31
	Local amenity (including noise and vibration, air quality, health and wellbeing)	32
	Biodiversity	38
	Soils and geology	43
	Flood Risk.....	46
	Surface Water and Groundwater	52
	Historic environment.....	54
	Landscape and Visual	58
	Socio-economics	67
	Traffic and Transport	70
	Welsh Language.....	74
5	Planning Balance.....	77
6	Conclusion	81

List of Figures

Figure 2-1 Locations of the A5025 Off-line Highway Improvements..... 4

1 Introduction and Purpose

1.1 Introduction

- 1.1.1 Introduction Studies undertaken by Horizon in 2010–2011 (summarised in chapter G2 of the Environmental Statement (ES) (Application Reference Number: 6.7.2)) identified that the stretch of the A5025 between the community of Valley and the Existing Power Station Access Road has physical and operational constraints in relation to its width, alignment, overtaking opportunities and surfacing condition.
- 1.1.2 As a result of these studies, Horizon has committed to improve this section of the A5025 in order to mitigate the predicted impacts of increased traffic associated with construction activities that would be undertaken at the Wylfa Newydd Development Area (WNDA), and from operational Power Station traffic that would travel along this part of the highway network.
- 1.1.3 Horizon therefore intends to deliver the following on-line and off-line improvements between Valley and the proposed Power Station Access Road Junction, as part of its Integrated Traffic and Transport Strategy (appendix F of appendix C2-4 in the ES (Application Reference Number: 6.3.20).
- A5025 Off-line Highway Improvements – involving the construction of new junctions, new sections of road to bypass local communities, and localised bend improvements generally beyond the existing highway boundary.
 - A5025 On-line Highway Improvements – involving the reconstruction and localised widening of the existing pavement and the application of a surface dressing, largely within the existing highway boundary.
- 1.1.4 Both types of improvement form an important component of the Wylfa Newydd Project, and are required as part of Horizon's Integrated Traffic and Transport Strategy (appendix F of appendix C2-4 in the ES (Application Reference Number: 6.3.20).
- 1.1.5 The A5025 On-line Highway Improvements are the subject of a separate planning application (reference: 27C106E/FR/ECON) made to the Isle of Anglesey County Council (IACC) (as the determining authority) in November 2017, under the provisions of the Town and Country Planning Act 1990 (as amended) ('TCPA') [RD2]. These improvements are accordingly not considered further in this Planning Statement.
- 1.1.6 The purpose of this appendix is to consider the site-specific planning issues relevant to the A5025 Off-line Highway Improvements. It therefore focuses on only those planning issues which are specific or unique to the proposed development. Project-wide planning issues are considered in the main body of the Planning Statement.

1.2 Report Structure

1.2.1 This appendix is structured as follows:

- chapter 2 – provides a description of the A5025 Off-line Highway Improvements;
- chapter 3 – provides a site description for the A5025 Off-line Highway Improvements;
- chapter 4 – provides a planning analysis of considerations relating to the A5025 Off-line Highway Improvements; and
- chapter 5 – provides conclusions to this appendix of the Planning Statement.

1.2.2 A more detailed site analysis and description of the A5025 Off-line Highway Improvements is provided in chapter G1 of the ES (Application Document Reference: 6.7.1). The accompanying Design and Access Statement (DAS) (Application Document Reference: 8.2.3) outlines the rationale for the design approach of the A5025 Off-line Highway Improvements and access issues in the context of relevant planning policy requirements. Full details of the consultation process are provided in the Consultation Report (Application Document Reference: 5.1).

2 Proposed A5025 Off-line Highway Improvements

2.1 Description of Development

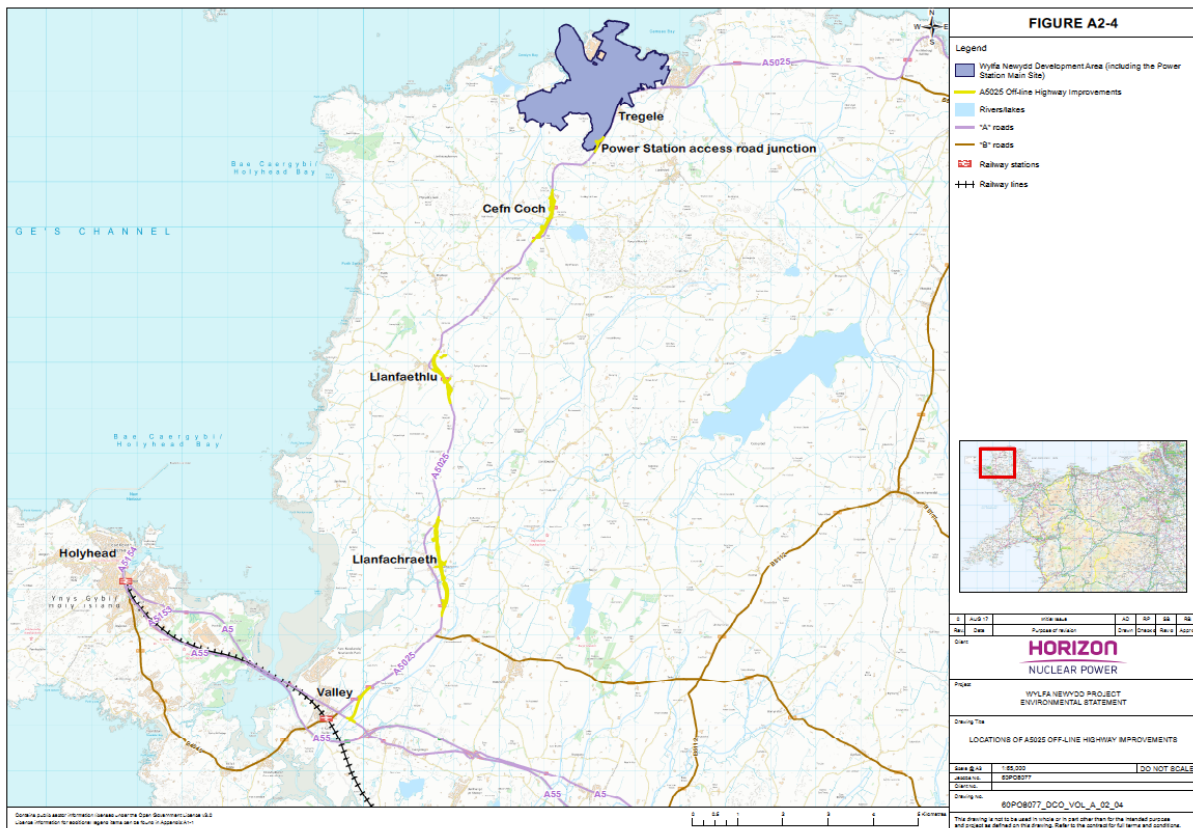
2.1.1 The 16.5km stretch of the A5025 identified for improvement has been divided into eight distinct sections, with a further section associated with the proposed Power Station Access Road Junction. Of these, sections 1, 3, 5 and 7 and the Power Station Access Road Junction relate to the A5025 Off-line Highway Improvements, as summarised below.

- Section 1 (Valley) (Work no. 8 – see table G1-1 in section 1.4 of chapter 1-1 in volume G of the ES) – A5 east of Valley Junction to north of Valley Junction – comprising a proposed four arm roundabout and a bypass connecting the A5 with the A5025 to the east of the existing A5/A5025 signalised junction in Valley. This section is 1.06km in length.
- Section 3 (Llanfachraeth) (Work no. 9 – see table G1-1 in section 1.4 of chapter 1-1 in volume G of the ES) – north of Llanynghenedl to north of Llanfachraeth – comprising a proposed bypass east of Llanfachraeth. This section is 2.28km in length.
- Section 5 (Llanfaethlu) (Work no. 10 – see table G1-1 in section 1.4 of chapter 1-1 in volume G of the ES) – south of Llanfaethlu to north of Llanfaethlu – comprising proposed improvements to two existing substandard bends on the A5025 in Llanfaethlu. This section is 1.43km in length.
- Section 7 (Cefn Coch) (Work no. 11 – see table G1-1 in section 1.4 of chapter 1-1 in volume G of the ES) – north of Llanrhuddlad to north of Cefn Coch – comprising a proposed bypass to provide a straighter section of road and bypass two existing substandard bends in Llanrhwydrus. This section is 1.3km in length.
- Power Station Access Road Junction ((Work no. 1J – see table G1-1 in section 1.4 of chapter 1-1 in volume G of the ES) – north of Cefn Coch – comprising a proposed three-arm roundabout junction linking the existing A5025 to the proposed Power Station Access Road.

2.1.2 Sections 1,3,5,7 and the Power Station Access Road Junction (collectively the A5025 Off-line Highway Improvements) have been identified where road improvements are needed and cannot be carried out to an appropriate level on the existing road line. The proposals will assist in the delivery of the Wylfa Newydd Project by ensuring that the road conditions are fit for purpose.

2.1.3 For the remainder of this Planning Statement, the above locations are referred to as ‘section 1’, ‘section 3’, ‘section 5’, ‘section 7’ and the ‘Power Station Access Road Junction’.

Figure 2-1 Locations of the A5025 Off-line Highway Improvements



2.2 Overview of the development proposals

Section 1 - A5 east of Valley Junction to north of Valley Junction

- 2.2.2 The proposed improvements in this section will comprise a four-arm 50m diameter roundabout and bypass connecting the A5 with the A5025 to the east of the existing A5/A5025 signalised junction.
- 2.2.3 The purpose of the bypass is to avoid the increased traffic using the existing signalised junction, which is geometrically constrained and would not be suitable to accommodate the predicted number of large Heavy Goods Vehicles (HGVs) due to space restrictions and the proximity of existing buildings.
- 2.2.4 The proposed roundabout junction would be located on-line (to be constructed as part of the existing A5 highway). The roundabout junction would be located within the 1 in 100 year flood zone plus a 30% allowance for the effects of climate change, whereas the bypass would be positioned outside of the 1 in 100 year flood zone. At three locations, where watercourses or drainage ditches are severed by the new Private Means of Access (PMAs), culverts would be provided.

- 2.2.5 A shared use footway and cycleway has been incorporated into the design to the south of the roundabout, providing connectivity between the new junction and junction 3 of the A55.

Section 3 - north of Llanynghenedl to north of Llanfachraeth

- 2.2.6 It is proposed to provide a new section of highway to provide a bypass to the east of Llanfachraeth village. The bypass is proposed to avoid an increase in vehicles passing through the village, and to provide increased safe overtaking opportunities by creating improved visibility along the A5205, in order to reduce driver frustration.
- 2.2.7 The horizontal alignment has been designed to provide an additional 1.1km of overtaking in both directions along a straight central section of the bypass that runs parallel to the village.
- 2.2.8 The bypass is to be located away from the village to minimise the impact of noise and vibration post construction. The northern section of the bypass would be constructed in a cutting to reduce noise pollution and vibration levels for Llanfachraeth village
- 2.2.9 The design includes an overbridge to accommodate the side road that intersects the route. Providing an overbridge instead of an at-grade junction means that vehicles using the side road avoid a potential conflict with bypass traffic, while maintaining the overtaking opportunities for those using the bypass. The overbridge would be constructed away from the existing side road to avoid disruption to the local highway network during the construction period.
- 2.2.10 The design also includes an elevated viaduct allowing traffic to cross the Afon Alaw.
- 2.2.11 A proposed underpass would offer access for agricultural vehicles and herding cattle. The underpass would be constructed from precast concrete box sections.
- 2.2.12 Noise barriers would be constructed along the eastern and western side of section 3. The heights, positions, orientations and acoustic properties (e.g. reflective or absorptive) of the noise barriers will be subject to review and finalisation during the detailed design stages of the A5025 Off-line Highway Improvements.

Section 5 - south of Llanfaethlu to north of Llanfaethlu

- 2.2.13 At Llanfaethlu, a bypass is proposed to provide a straighter section of road, where there are two existing substandard bends near the Black Lion public house and through Llanfaethlu village. The proposed improvements would also reduce through traffic from passing the new school at Llanfaethlu.
- 2.2.14 A new footpath would be provided to the west of the highway to allow pedestrians to access Llanfaethlu village from the properties to the north of the bypass. A safe crossing point would be provided across the A5025, which

is an improvement on the existing conditions which currently provide no provisions for pedestrians.

- 2.2.15 A cattle underpass would be provided. It would be constructed from precast concrete box sections.

Section 7 - north of Llanrhyddlad to north of Cefn Coch

- 2.2.16 The Cefn Coch bypass is proposed to provide a straighter section of road, replacing two existing substandard bends in Llanrhyddlad.
- 2.2.17 Constructing a bypass at Cefn Coch would involve stopping up the road leading to Llanfechell to the east of the proposed bypass and removing the existing staggered cross-roads along the A5025 between Llanrhyddlad and Llanfechell. This would reduce the risk of collision associated with slow moving vehicles manoeuvring between the two junctions.
- 2.2.18 The proposed bypass is a very straight horizontal alignment that bypasses the existing A5025 to the west. From the southern end tie-in with the existing A5025, the route follows a relatively straight alignment, bending slightly toward the existing A5025 for approximately 530m to approximately 20m north of the proposed junction to the existing highway to the west. It follows a straight alignment for a short stretch and then bends away from the existing road. The alignment then ties back in to the existing A5025 on a curve approximately 20m north of the private access at the northern end of the bypass.
- 2.2.19 The design includes an accommodation overbridge approximately half way along the bypass to facilitate the safe movement of cattle. The bridge is only to be used by the land owner to maintain current access rights and would not be accessible to the public.
- 2.2.20 An underpass is proposed to be constructed from precast concrete box sections.

Power Station Access Road junction

- 2.2.21 The proposed new junction will link the proposed Power Station Access Road to the A5025 north of Cefn Coch at the tie in of on-line section 8. The existing A5025 would require a slight realignment in order to accommodate the new roundabout junction.
- 2.2.22 The proposed three-arm roundabout would be constructed off-line from the A5025 to link the A5025 with the Power Station Access Road.

2.3 Design, layout and scale

- 2.3.1 Whilst the A5025 Off-line Highway Improvements have been subject to an extensive process of design development and consultation, Horizon will have a continuing need to refine the proposals. Flexibility is required in the Development Consent Order (DCO) to reduce the potential need for non-

material changes post consent for minor amendments. An amount of flexibility is required for the proposed structures to allow for changes that may arise from variances in subsequent design and manufacture.

- 2.3.2 The approach to flexibility sought in the DCO is set out in the Design and Access Statement (DAS) (Application Reference Number: 8.2.3). In summary, Work Packages 8-11 (except for 9A, 9B and 10B, as shown in table 2-1 below), will need to be undertaken in accordance with detailed plans, unless otherwise agreed with IACC. Any revised plans must be in accordance with the limits of deviation (which allow repositioning up to 3m on either side of the centreline shown on the work plans and 0.5m upwards deviation shown on the work plans and detailed design drawings) and the design principles in the DAS (Application Reference Number: 8.2.3).
- 2.3.3 For structures which are currently only provided as illustrative plans (the viaducts, underpasses and overbridges in Work Packages 9A, 9B and 10B (as shown in table 2-1 below), the detailed drawings will need to be in accordance with the parameters and the design principles set out in the A5025 Off-line Highway Improvements DAS (Application Reference Number: 8.2.3).
- 2.3.4 Details of design (including size, external appearance, siting and samples of materials) for the A5025 Off-line Highway Improvements will be submitted to, and approved in writing by, IACC in accordance with the parameters secured in the DCO requirements and the design principles set out in the Off-line Highway Improvements DAS (Application Reference Number: 8.2.3).

Table 2-1 Schedule of works for the A5025 Off-line Highway Improvements

Section	Work Package (work area)	Description of works
Section 1 – Valley	8	New four-arm roundabout and 1.06km bypass connecting the A5 with the A5025 to the east of the existing A5/A5025 signalised junction.
Section 3 – Llanfachraeth	9A	A new 2.28km highway to provide a bypass to the east of Llanfachraeth village and an elevated viaduct.
	9B	An over-bridge to accommodate an existing side road.
Section 5 – Llanfaethlu	10A	A new 1.43km bypass.
	10B	An associated underpass
Section 7 – Cefn Coch	11	A new 1.3km bypass.
Power Station Access Road Junction	1J	A new access road and roundabout connecting to the A5025, associated laying, replacement and diversions of apparatus and associated works.

2.4 Construction Programme

- 2.4.1 It is anticipated that construction of the A5025 Off-line Highway Improvements would commence in the first year following the award of development consent. The full construction programme for the A5025 Off-line Highway Improvements would be approximately 18 months. Sections 1, 3, 5 and 7 and the Power Station Access Road Junction would be constructed in parallel. Section 1 and the Power Station Access Road Junction would take approximately 12 months to construct. Construction of section 3, section 5 and section 7 would last for approximately 18 months. The A5025 Off-line Highway Improvements would remain as a permanent feature following their construction.

3 The Site and Surrounding Area

3.1 Site Location

- 3.1.1 The A5025 is a principal transportation route on Anglesey, distributing traffic around the western, northern and eastern parts of the island. The route connects the northern Anglesey coast and villages in western and northern Anglesey to the A55 at two points, one in the north-west of the island, and one in the south-east of the island at the Menai Bridge.
- 3.1.2 The A5025 forms the main access route to the Existing Power Station.

3.2 Existing Site Characteristics

- 3.2.1 The A5025 varies significantly in width and elevation. It follows a winding course with a number of sharp bends. In some places, the route passes through rural communities where it is closely flanked on one or both sides by residential properties and other structures.
- 3.2.2 The road is generally rural in nature and is governed by 30mph, 40mph, 50mph and 60mph speed limits. The A5025 predated modern design standards and is considered substandard in many locations due to its tight bends, narrow sections and poor sight lines for stopping distances.
- 3.2.3 National Cycle Network (NCN) Route 5 crosses the A5025 at Llanynghenedl, and NCN Route 566 crosses the A5025 at Tregel. No other formal cycle provision exists along the route. Several PRowWs are crossed by the A5025. However, the vast majority of Public Rights of Way (PRowWs) terminate at the A5025 and require users to travel alongside the A5025 to continue and make a connection with another PRowW. Local watercourses and drains pass under the carriageway within culvert structures, with many adjacent agricultural holdings accessed directly from the A5025 by way of private means of access.
- 3.2.4 The surrounding areas to the A5025 are formed predominantly of agricultural land contained by hedgerows and crossed by a network of roads, lanes, footpaths, pockets of woodland, watercourses and overhead electricity infrastructure. The fields are punctuated by occasional trees and are divided by fences, low dry stone walls and hedges. Isolated farmstead and residential properties are located within the vicinity of the A5025.
- 3.2.5 The proposed A5025 Off-line Highway Improvements are located across the four wards of Llanfair-yn-Neubwll, Valley, Llanfaethlu and Mechell. In 2011, the wards along the relevant sections of the A5025 had a total resident population of 8,479 that comprised 12% of Anglesey's population (total: 69,751). Of the total resident population of the wards along the relevant sections of the A5025 (8,479 people), 34.5% resided in Llanfair-yn-Neubwll ward, 27.8% resided in Valley ward, 19.4% resided in Llanfaethlu ward and 18.2% resided in Mechell ward.
- 3.2.6 In 2011, 56.4% of the population (aged three and over) in the wards along the relevant sections of the A5025 were able to speak Welsh. Variation is seen in the percentage of Welsh speakers between the four wards, with a higher

proportion of Welsh speakers living in the ward of Llanfaethlu (64.4%) and the lowest proportion of Welsh speakers living in the ward of Llanfair-yn-Neubwll (50.5%) in 2011.

- 3.2.7 A summary of the key constraints affecting each section of the A5025 Off-line Highway Improvements and their context is provided below.

Section 1 - A5 east of Valley Junction to north of Valley Junction

PRoWs

- 3.2.8 There is one Public Right of Way (PRoW) within the study area for section 1. PRoW 49/016/2 orients northwest from the A5025 near Cleifiog Fawr to join National Cycle Network (NCN) Route 566 (Copper Trail). It is accessed via a field gate; however, currently the access is not gated. Having reviewed aerial photography, this footpath is signposted from the A5025 carriageway. PRoW 49/016/2 has been assigned medium value because while it does not link to the wider PRoW network in accordance with the methodology set out in chapter B4 (Application Reference Number: 6.2.4), it does provide linkages to built-up areas.

Air Quality

- 3.2.9 Section 1 is bounded by the community of Valley to the west, and an area of flat and low-lying farmland to the east. The closest residential property is located approximately 30m to the west of the site boundary.
- 3.2.10 For the assessment of air quality, a receptor count has been carried out for sensitive receptors within 350m of Section 1, which identified that there are three commercial properties within 20m and three residential property, between 20m and 50m from the site boundary. Full details of the receptor count are provided in appendix G5-1 (Application Reference Number: 6.7.17).

Soils and Geology

- 3.2.11 Section 1 is underlain by Brickfield 2 soils and by strata of the New Harbour Group, comprising mica schist and psammite.
- 3.2.12 The Agricultural Land Classification (ALC) survey found the soil within low-lying land was limited to ALC Grade 4 by flooding. The remainder of section 1 is limited to ALC Subgrade 3b due to the presence of irregular slopes which would pose access restrictions for some machinery.
- 3.2.13 Made ground is likely to be present beneath and near man-made features, such as the existing roads, residential properties, fuel filling station and garage site. Localised made ground is also likely to be present within the adjacent cemetery and car park. In addition, the IACC identified several potentially infilled pond and stream areas, located north-west and south-east of section 1.
- 3.2.14 Much of the western and south-western parts of section 1 are underlain by tidal flat deposits. These were also mapped across the central part of the

section, associated with a stream running north-east to south-west. The remaining central and eastern parts of section 1 comprise diamicton glacial till. It is likely that localised shallow thicknesses of alluvium will be present along existing streams and former stream alignments.

Flood Risk

- 3.2.15 Land to the west and south of section 1, including the A5025 Off-line Highways Improvements roundabout junction with the A5, is located within Flood Zone C2, as defined in Technical Advice Note (TAN) 15 [RD15], indicating a high risk of tidal and fluvial flooding.

Terrestrial Ecology

- 3.2.16 The following statutory designated sites were recorded within 2km of the proposed road alignment at Valley.
- Llyn Dinam Special Area of Conservation (SAC): 36.72ha site, approximately 1.6km south-east of section 1 at its closest point.
 - Anglesey Terns/Morwenoliaid Ynys Môn Special Protection Area (SPA): 101,931.08ha site, approximately 1.2km south-west of section 1 at its closest point.
 - Beddmanarch-Cymyran Site of Special Scientific Interest (SSSI): 911.0ha site, approximately 1.2km south-west of section 1 at its closest point.
 - Valley Lakes/Llynnau y Fali SSSI: 98.00ha site, approximately 1.6km south-east of section 1 at its closest point.
- 3.2.17 The following non-statutory designated sites were recorded within 2km of the proposed road alignment at Valley.
- Gwely Cyrs Caergeiliog Local Wildlife Site (LWS): 2.71ha site, approximately 0.5km south-east of section 1 at its closest point.
 - Cae Barcdy WS: 2.67ha site, approximately 0.7km south-west of section 1 at its closest point.
 - Rhostir a Phwll Caergeiliog WS: 4.55ha site, approximately 0.9km south-east of section 1 at its closest point.
 - Tywyn Gwyn a Phenial Dowyn WS: 18.80ha site, approximately 1.8km north of section 1 at its closest point.
 - Valley Wetlands Royal Society for the Protection of Birds (RSPB) Reserve: 35.88ha site, approximately 1.6km south-east of section 1 at its closest point.
- 3.2.18 The habitats recorded within 250m of the proposed alignment at Valley were predominantly semi-improved grassland and improved grassland, with some areas of marshy grassland. The field boundaries are generally dry-stone wall (or cloddiau), stock-proof fencing and species-poor hedgerows.

- 3.2.19 The majority of the fields within 250m of the proposed alignment at Valley were bordered by drainage ditches which appeared to have limited flow, soft silt substrate with exposed earth banks, some with high macrophyte cover and grass growing in the channel.
- 3.2.20 Many of the watercourses were recorded as over-deepened or realigned along field boundaries and silt substrate was prevalent in these suggesting that they act as part of the field drainage systems. The Cleifiog the main watercourse is located within 250m of the proposed alignment at Valley.
- 3.2.21 There are records for Great Crested Newts (GCN) at eight distinct locations near the proposed road alignment at Valley, though no evidence for GCN was recorded in field surveys within the study area.
- 3.2.22 One building with 'moderate' potential for roosting bats and five buildings with 'low' potential for roosting bats were identified within 250m of the proposed road alignment at Valley. No confirmed roosts have been recorded in the study area but low levels of bat activity by widespread and common bat species were recorded during the activity surveys at Valley.
- 3.2.23 The species recorded during bat activity surveys of the proposed alignment at Valley are considered to be 'common' (i.e. pipistrelle bat species, and noctule bat) and 'locally common' (Myotis species).
- 3.2.24 Evidence of otter in Valley was confined to a single footprint on a ditch (ref: D7), recorded during the field surveys but no confirmed holts or couches (otter resting places) were identified.
- 3.2.25 Live sightings of water voles as well as burrows, latrines, droppings and feeding stations/lawns were recorded west of the existing A5025.

Landscape

- 3.2.26 Section 1 is less than 0.5km from the community of Valley. The community is located on or near transport routes running between Holyhead approximately 6km to the west, and mainland Wales approximately 30km to the east. Transport routes include a railway, the A5 and the A55. Valley Airport, which is approximately 3km away, influences the local landscape due to aircraft noise. Valley cemetery is located approximately 15m to the east, and is situated on the southern slope of a drumlin landform (oval-shaped hill).
- 3.2.27 The Anglesey coast is just over 1km away to the west, with the Holy Island Strait 1km to the south, although these areas are not readily apparent due to rising topography. Generally, the topography ranges between 0m and 30m Above Ordnance Datum (AOD) with the rolling character of drumlins. In lower-lying areas there are several small streams or ditches collecting runoff from surrounding farmland. Fields are predominantly used for grazing livestock and are medium to large in size, with limited vegetation cover except for occasional hedgerows along field boundaries and roads.

Archaeology and cultural heritage

- 3.2.28 The study area for section 1 was defined as an area extending 200m in all directions from the edge of the alignment of the proposed four-arm roundabout and bypass connecting the A5 with the A5025 to the east of Valley (see figure G11-2 in the ES, Application Reference Number: 6.7.11). The site compound, comprising materials and plant storage areas, site offices, welfare facilities and a parking area, would also be located within this study area.
- 3.2.29 A total of 11 heritage assets are considered part of the cultural heritage baseline for section 1, comprising seven archaeological remains, one historic building, and three Historic Landscape Types (HLTs).

Section 3 - north of Llanyngghenedl to north of Llanfachraeth

PRoWs

- 3.2.30 There are 10 PRoWs within 250m of section 3, details of which are provided in table G4-2. The location of these PRoWs is shown on figure G4-2 (Application Reference Number: 6.7.48).
- 3.2.31 There are currently four PRoWs affected by the bypass, namely 27/012/1, 27/020/1, 27/018/1 and 49/014/2. The northernmost footpath, 27/012/1, would be permanently stopped up and diverted along a route further to the north. The southernmost footpath, 49/014/2, would be permanently diverted to tie back into the existing A5025 at the current position. A wide verge adjacent to the highway would provide pedestrians with a suitable waiting area to cross the highway, and signage would be provided to warn motorists that pedestrians may be crossing the highway at this location.
- 3.2.32 Footpath 27/018/1 would be permanently diverted 30m to the south towards Afon Alaw. A new section of footpath would be provided adjacent to the northern abutment of the viaduct over the river to enable the safe diversion of the footpath. This would avoid pedestrians having to cross the highway along the section of the bypass where overtaking in both directions would be permitted. The new footpath runs along the bottom of the embankment and connects into the existing footpath on the opposite side of the highway.
- 3.2.33 The final footpath is 27/020/1, which provides a direct link to Llanfachraeth village. As the road is close to existing ground level, it is not feasible to provide a footbridge crossing at this location. Instead, an at-grade crossing is proposed to provide access across the highway, with signage to warn motorists that pedestrians may be crossing. The straighter road alignment at this location would provide pedestrians with good visibility in both directions to ensure that they can cross safely.

Air Quality

- 3.2.34 Section 3 is bound by the community of Llanfachraeth to the west, and isolated farmsteads and residential properties to the east. The existing A5025 carriageway borders the site to the north and south. The closest residential property is located adjacent to the western site boundary in Llanfachraeth.

- 3.2.35 For the assessment of air quality, a receptor count has been carried out for sensitive receptors within 350m of the site boundary, which identified that there are four residential properties within 20m of the site boundary. Full details of the receptor count are provided in appendix G5-1 of volume G of the ES (Application Document Reference: 6.7.17).

Soils and Geology

- 3.2.36 Section 3 is underlain by East Keswick 1 and Brickfield 2 soils and New Harbour Group, primarily comprising mica schist and psammite with small localised areas of jasper and lava. East Keswick 1 soils are present in the centre of the section, from where the A5025 crosses the Afon Alaw to the Pen Y Craig junction. Brickfield 2 soils are present to the north and south of this.
- 3.2.37 The ALC survey in section 3 identified that both topsoil and subsoil comprise mainly medium clay loam or medium silty clay loam, limiting it to ALC Grade 2, Subgrade 3a or Subgrade 3b. A small area in the middle of the section is limited to Grade 4 due to flood risk.

Flood Risk

- 3.2.38 Section 3 is largely located in Flood Zone A, as defined in TAN 15 [RD15]. Flood Zone A comprises land considered to be at little or no risk of fluvial or coastal/tidal flooding. The exception is land adjacent to the Afon Alaw, the Afon Llywenan and the Tan R'Allt, all of which is located in a narrow band of Flood Zone C2 and at high risk of flooding.

Terrestrial Ecology

- 3.2.39 The following statutory designated sites were recorded within 2km of the proposed road alignment at Llanfachraeth.
- Beddmanarch-Cymyran SSSI: 911.00ha site, approximately 0.15km west of Section 3 at its closest point.
- 3.2.40 The following non-statutory designated sites were recorded within 2km of the proposed road alignment at Llanfachraeth.
- Tywyn Gwyn a Phenial Dowyn WS: 18.88ha site, approximately 1.5km west of Section 3 at its closest point.
 - 26040 Ancient semi-natural woodland (ASNW): 0.68ha site approximately 1km south-east of Section 3 at its closest point.
 - 48997 ancient woodland site of unknown category (AWSU): 0.63ha site approximately 1km east of Section 3 at its closest point.
 - 26046 ASNW: 0.52ha site approximately 1.7km north-east of Section 3 at its closest point.
 - 26047 ASNW (3.9ha), 26048 ASNW (0.5ha) and 26070 Restored Ancient Woodland Site (RAWS) (1.3ha) are grouped together approximately 1.94km north-east of Section 3 at its closest point.

- 3.2.41 The habitats within 250m of the proposed road alignment at Llanfachraeth were predominantly improved grassland with some isolated areas of arable, semi-improved and marshy grassland. The field boundaries were generally a mixture of dry stone wall (or cloddiau), stock-proof fencing and species poor hedgerows. Detailed habitat descriptions are set out in appendix G9-2 (Application Reference Number: 6.7.23) and appendix G9-3 (Application Reference Number: 6.7.24) in volume G of the ES.
- 3.2.42 The habitats recorded within the study area are not of biodiversity importance themselves but are potentially of value for the species that they support. These habitats are therefore incorporated within the evaluation of the relevant species assessments (i.e. GCN and bats).
- 3.2.43 The Afon Alaw (D18 & D20) is the main watercourse crossed by the proposed road alignment at Llanfachraeth. The source of the Alaw is located to the north-east of Llannerch-y-medd, where it flows in a northerly then westerly direction into the Llyn Alaw reservoir before continuing south and west to Llanfachraeth.
- 3.2.44 The Tan-yr-allt (D28 & D30) is located approximately 300m north of the proposed alignment. The source of the Tan-yr-allt is located to the west of Mynydd Mechell, where it flows south to its confluence with the Alaw estuary. It is crossed by the existing A5025, several smaller roads and access tracks. The Tan-yr-allt has a sinuous planform with some sections where the channel appears to have been straightened. It is predominantly bordered by agricultural land, with both semi-improved grassland and tilled arable fields present.
- 3.2.45 A number of minor tributaries, field drains, wetland areas and a small number of natural ponds were identified within the study area, some of which would be crossed by the proposed road alignment. Section 3 is considered to be of local value for GCN.
- 3.2.46 A tree roost ground assessment identified a total of six trees with the potential to provide suitable habitat for roosting bats within 250m of the proposed alignment at Llanfachraeth. No bats or evidence of bat activity was identified during the subsequent climbing surveys of the trees. The majority of buildings within the 250m survey area around the proposed road alignment at Llanfachraeth had low potential to contain bat roosts. Two buildings (679 and 682) located approximately 80m west of the proposed road alignment were confirmed as bat roosts. The assemblage of bats in the study area is considered to be of local value.
- 3.2.47 The field surveys recorded evidence of otter on:
- Afon Alaw (D18, D19 and D20) in the form of spraints, footprint and numerous access points to the river; and
 - Tan-yr-allt (D26, D28 & D30), where otter footprints and spraints were recorded.

- 3.2.48 It is considered that the watercourses potentially provide important commuting routes linking coastal and inland habitats. The watercourses of the study area are considered to be of county value for otter.
- 3.2.49 Water vole burrows, latrines, feeding stations and runs were recorded on tributaries of the Afon Alaw and Tan-yr-allt at Llanfachraeth. The study area is considered to be of county value for water vole.
- 3.2.50 River lamprey (*Lampetra fluviatilis*) was confirmed on the Afon Alaw and juvenile lamprey were observed on Tan-yr-allt and the upper Afon Alaw site. The juvenile lamprey were expected to be brook (*Lampetra planeri*) or river lamprey; given the close proximity of the Afon Alaw and Tan-yr-allt site there is a high likelihood of unidentified lamprey being river lamprey.
- 3.2.51 Flounder (*Platichthys flesus*) and common goby (*Pomatoschistus microps*) were reported within Afon Alaw indicating a saline influence. Connectivity with the head of the estuary may increase the likelihood of other estuarine species moving into the study area. The study area is considered to be of county value for fish receptors.

Landscape

- 3.2.52 Section 3 is less than 0.5km from the community of Llanfachraeth. The linear community is focused on the existing A5025 and one local road perpendicular to the A5025 to the east. The course of the Afon Alaw crosses the landscape east to west approximately 120m to the south of Llanfachraeth, leading from Llyn Alaw reservoir approximately 6.5km in the east, to the Alaw estuary approximately 2.6km in the west. The topography is generally flat and low-lying near the Afon Alaw, with drumlins present west of the A5025 and east of Llanfachraeth. The topography ranges between 0m and 30m AOD with a rolling characteristic. In lower-lying areas there are several small streams or ditches collecting runoff from surrounding farmland.
- 3.2.53 Outside of Llanfachraeth, the landscape has a rural character, with development limited to isolated farmsteads and residential properties. Occasional footpaths cross the farmland. Fields are predominantly used for grazing livestock and are small scale and irregularly shaped near the village and Afon Alaw, becoming larger and more regular further away. Vegetation cover is limited to occasional woodland blocks and shelterbelts such as at The Rectory (residential property), although dense hedgerow field boundaries provide a sense of enclosure in places.

Archaeology and cultural heritage

- 3.2.54 No archaeological remains assessed to be of high value have been identified within the cultural heritage baseline for Section 3.
- 3.2.55 Three burnt mounds, with associated possible hearths, have been included in the cultural heritage baseline for Section 3. These are known as Two Burnt Mounds, Llanfachraeth, and Llanfachraeth Burnt Mound 2 (Assets 351 and 432). These archaeological features comprise mounds of fire-cracked stones, normally accompanied by a trough or pit which may have been lined with

wood, stone or clay, which is assumed to be the locations where heated stones were used to boil water, primarily for cooking purposes. The majority of burnt mounds in north-west Wales have been dated to the Bronze Age although earlier and later examples have also been identified. The Upper Palaeolithic/Late Pleistocene radiocarbon date obtained from material recovered from these examples, however, has been ascribed to residual material deposited within these features, rather than being an accurate date for the features themselves. While the burnt mounds identified are not as rare as was once thought, they are characteristic of Bronze Age activity in the region and so can contribute to our understanding of the chronology and function of burnt mounds and to our understanding of prehistoric activity. In consideration of this, Assets 351 and 432 have been assessed to be of medium value.

- 3.2.56 Rubbing Stone (Possible Standing Stone), Llanynghenedl (Asset 37) has been interpreted as a cattle rubbing stone, however in consideration that this asset has the potential to be of earlier origin this asset has been assessed to be of medium value.
- 3.2.57 Religious activity and burials within the Section 3 baseline are evidenced by the continued use of St. Macraeth's Graveyard (Asset 113) from the early medieval to the post-medieval periods. The church itself (Asset 114; medium value) was rebuilt in 1878 and it appears that evidence of a church and graveyard from the early medieval period were largely removed at this time. A later graveyard (Asset 55; medium value) to the south of Llanfachraeth and associated with Capel Pont yr Arw (Asset 56; Grade II Listed Building – medium value) contains memorials from the 19th century. The graveyards have the potential to contribute to research objectives related to burial practices in the early medieval period. In consideration of this, and the potential for buried archaeological remains associated with the earlier St Macraeth's Church to survive, Assets 55 and 113 have been assessed to be of medium value.
- 3.2.58 The potential for the presence of unknown archaeological remains within Section 3 has been assessed to be high.

Section 5 - south of Llanfaethlu to north of Llanfaethlu

PRoWs

- 3.2.59 There are eight PRoWs and one permissive route located within 250m of section 5 and details of which are provided in table G4-3. The location of the PRoWs is shown on figure G4-3 (Application Reference Number: 6.7.48).
- 3.2.60 Two PRoWs, namely 29/013/1 and 29/009/1, terminate at the side of the existing A5025 along the section of the bypass at chainages 480m and 580m. As the proposed alignment follows the existing A5025 alignment in this area, the PRoW would be maintained in their current positions and signage would be provided to warn vehicles of pedestrians crossing the highway in these areas. The wide verge to the west of the highway can provide a suitable link between these public footpaths.

Air Quality

- 3.2.61 Section 5 bypasses the village of Llanfaethlu with several properties and isolated farmsteads to the east and west of the site boundary. The closest residential property is located adjacent to eastern site boundary. The grounds of the new school in Llanfaethlu are approximately 25m from the boundary of the nearest section of the new road, at its closest point. The school buildings and play areas are set back further than this.
- 3.2.62 For the assessment of air quality, a receptor count has been carried out for sensitive receptors within 350m of the site boundary, which identified that there are eight residential properties within 20m of the site boundary.

Soils and Geology

- 3.2.63 The central part of section 5 around Llanfaethlu is thought to be underlain by East Keswick 1 soils and below that Gwna Group, with Church Bay Tuffs and Skerries Grits of the Skerries Group present in the south-west. The north and the south of section 5 are noted to be underlain by Brickfield 2 soils. A number of outcrops, including quartzite and jasper, are identified in the north-east and east of section 5 respectively.
- 3.2.64 The ALC survey determined that the soils in this section were mainly Grade 2, Subgrade 3a or Subgrade 3b. Areas of Grade 5 were mapped due to microrelief limitations.
- 3.2.65 Made ground is likely to be present beneath or near man-made features, including those identified below as sources of potential contamination.
- 3.2.66 Superficial deposits are absent in the area around Llanfaethlu with the remainder of the section underlain by glacial till.

Flood Risk

- 3.2.67 Section 5 is wholly located in Flood Zone A, as defined in TAN 15 [RD52], and lies outside of all main river floodplains, as indicated by Natural Resources Wales (NRW) river and sea flood mapping. Therefore, section 5 is considered to be at low risk of fluvial and tidal flooding.

Terrestrial Ecology

- 3.2.68 The following statutory sites were recorded within 2km of the proposed road alignment at Llanfaethlu:
- Llyn Garreg-lwyd SSSI: 17.7ha site, approximately 0.8km north of Section 5 at its closest point.
- 3.2.69 The following non-statutory designated sites were recorded within 2km of the proposed alignment at Llanfaethlu.
- Coed Carreglwyd WS: 12.28ha site, approximately 0.7km north-west of Section 5 at its closest point.
 - Clwch Dernog WS: 5.25ha site, approximately 1.94km east of Section 5 at its closest point.

- A group (co-located with Coed Carreglwyd) of ASNW and RAWs is recorded approximately 0.7km north-west of Section 5 at its closest point.
 - 26046 ASNW: 0.52ha site approximately 1.3km south-east of Section 5 at its closest point.
 - 26047 ASNW (3.9ha), 26048 ASNW (0.5ha) and 26070 RAWs (1.3ha) are grouped together approximately 1.7km south-east of Section 5 at its closest point.
- 3.2.70 The habitats within 250m of the proposed road alignment at Llanfaethlu were predominantly improved grassland with some examples of arable and semi-improved grassland. The field boundaries were generally a mixture of dry stone walls (or cloddiau), stock-proof fencing and species-poor hedgerows.
- 3.2.71 A number of minor unnamed tributaries, field drains and a small number of natural ponds were identified within 250m of the proposed road alignment at Llanfaethlu. The majority of the ditches had a silt substrate and low flows. One stream (D43) was recorded in the north of the study area. Section 5 is considered to be of local value for GCN.
- 3.2.72 Cofnod data returned records of brown long-eared bat (*Plecotus auritus*), Daubenton's bat and soprano pipistrelle bat within the 2km study area of the proposed alignment at Llanfaethlu.
- 3.2.73 A tree roost ground assessment identified a total of 22 trees with the potential to provide suitable habitat for roosting bats within 250m of the proposed alignment at Llanfaethlu. A total of 20 of these trees were then further assessed during tree climbing surveys. No bats or evidence of bat activity was identified during the tree ground and climbing assessment work.
- 3.2.74 The majority of buildings within the study area were considered to have low potential to contain bat roosts, though six buildings were confirmed as bat roosts). The roosts were located at the following distance from the proposed alignment of section 5.
- Fadog Frech approximately 50m north-east.
 - Bryn Maethlu approximately 230m north.
 - Cae'r-bryniau approximately 150m north-east.
- 3.2.75 Two lime kilns with the potential to support hibernating bats were identified during the building roost assessments in Llanfaethlu. Low levels of bat activity by widespread and common bat species, including common and soprano pipistrelle, were recorded during the walked activity transects. However, the assemblage of bats in the study area is considered to be of local value.
- 3.2.76 No evidence of otter or water vole were recorded near Llanfaethlu during field surveys therefore were considered to be of negligible value.
- 3.2.77 The minor field drains and tributaries in this section are considered to provide sub-optimal habitat for fish populations, with seasonal variation in flow and

vegetation reducing the potential for fish. Therefore, fish are considered to be of negligible value.

Landscape

- 3.2.78 The community is focused on a bend in the existing A5025 and local roads leading west towards the Anglesey coast. The topography is elevated in this area resulting in Llanfaethlu and the A5025 being apparent in the landscape for some distance. At the same time, the landscape character around Llanfaethlu is influenced by the scenic quality of the Isle of Anglesey AONB, and intervisibility with the coast approximately 2.5km to the west, and Snowdonia approximately 50km to the south-east. Generally, topography is between 40m and 80m AOD and slopes away from Llanfaethlu to the west, east and south. Topography remains higher to the north-east where the A5025 travels towards Llanrhuuddlad approximately 2km away. Drumlin features are also apparent to the north-east.
- 3.2.79 Away from Llanfaethlu the landscape has a rural feel, with development limited to isolated farmsteads and residential properties. Occasional footpaths cross the farmland. Fields are predominantly used for grazing livestock and are small scale and irregularly shaped near the village, becoming larger and more regular further away. Vegetation cover is limited apart from woodland at Carreglwyd Registered Park and Garden approximately 800m to the north-west of Llanfaethlu.

Archaeology and cultural heritage

- 3.2.80 Capel Soar Standing Stone (Asset 146) is a Scheduled Monument, located to the south-east of Llanfaethlu.
- 3.2.81 Llanfaethlu Multiperiod Activity (Asset 440) to the north of Llanfaethlu, is a multi-period site identified from trial trenching, with activity dating to the Neolithic, Late Bronze Age and Iron Age. One of the trial trenches contained a high density of features representing a range of Neolithic and Iron Age features. Small fragile crumbs of Neolithic Grooved Ware pottery were also recovered. Environmental material from four features that were investigated included radiocarbon dated to the Iron Age, with one result possibly extending into the Bronze Age. There are similarities between the archaeology located in this trench and Llanfaethlu Neolithic Settlement (Asset 177; negligible value (see 11.3.45)) recorded during construction of a new primary school approximately 150m to the west of the scheme.
- 3.2.82 Further evidence for prehistoric settlement is provided by the Possible Pit Cluster, Llanfaethlu (Asset 360). These six possible pits were identified as anomalies during a geophysical survey to the west of Capel Soar Standing Stone (Asset 146).
- 3.2.83 In consideration of their potential to contribute to our understanding of the Neolithic and later periods on Anglesey, Asset 440 and Asset 360 have been assessed to be of medium value.

- 3.2.84 Archaeological remains of more recent date within the cultural heritage baseline for Section 5 include evidence of religious activity and burials dating from the early medieval to post-medieval periods. These are evidenced by the presence of cist burials (Asset 186) discovered in a field adjacent to the Hen Shop Farm and the more recent Burial Ground in Capel Soar (Asset 148).
- 3.2.85 Cist burials have the potential to contribute to research objectives related to burial practices in the early medieval period. In consideration of their potential to contribute to our understanding of the chronology and function of medieval and more recent settlement, their condition, and the potential for further buried archaeological remains, these heritage assets have been assessed to be of medium value.
- 3.2.86 The potential for the presence of unknown archaeological remains within Section 5 has been assessed to be high.

Section 7 - north of Llanrhyddlad to north of Cefn Coch

PRoW

- 3.2.87 There are eight PRoWs within 250m of section 7 of the scheme. Details of which are provided in table G4-4 (Application Reference Number: 6.7.48).
- 3.2.88 Only one PRoW, namely 18/018/1, which crosses the alignment at chainage 540m, would be affected by the proposed works. Discussions with the IACC have indicated that this is a historical footpath which is rarely used and, therefore, it is proposed to permanently stop it up and divert it along a new route to the north, along the existing A5025 and across the new bypass.

Air Quality

- 3.2.89 The section 7 site is bound by the small community of Cefn Coch. The closest residential property in Cefn Coch is located 17m to the east of the site boundary. Further away from Cefn Coch, the closest isolated property is located approximately 30m to the east of the site boundary.
- 3.2.90 For the assessment of air quality, a receptor count has been carried out for sensitive receptors within 350m of the site boundary, which identified that there is one residential property within 20m of the site boundary.

Soils and Geology

- 3.2.91 The predominant soil type within section 7 is Brickfield 2. East Keswick 1 soils are present in a small part in the south of the section. Most of the northern part of section 7 is underlain by mica schist and psammite of the New Harbour Group. Southern parts of the section are underlain by the Church Bay Tuffs and Skerries Grits, schist and a small area of quartzite of the Gwna Group and Ordovician interbedded mudstone, sandstone and quartzite.
- 3.2.92 The ALC survey identified both topsoil and subsoil to comprise clay loam. Most of the section was classed as ALC Subgrades 3a and 3b, limited by wetness, workability and slope. In addition, there are small areas of Grade 4 and Grade 5.

- 3.2.93 Made ground is likely to be present beneath or near man-made features such as roads, two potentially infilled ponds and a potentially infilled former sand and gravel quarry.
- 3.2.94 Deposits of glacial till are thought to be present across the majority of the section, with the exception of isolated areas in the west and south, where superficial deposits are absent.

Flood Risk

- 3.2.95 Section 7 (Cefn Coch) is largely within Flood Zone A and therefore at little or no risk of flooding from rivers. However, the floodplain of the Afon Cafnan lies to the west of the existing A5025 and immediately west of the A5025 Off-line Highway Improvements, and is identified by the TAN 15 Development Advice Map [RD52] as being in Flood Zone C2. There are minor encroachments of the A5025 Off-line Highway Improvements into the floodplain upstream of the minor road crossing and downstream of Cefn Coch.

Terrestrial Ecology

- 3.2.96 The following statutory designated sites for nature conservation was recorded within 2km of the proposed road alignment at Cefn Coch.
- Cae Gwyn SSSI: 10.00ha site, approximately 0.76km north-east of Section 7 at its closest point.
 - Llyn Llygeirian SSSI: 29.80ha site, approximately 0.3km east of Section 7 at its closest point.
- 3.2.97 The following non-statutory designated sites were recorded within 2km of the proposed road alignment at Cefn Coch.
- Rhostir Mynydd Mechell WS: 36.92ha site, approximately 0.9km south-east of Section 7 at its closest point.
 - Llyn Cors Coch WS: 0.73ha site, approximately 1.5km south-east of Section 7 at its closest point.
 - Llyn Bwch WS: 11.57ha site, approximately 1.8km south-east of Section 7 at its closest point.
 - Cors Cromlech WS: 7.63ha site, approximately 1.8km north-east of Section 7 at its closest point.
 - Cors Bonw WS: 3.97ha site, approximately 1.8km south-west of Section 7 at its closest point.
 - 26051 ASNW: 0.29ha, immediately adjacent to the east of Section 7. properties, between 20m and 50m from the site boundary. Full details of the receptor count are provided in appendix G5-1 (Application Reference Number: 6.7.17).
 - 26052 ASNW: 2.01ha, approximately 1.4km west of Section 7 at its closest point.
 - 26054 ASNW: 0.81ha approximately 2km north-west of Section 7 at its closest point.

- 3.2.98 The habitats within 250m of the proposed road alignment at Cefn Coch were predominantly semi-improved grassland and improved grassland bounded generally by dry stone wall (or cloddiau) and stock-proof fencing. Broadleaved, coniferous and mixed trees were recorded bordering some field margins and along some lanes and pathways.
- 3.2.99 A small unnamed channel (D56) flowing west from Llyn Llygeirian into the Afon Cafnan and then north to Porth-y-pistyll is crossed by the proposed road alignment at Cefn Coch. The channel has a relatively straight planform and forms the boundary of several fields. The freshwater habitats recorded within the study area are not of biodiversity importance themselves but are of potential value for the species they support.
- 3.2.100 No evidence for GCN was recorded within 250m of the proposed road alignment at Cefn Coch. Section 7 is considered to be of negligible value for GCN.
- 3.2.101 A tree roost ground assessment identified a total of 26 trees with the potential to provide suitable habitat for roosting bats within 250m of the proposed road alignment at Cefn Coch. A total of 18 of these trees were then further assessed during tree climbing surveys. No bats or evidence of bat activity was identified during the tree ground and tree climbing assessment survey work.
- 3.2.102 Two buildings with high potential and three buildings with moderate potential to support bat roosts were identified within the 250m survey area around the proposed alignment at Cefn Coch. One building at Cefn Coch was confirmed as a roost within the survey. The roost at Cefn Coch was located approximately 50m east of the proposed alignment. The number of individuals recorded during further surveys would suggest that the identified roost is not an important maternity roost and does not contribute significant numbers to the local populations. The assemblage of bats in the study area is considered to be of local value.
- 3.2.103 Tributaries of the watercourses linked to Cemlyn Bay (D99, D101, D102, D105 and D125), north of Cefn Coch, recorded relatively higher numbers of otter spraints and footprints than the other survey areas. It is considered that the watercourses provide potentially important commuting routes linking coastal and inland habitats. The watercourses of the study area are considered to be of county value for otter.
- 3.2.104 Evidence of water vole was recorded during field surveys on one ditch within the study area (D57). The study area is considered to be of county value for water vole.
- 3.2.105 Fish abundance was low within the upper reaches of the Afon Cafnan as a result of very shallow water levels and dense macrophyte growth reducing the potential for optimal fish habitat. The study area is therefore considered to be of negligible value for fish receptors.

Landscape

- 3.2.106 Section 7 is in a rural area with scattered farmsteads and residential properties, and occasional footpaths. The existing A5025 is the most noticeable man-made element, crossing the landscape between the village of Llanrhuuddlad approximately 800m to the south, and the village of Tregele approximately 2km to the north-east. There is a ridgeline north of Llanrhuuddlad, and the peak of Mynydd y Garn almost 2.5km to the west influences the surrounding landscape character. Generally, topography is between 40m and 80m AOD, rising to the south towards Llanrhuuddlad and abruptly to the east of the existing A5025. Llyn Llygeirian is a large water body situated approximately 500m to the east of the existing A5025, although it is not readily apparent due to topography. A small stream exits Llyn Llygeirian joining the Afon Cafnan approximately 100m to the west of the existing A5025 in an area of lower-lying topography. The Afon Cafnan follows a south to north course towards the Anglesey coast.
- 3.2.107 The landscape has a rural feel due to limited development. Fields are predominantly used for grazing livestock and are small scale and irregularly shaped near the Afon Cafnan, becoming larger and more regular further away. Vegetation cover in the landscape is limited, resulting in an open feel. The most noticeable vegetation blocks are in the vicinity of Cefn Coch Farm where there is a block of Ancient Woodland to the east of the existing A5025, and mature trees and shelterbelt vegetation to the west at the Afon Cafnan and nearby residential properties.

Heritage and archaeology

- 3.2.108 No archaeological remains assessed to be of high value were identified within the cultural heritage baseline for Section 7.
- 3.2.109 Asset 241 comprises two small orthostatic stones located on a slight mound south of Tyn Felin. Identified during a walkover survey, these stones have been interpreted as possible standing stones, a barrow or field clearance (appendix G11-1, Application Reference Number: 6.7.42). Whilst standing stones of prehistoric date would have the potential to contribute to the analysis of the ritual landscape in consideration of their uncertain interpretation and origin, these heritage assets have been assessed to be of medium value.
- 3.2.110 Melin Bodryn (Asset 251) is the site of a water-powered corn mill of medieval origin. While the historic mill was once a considerably more substantial structure, the visible remains now comprise a small, derelict building and scatter of stones next to an overgrown, rocky gorge. In consideration of the survival of this historic, unlisted, ruined building of some quality which can contribute to medieval and post-medieval research objectives this heritage asset has been assessed to be of medium value.
- 3.2.111 The potential for the presence of unknown archaeological remains within Section 7 has been assessed to be low.

New Power Station Access Road junction

PRoWs

- 3.2.112 There are four PRoWs within 250m of the Power Station Access Road Junction details of which are provided in table G4-5. The location of these PRoWs are shown in figure G4-5 (Application Reference Number: 6.7.48).
- 3.2.113 The Wales Coast Path would require a permanent diversion in order to construct the Power Station. This diversion route would require a section of the Wales Coast Path to navigate across the Power Station Access Road Junction roundabout as part of the route. The roundabout design includes shared use footway/cycleway provision to enable safe crossing for walkers.

Air Quality

- 3.2.114 The Power Station Access Road Junction is located north of section 7 and is bound predominantly by open farmland, with the A5025 located along its eastern boundary.
- 3.2.115 For the assessment of air quality, a receptor count has been carried out for sensitive receptors within 350m of the site boundary, which identified that there are two residential properties within 100m of the site boundary. The closest receptor is approximately 70m from the road alignment tie-in with the existing A5025, south of the proposed new junction.

Soils and Geology

- 3.2.116 The Power Station Access Road Junction is underlain by East Keswick 1 soils and beneath that, mica schist and psammite of the New Harbour Group. There are also thought to be deposits of glacial till beneath the Power Station Access Road Junction.
- 3.2.117 The ALC survey identified that topsoil beneath the Power Station Access Road Junction primarily comprises medium clay loam, although heavy clay loam and sandy clay loam were also encountered. Subsoil was primarily clay, although heavy clay loam and sandy clay were also found. Soils were found to be limited by wetness and workability to ALC Subgrade 3b.
- 3.2.118 Made ground will be present beneath the existing A5025 and the access road and may be present in field entrances.

Flood Risk

- 3.2.119 The proposed junction for the Power Station Access Road on the A5025 is shown to lie on a topographical high point and it is therefore not at flood risk from any source and is within Flood Zone A.

Terrestrial Ecology

- 3.2.120 The following statutory sites were recorded within 2km of the proposed alignment at the Power Station Access Road Junction.

- Cemlyn Bay/Bae Cemlyn SAC and SSSI: a 44.5ha site, approximately 2km north-west of the Power Station Access Road Junction at its closest point.
- The North Anglesey Marine/Gogledd Môn Forol cSAC: approximately 2km north-west of the Power Station Access Road Junction at its closest point.
- Anglesey Terns/Morwenoliaid Ynys Môn SPA: a 101,931.08ha site approximately 2km north-west of the Power Station Access Road Junction at its closest point.
- Cae Gwyn SSSI: 10ha site, approximately 0.3km west of the Power Station Access Road Junction at its closest point.
- Tre'r Gof SSSI: 10.1ha site, approximately 1.5km north-east of the Power Station Access Road Junction at its closest point.
- Llyn Llygeirian SSSI: 29.8ha site, approximately 1.7km south of the Power Station Access Road Junction at its closest point.

3.2.121 The following non-statutory designated sites were recorded within 2km of the proposed alignment at the Power Station Access Road Junction.

- Cors Cromlech WS: 7.6ha site approximately 0.75km east of the Power Station Access Road Junction at its closest point.
- Rhostir Mynydd Mechell WS: 36.92ha site, approximately 1.5km south of the Power Station Access Road Junction at its closest point.
- Arfordir Mynydd y Wylfa - Trwyn Penrhyn Wildlife Site: 21.0ha site approximately 1.8km to the north of the Power Station Access Road Junction at its closest point.
- Trwyn Pencarreg WS: 10.21ha site approximately 2km north-west of the Power Station Access Road Junction at its closest point.
- 26051 ASNW: 0.29ha site, approximately 1.4km south-west of the Power Station Access Road Junction at its closest point.
- 26075 RAW site: 0.5ha site, approximately 1km north of the Power Station Access Road Junction at its closest point.
- 26059 ASNW: 0.3ha site, approximately 1.3km north of the Power Station Access Road Junction at its closest point.
- 26060 ASNW: 0.3ha site, approximately 1.8km north of the Power Station Access Road Junction at its closest point.

3.2.122 The habitats within the study area were predominantly improved grassland with some examples of arable fields. Large areas of scrub were also recorded, along with isolated areas of marshy grassland. The field boundaries were generally a mixture of dry stone wall (or cloddiau), stock-proof fencing and species poor hedgerows.

- 3.2.123 There were two watercourses within the study area: ditch 125 (D125, also referred to as Groes-fechan) and ditch 63 (D63 also referred to as Foel Fawr). These are part of the Cafnan and Cemaes catchments respectively. The Groes-fechan has evidence of channel realignment along much of the reach surveyed and it was recorded as either heavily shaded by bankside vegetation or choked with aquatic vegetation, including water forget-me-not (*Myosotis scorpioides*) and fool's-water-cress (*Apium nodiflorum*). The Foel Fawr was a narrow stream which also had evidence of realignment. Much of the channel surveyed was heavily shaded by bankside vegetation. The study area is considered to be of local value for GCN.
- 3.2.124 A line of trees was recorded west of Groes-fechan farm that may have potential to support bats. The buildings within 250m were Groes-fechan farm buildings and a ruined barn. Groes-fechan farm buildings were found to potentially support a small bat roost but no evidence of bats was recorded in the ruined barn. Low levels of bat activity by widespread and common bat species were recorded during the activity surveys in the study area. However, the assemblage of bats in the study area is considered to be of local value.
- 3.2.125 No signs of otter were recorded within the study area during field surveys but otter have been recorded in the downstream sections of the catchments within the field study area. The study area is therefore considered to be of negligible value for otter.
- 3.2.126 Water vole latrines and optimal habitat were recorded on ditch 15 during surveys in 2013. As such the study area is considered to be of county value for water vole.
- 3.2.127 Ditch 125 (Groes-fechan), north-west of the proposed alignment, recorded no fish during the field survey work. The Groes-fechan site is upstream of Caerdegog Isaf, and demonstrates very low base flow which does not support a permanent population of fish. The Power Station Access Road junction study area is considered to be of negligible value for fish.

Landscape

- 3.2.128 The landscape context around the Power Station Access Road Junction is in a rural area with scattered farmsteads and residential properties, and occasional footpaths. The community of Tregele is located approximately 1.5km to the north-east, and the Existing Power Station is approximately 2km to the north. The existing A5025 is highly perceptible in the landscape at this location as it is situated on elevated topography. Generally, topography ranges from 20m to 40m AOD and slopes away from the A5025 in all directions. Small drumlins are noticeable throughout the landscape resulting in rolling topography.
- 3.2.129 The surrounding fields are predominantly used for grazing livestock and are medium to large scale and regularly shaped. Vegetation cover in the landscape is limited, apart from a coniferous shelterbelt at the residential property Groes-fechan to the west of the A5025. Woodland blocks are also noticeable at the Existing Power Station to the north.

Archaeology and cultural heritage

- 3.2.130 The study area for the Power Station Access Road Junction was defined as an area extending 200m in all directions from the edge of the alignment of the proposed three-arm roundabout linking the Power Station Access Road to the existing A5025 public highway.
- 3.2.131 A total of 10 heritage assets have been identified within the cultural heritage baseline for the Power Station Access Road Junction, comprising five archaeological remains, three historic buildings, and two HLTs.

4 Principal Planning Issues

4.1 Introduction

- 4.1.1 The purpose of this section is to present and analyse the site-specific planning considerations that emerge from the planning policy background, site characteristics and issues, as well as the feedback raised through the pre-application consultation process.
- 4.1.2 A detailed assessment of the likely effects of the construction, operation and decommissioning of the A5025 Off-line Highway Improvements is set out in the Environmental Statement (Application Reference Number: 6.7.1), Health Impact Assessment (Application Reference Number: 8.19), Welsh Language Impact Assessment (Application Reference Number: 8.21) and Equality Impact Assessment (Application Reference Number: 8.22).
- 4.1.3 Design principles and parameters for the A5025 Off-line highway Improvements are set out in Volume 3 of the Design and Access Statement (Application Reference Number: 8.2.3), alongside details of how the design of the scheme has evolved during pre-application discussions.
- 4.1.4 Details of the need for the Wylfa Newydd DCO Project and the effect of the Statement on Energy Infrastructure (7 December 2017, hereafter referred to as the 'ministerial statement') on the decision making process are identified in Chapter 5 of the Planning Statement main report (Application Reference Number: 8.1).
- 4.1.5 This concludes that NPS EN-1 and NPS EN-6 remain important and relevant matters which would carry significant weight in the determination of projects that will deploy after 2025. They continue to represent the primary policy basis for a decision made by the SoS on this application for development consent for the Wylfa Newydd DCO Project

4.2 Principle of development

Policy Context

National Policy Statements

- 4.2.2 In considering the proposed development and weighing the adverse impacts of the proposed development against its benefits, Paragraph 4.1.3 of NPS EN-1 [RD4] states that the decision maker should take into account:
 - its potential benefits including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits; and
 - its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.

Welsh national and local policy

- 4.2.3 The Joint Local Development Plan (JLDP) [RD27] states that improvements to the existing transport network will be granted provided they conform to a number of criteria. These include minimising the impact on the built and natural environment, minimising permanent land take, good design and high quality landscaping and improvement in road safety (Policy TRA1). Part 4iii of Policy TRA 1 of the JLDP [RD27] confirms that improvements to the A5025 Valley to Wylfa and other transport infrastructure improvements associated with the new nuclear development at Wylfa Newydd will be secured through the safeguarding and provision of land, where need for improvement on that section is demonstrated following a highway impact assessment of the Wylfa Newydd Project on the A5025. Such improvements are illustrated on the JLDP Proposals Map [RD27].
- 4.2.4 Paragraph 6.1.46 of the JLDP [RD27] confirms that the four main locations on the route between Valley and the Power Station Site that will require significant improvements are as listed below. The following four locations are within the scope of the proposed A5025 Off-line Highway Improvements:
- A5/A5205 (Valley);
 - A5025 (Llanfachraeth);
 - A5025 (Llanfaethlu); and
 - A5025 (Cefn Coch).
- 4.2.5 Paragraph 6.7 of the Wylfa Supplementary Planning Guidance (SPG) [RD28] acknowledges that key junctions and sections of carriageway may need improving to cope with peak traffic flows (these include sections of the A5025 and Junction 3 (A55/A5 junction)).

Assessment

- 4.2.6 The A5025 Off-line Highway Improvements are a vital component of the Wylfa Newydd DCO Project and are necessary to facilitate the construction and ultimate operation of the Power Station.
- 4.2.7 As shown above, Policy TRA 1 of the JLDP [RD27] supports the principle of improvements to the A5025 where need for improvement on that section is demonstrated following a highway impact assessment of the Wylfa Newydd Project on the A5025. This need has been established through highway impact assessments (refer to the accompanying chapter G1, of the ES (Application Document Reference: 6.7.1)).
- 4.2.8 In addition, the A5025 Off-line Highway Improvements also accord with Policy TRA1 of the JLDP [RD27], as they have been sensitively designed to respect the scale and character of the surrounding area, and to prevent as far as possible any adverse impacts on surrounding residential amenity, ecological receptors or the setting of heritage assets (as explained further in volume G of the accompanying ES (Application Document Reference: 6.7.1-6.7.12)).

- 4.2.9 The Wylfa SPG [RD28] provides further support for the A5025 Off-line Highway Proposals confirming that sections of the A5025 may need improving to cope with peak traffic flows.
- 4.2.10 In light of the above policy support for improvements to the A5025, it is considered that the principle of the A5025 Off-line Highway Improvements is acceptable.

4.3 Other Site-Specific Planning Issues

- 4.3.1 NPS EN-1 [RD4] and the National Policy Statement for Nuclear Power Generation EN-6 (NPS EN-6) [RD5] identify “generic impacts” and “flags for local consideration”. Whilst these are not exhaustive, they provide a helpful guide to the principal issues which the decision maker will be expected to take into account when determining the acceptability of the DCO application. These issues are addressed in the remaining sections of this chapter.
- 4.3.2 In order to determine the overall acceptability of the proposals, assessment against planning policy is undertaken in this section on all matters deemed material to the consideration of this planning application. These matters are as follows:
- Local amenity (including noise and vibration, air quality, health and wellbeing);
 - Biodiversity;
 - Soils and geology;
 - Flood risk;
 - Surface Water and Groundwater;
 - Historic environment;
 - Landscape and visual;
 - Traffic and transport;
 - Socio-economics; and
 - Welsh language.
- 4.3.3 This Planning Assessment uses the assessments contained within accompanying supporting application documents in order to make judgements against planning policy. Volume G in the ES (Application Document Reference: 6.7.1 to 6.7.12) contains assessments on a number of topic areas covering the above material considerations. The Transport Statement (Application Document Reference: 6.3.14), Welsh Language Impact Assessment (WLIA) (Application Document Reference: 8.22), Health Impact Assessment (HIA) (Application Document Reference: 8.19) and DAS (Application Document Reference: 8.2.3) are also used to make judgements against those specific issues.

Local amenity (including noise and vibration, air quality, health and wellbeing)

Policy Context

National Policy Statements

- 4.3.4 Paragraph 4.13.2 of NPS EN-1 [RD4] states that the ES should assess effects on human beings for each element of the project, identifying any adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts as appropriate. The impacts of more than one development may affect people simultaneously, so the applicant and the decision maker should consider the cumulative impact on health.
- 4.3.5 Paragraph 5.6.4 of NPS EN-1 [RD4] advises that applicants should “...*assess the potential for insect infestation and emissions of odour, dust, steam, smoke and artificial light to have a detrimental impact on amenity, as part of the Environmental Statement*”.
- 4.3.6 Paragraph 5.6.7 of NPS EN-1 [RD4] states that the decision maker should be satisfied that an assessment of the potential for artificial light, dust, odour, smoke, steam and insect infestation to have a detrimental impact on amenity has been carried out and that all reasonable steps have been taken, and will be taken, to minimise any such detrimental impacts.
- 4.3.7 Paragraph 5.6.9 of NPS EN-1 [RD4] states that where the decision maker believes it is appropriate, they may consider attaching requirements to the development consent, in order to secure certain mitigation measures.
- 4.3.8 Paragraph 5.10.24 of NPS EN-1 [RD4] states that PRoWs, National Trails and other rights of access to land are important recreational facilities. The decision maker should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails and other PRoWs. Where this is not the case the decision maker should consider what appropriate mitigation requirements might be attached to any grant of development consent.
- 4.3.9 Paragraph 5.11.1 of NPS EN-1 [RD4] states that excessive noise can have wide-ranging impacts on the quality of human life, health (for example owing to annoyance or sleep disturbance) and use and enjoyment of areas of value such as quiet places and areas with high landscape quality. Similar considerations apply to vibration, which can also cause damage to buildings.
- 4.3.10 Paragraph 5.11.8 of NPS EN-1 [RD4] states that projects should demonstrate good design through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.
- 4.3.11 Paragraph 5.11.9 of NPS EN-1 [RD4] states that:

“the decision maker should not grant development consent unless it is satisfied that the proposals will meet the following aims:

- avoid significant adverse impacts on health and quality of life from noise;
 - mitigate and minimise other adverse impacts on health and quality of life from noise; and
 - where possible, contribute to improvements to health and quality of life through the effective management and control of noise”.
- 4.3.12 Paragraph 5.11.12 of EN-1 [RD4] states that mitigation measures may include one or more of the following:
- engineering: reduction of noise at point of generation and containment of noise generated;
 - lay-out: adequate distance between source and noise-sensitive receptors; incorporating good design to minimise noise transmission through screening by natural barriers, or other buildings; and
 - administrative: restricting activities allowed on the site; specifying acceptable noise limits; and taking into account seasonality of wildlife in nearby designated sites.
- 4.3.13 Where a project is likely to have adverse effects on air quality, paragraph 5.2.6 in NPS EN-1 [RD4] requires that an assessment of the impacts of the proposed project should be undertaken as part of the ES. Paragraph 5.2.7 of NPS EN-1 [RD4] identifies the air quality and emission requirements that should be assessed within an ES stating:
- “The ES should describe:
- any significant air emissions, their mitigation and any residual effects distinguishing between the project stages and taking account of any significant emissions from any road traffic generated by the project;
 - the predicted absolute emission levels of the proposed project, after mitigation methods have been applied;
 - existing air quality levels and the relative change in air quality from existing levels; and
 - any potential eutrophication impacts”.

Welsh national and local policy

- 4.3.14 PPW [RD8] sets out at chapter 13 (Minimising and Managing Environmental Risks and Pollution) that while planning authorities should not seek to control through planning measures, matters that are the proper concern of the pollution control authority, where pollution considerations affect the use and development of land, they can be material planning considerations.
- 4.3.15 Paragraph 13.15.1 in PPW [RD8] confirms that noise can be a material planning consideration. Paragraph 13.15.2 in PPW [RD8] also states that special consideration is required where noise-generating development is likely to affect a protected species, or is proposed in or near statutorily designated areas, including urban ‘quiet areas’ designated in Noise Action Plans. It

continues to state that the effect of noise on the enjoyment of other areas of landscape, wildlife and historic value should also be taken into account.

- 4.3.16 Strategic Policy PS 4 in the JLDP [RD27] states that, where possible, PRoW and cycle networks should be safeguarded, improved, enhanced and promoted in order to increase health, leisure, well-being and tourism benefits for both local residents and visitors.

- 4.3.17 Policy PCYFF 2 in the JLDP 27] states that planning permission will be refused where the proposed development would have an unacceptable adverse impact on:

“...the health, safety or amenity of occupiers of local residences, other land and property uses or characteristics of the locality due to increased activity, disturbance, vibration, noise, dust, fumes, litter, drainage, light pollution, or other forms of pollution or nuisance”.

- 4.3.18 The Wylfa SPG 28] at GP 7 states that the applicant should work with IACC and the Betsi Cadwaladr University Health Board to identify any potentially significant health impacts and appropriate mitigation measures. It also states that Associated Developments should not be proposed where construction activities would give rise to unacceptable impacts on air quality, noise/vibration and light pollution and the amenity of the existing residents, visitors, businesses and construction workers. GP 5 in the Wylfa SPG [RD28] states that the detailed assessments should consider the impacts on access to the Island's natural and built environmental assets, including on PRoW. GP 8 in the Wylfa SPG [RD28] expects applicants to undertake a comprehensive assessment of the potential impacts of the Project on open space, recreation and leisure provision. GP 20 in the Wylfa SPG [RD28] states that the Project should not have a significant adverse impact on the Wales Coast Path. GP 26 in the Wylfa SPG [RD28] seeks improvement to the Wales Coast Path and PRoWs.

Assessment

- 4.3.19 In line with paragraph 4.13.2, 5.6.4 and 5.6.7 of NPS EN-1 [RD4], chapters G5 and G6 in the ES (Application Document Reference: 6.7.5 and 6.7.6) have assessed effects on human beings for each element of the project, identifying any adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts as appropriate. The cumulative impact of the Wylfa Newydd DCO Project on health is provided in volume I of the ES (Application Document Reference: 6.9.1), in accordance with paragraph 4.13.2 in NPS EN-1 [RD4].
- 4.3.20 The design of the proposals as well as the proposed good practice mitigation measures will avoid unacceptable disturbance to local communities, through noise, smell, vibration, smoke or air pollution. As a result, they are also in accordance with Policy PCYFF2 of the JLDP [RD27] (as confirmed in chapters G5 and G6 of the ES (Application Reference Number 6.7.5 and 6.7.6)).
- 4.3.21 As discussed below, although major adverse significant noise effects are predicted, the design of the A5025 Off-line Highway Improvements has sought

to mitigate these as far as practicable. The adverse effects are outweighed by the significant benefits that the A5025 Off-line Highway Improvements will deliver. The A5025 Off-line Highway Improvements represent significant mitigation of the transport impacts which would otherwise be experienced as a result of the construction of the Wylfa Newydd DCO Project. As such the A5025 Off-line Highway Improvements are in accordance with paragraphs 5.11.9, 4.13.2 and 5.6.7 of NPS EN-1 [RD4], PPW (paragraph 13.5.1) [RD8], Policy PCYFF2 of the JLDP [RD27] and GP7 of the Wylfa SPG [RD28].

Health

- 4.3.22 Paragraph 4.13.5 in NPS EN-1 [RD4] states that those aspects of energy infrastructure which are most likely to have a significantly detrimental impact on health are subject to separate regulation (for example for air pollution) which will constitute effective mitigation of them, so that it is unlikely that health concerns will either constitute a reason to refused consent or require specific mitigation under the Planning Act 2008 [RD1]. Paragraph 4.13.5 in NPS EN-1 [RD4] does confirms that decision makers will want to take account of health concerns when setting requirements relating to a range of impacts such as noise. The conclusion of the Health Impact Assessment (HIA) Report for the A5025 Off-line Highways Improvements (Application Document Reference: 8.19) is that there are no potentially significant health effects that warrant further assessment.
- 4.3.23 Importantly, paragraph 3.12.8 in NPS EN-6 [RD5] states that the decision makers should consider the positive effect of employment and other socio economic impacts on human health and wellbeing. At section 3 of the A5025 Off-line Highway Improvements (north of Llanyngghenedl to north of Llanfachraeth) there would be a potential major beneficial effect as existing traffic levels within Llanfachraeth would be reduced by more than 60%.
- 4.3.24 Detailed analysis on the project-wide effects is provided in the main report of this Planning Statement (Application Reference Number: 8.1).

Noise and Vibration

- 4.3.25 The assessment of the predicted noise and vibration effects of the A5025 Off-line Highway Improvement works has considered activities across five distinct work areas across the improvement scheme, as detailed at chapter G6 of the accompanying ES (Application Document Reference: 6.7.6). In accordance with paragraph 5.11.4 in NPS EN-1 [RD4], the potential for both noise and vibration effects have been assessed in chapter G6 of the accompanying ES (Application Document Reference 6.7.6).
- 4.3.26 The following additional mitigation is proposed to reduce the noise and vibration effects of the A5025 Off-line Highway Improvements:
- Acoustic screening around hydraulic breaker/s, selection of quieter plant and/or alteration of working techniques to reduce the level of noise from this significant item of plant, in accordance with 5.11.8 in NPS EN-1 [RD4] which advocates the use of landscaping, bunds or noise barriers to reduce noise transmission.

- Vibration risk assessment to be undertaken to establish if safe working distances are available, otherwise alternative methods will be adopted.
- 4.3.27 The residual noise effects remaining after taking account of the proposed mitigation measures are set out in table 6-27 of chapter G6 of the ES (Application Reference Number: 6.7.6) Whilst the proposals will result in adverse impacts on amenity, these effects have been limited as far as possible and are considered acceptable in the balance of the overriding need for the A5025 Off-line Highway Improvements in order to satisfy the urgent need for low carbon energy as well as the public benefits that the A5025 Off-line Highway Improvements will deliver. An important benefit of the A5025 Off-line Highway Improvements would be the significant reduction in traffic passing through the effected villages on the existing path of the A5025.

Air Quality

- 4.3.28 In line with paragraph 5.2.6 and 5.2.7 of NPS EN-1 [RD4], chapter G5 of the ES (Application Document Reference: 6.7.5) considers air quality impacts (excluding air quality effects associated with emissions from traffic, which are covered in chapter C4 of the ES (Application Document Reference: 6.7.4) which covers project-wide effects of road traffic upon air quality). This concludes that no potentially significant air quality effects have been identified and there is no requirement for additional mitigation.
- 4.3.29 The A5025 Off-line Highway Improvements would not lead to a deterioration in air quality in an area, nor lead to any new areas where air quality breaches any national air quality limits. Additionally, no substantial changes in air quality levels are expected, as confirmed by chapter G5 of the ES (Application Document Reference: 6.7.5).
- 4.3.30 The following good practice mitigation for the control of dust during the construction phase would be implemented.
- Plan site layout so that machinery and dust-generating activities are located as far as practicable from nearby sensitive receptors.
 - Manage earthworks and exposed areas/soil stockpiles to prevent wind whipping using methods such as covering and re-vegetating or other alternative methods of dust suppression, such as water suppression.
 - Control site runoff of water or mud.
 - Comprehensive measures and working methods to prevent and reduce dust emissions at their source, including but not limited to:
 - where there is a risk of dust nuisance, use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques;
 - ensuring an adequate water supply on the respective A5025 Off-line Highway Improvements site for effective dust/particulate matter suppression/mitigation;

- using water suppression during demolition activities and on internal site haul roads;
 - where there is a risk of dust nuisance, reducing drop heights from loading shovels, hoppers and other loading or handling equipment during material movement or transfer;
 - ensuring equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable using wet cleaning methods where appropriate;
 - where there is a risk of dust nuisance, enclosing chutes and conveyors and covered skips, where practicable;
 - sheeting of vehicles containing dusty/friable materials when entering and leaving the site; and
 - implementing a wheel wash system (with rumble grids) to reduce trackout.
- Visual inspections of the site and off-site locations, including dust deposition monitoring and PM10/PM2.5 monitoring at suitable site boundary locations, to check compliance with dust management procedures and effectiveness of the mitigation measures and dust controls.
 - Develop and implement procedures for liaising with stakeholders (including the local community and the IACC), including procedures and protocols for receiving complaints and subsequent investigations and responses.
 - Construction workers would be trained as appropriate to increase their awareness of environmental concerns including dust management.
- 4.3.31 Dust mitigation, management and control measures (set out in appendix G5-1 of the ES (Application Document Reference: 6.7.5)) would be implemented in accordance with the Wylfa Newydd Code of Construction Practice (Application Reference Number: 8.6). It may not be necessary to adopt all the mitigation measures at some sections of the A5025 Off-line Highway Improvements (i.e. for those sections where the risks were found to be negligible or low).

Public Access and Recreation

- 4.3.32 In line with GP5 and GP8 of the Wylfa SPG [RD28], chapter G4 of the ES (Application Document Reference: 6.7.4) provides the assessment of effects of the A5025 Off-line Highway Improvements on public access and recreation. It is noted that the permanent closure of PRow 18/018/1 prior to the construction of section 1 would result in a moderate adverse effect during construction, and the introduction of an at-grade crossing within the route of PRow 27/020/1 would cause a moderate adverse effect during operation.

- 4.3.33 Paragraph 5.10.24 of EN-1 [RD4] requires appropriate mitigation measures to address adverse effects on PRoWs and Policy PS 4 of the JLDP [RD27] states that PRoW should be safeguarded, improved, enhanced and promoted. Whilst the assessed effect remains moderate adverse, an alternative route to RRoW 178/018/1 would be provided that would run along the existing A5025 carriageway. Users of PRoW 27/020/1 would be required to cross the A5025 at grade and the approach to this crossing location would involve a short diversion. It is considered that there are no such reasonable or practicable alternative opportunities.

Biodiversity

Policy Context

National Policy Statements

- 4.3.34 Generic biodiversity conservation impacts of new energy NSIPs are covered in section 5.3 of EN-1 [RD4].
- 4.3.35 Paragraph 5.3.3 in NPS EN-1 [RD4] requires an ES to clearly set out:
- “...any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity”.
- 4.3.36 Further, paragraph 5.3.4 in NPS EN-1 [RD4] states that the applicant should show how the proposals have taken advantage of opportunities to conserve and enhance biodiversity interests.
- 4.3.37 Paragraph 5.3.7 in NPS EN-1 [RD4] states that as a general principle, and subject to other paragraphs in NPS EN-1 [RD4], development should aim to avoid significant harm to biodiversity interests, including through mitigation and consideration of reasonable alternatives; where significant harm cannot be avoided, then appropriate compensation measures should be sought.
- 4.3.38 Paragraph 5.3.11 in NPS EN-1 [RD4] relates to SSSIs and states:
- “Where a proposed development on land within or outside an SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect, after mitigation, on the site’s notified special interest features is likely, an exception should only be made where the benefits (including need) of the development at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs. The decision maker should use requirements and/or planning obligations to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site’s biodiversity or geological interest”.
- 4.3.39 Paragraph 5.3.14 in NPS EN-1 [RD4] confirms that ancient woodland is a valuable biodiversity resource and the decision maker should not grant

development consent for any development that would result in its loss or deterioration “...unless the benefits (including need) of the development, in that location outweigh the loss of the woodland habitat”.

- 4.3.40 Paragraph 5.3.17 in NPS EN-1 [RD4] states that other species and habitats have been identified as being of principal importance for the conservation of biodiversity in England and Wales and thereby requiring conservation action. The decision maker should ensure that these species and habitats are protected from the adverse effects of development by using requirements or planning obligations. The decision maker should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits (including need) of the development outweigh that harm. In this context, the decision maker should give substantial weight to any such harm to the detriment of biodiversity features of national or regional importance which it considers may result from a proposed development.
- 4.3.41 Paragraphs 5.3.18 and 5.3.19 of NPS EN-1 [RD4] identify that the applicant should include appropriate mitigation measures as an integral part of the proposed development. Paragraph 3.9.6 of NPS EN-6 [RD5] states that potential mitigation measures could include variations to building layouts to avoid ecologically sensitive areas and on-site measures to protect habitats and species and to avoid or minimise pollution and the disturbance of wildlife.

Welsh national and local policy

- 4.3.42 Paragraph 5.2.8 of PPW [RD8] states that the planning system should promote biodiversity objectives and seek to minimise the fragmentation of habitats.
- 4.3.43 The planning system has an important part to play in meeting biodiversity objectives by promoting approaches to development which create new opportunities to enhance biodiversity, prevent biodiversity losses, or compensate for losses where damage is unavoidable. Paragraph 5.2.8 in PPW [RD8] confirms that the adaptation needs of biodiversity could be considered by identifying the scope for minimising or reversing the fragmentation of habitats and improving habitat connectivity through the promotion of wildlife corridors.
- 4.3.44 Section 5.5 of PPW [RD8] states that sites should be protected relative to their importance. In the interests of achieving sustainable development, it is important to balance conservation objectives with the wider economic needs of communities. Where development does occur, it is important to ensure that all reasonable steps are taken to safeguard or enhance the environmental quality of land. Further, section 5.5 of PPW [RD8] recognises where other material considerations outweigh the potential adverse environmental effects, authorities should seek to minimise those effects.
- 4.3.45 Strategic Policy PS 5 in the JLDP [RD27] states that development will be supported where it is demonstrated that it is consistent with the principles of sustainable development. It also states that all proposals should protect and improve the quality of the natural environment, its landscapes and biodiversity assets.

- 4.3.46 Strategic Policy PS 9 in the JLDP [RD27] requires all Associated Development to avoid, minimise, mitigate or compensate for potentially adverse ecological impacts in the local and wider area, both in the short and longer term.
- 4.3.47 Strategic Policy PS 19 in the JLDP [RD27] states that the Councils will manage development so as to conserve and where appropriate enhance the distinctive natural environment, countryside and coastline, and that proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area. Strategic Policy PS 19 also states that when determining planning applications, consideration should be given *inter alia* to the following items.
- Safeguarding habitats and species and geology.
 - Protecting or where appropriate enhancing sites of international, national, regional and local importance and, where appropriate, their settings in line with National Policy.
 - Protecting or enhancing biodiversity through networks of green/blue infrastructure and/or restoring networks of natural habitats.
 - Protecting, retaining or enhancing trees, hedgerows or woodland of ecological value.
 - Having appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with National Policy.
- 4.3.48 Policy AMG 5 in the JLDP [RD27] states that proposals must protect and, where appropriate, enhance biodiversity that has been identified as being important to the local area. This policy also confirms that proposals affecting sites of local biodiversity importance will be refused unless they can conform with all of the following criteria:
- That there are no other satisfactory alternative sites available for the development.
 - The need for the development outweighs the importance of the site for local nature conservation.
 - That appropriate mitigation or compensation measures are included as part of the proposal.
- 4.3.49 Policy AMG 6 in the JLDP [RD27] states that proposals likely to cause direct or indirect significant harm to Local Nature Reserves, WSs or RIGS would be refused, unless it can be proven that there is an overriding need for the development, and that there is no other suitable site that would avoid having a detrimental impact on sites of local nature conservation value or local geological importance.
- 4.3.50 Section 4.10 of the Wylfa SPG [RD28] relates to the natural environment and Policy GP 20 states that the Wylfa Newydd DCO Project should seek to ensure

that the island's unique and distinctive natural environment is conserved and, where possible, enhanced. This includes the consideration of, among other things:

- the integrity of statutory and non-statutory sites for nature conservation;
- internationally and nationally protected habitats and species; and
- ecological functionality and relationships within the wider landscape.

4.3.51 GP 20 of the Wylfa SPG [RD28] states that inter alia; protected species, the ecological functionality of nature conservation sites, SACs, SPA, SSSIs, RIGS and the Geopark status of Anglesey should not be subjected to significant adverse impacts, or if they are, sufficient mitigation should be implemented. GP 20 of the Wylfa SPG [RD28] goes on to state that where adverse effects cannot be avoided, the Council will seek appropriate mitigation and/or compensation measures.

Assessment

4.3.52 In accordance with paragraph 5.3.3 of NPS EN-1 [RD4], chapter G9 of the ES (Application Reference Number 6.7.9) sets out effects on internationally, nationally, and locally designated sites of ecological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity.

4.3.53 In line with paragraph 5.3.4 and 5.3.7 of NPS EN-1 [RD4], PPW (paragraph 5.2.8 and section 5.5 [RD8]) and Strategic Policies PS 5, PS 9, PS 19 and Policies AMG 5 and AMG 6 in the JLDP [RD27] the proposals have sought to minimise adverse impacts on ecology and have taken advantage of opportunities to conserve and enhance biodiversity interests. The design has been developed to do this by including the following measures as embedded mitigation, in accordance with paragraph 5.3.18 and 5.3.19 in NPS EN-1 [RD4]:

- Mammal ledges, underpasses and clear span bridges would be provided where the new road alignment crosses all watercourses.
- The development of a landscape planting strategy to visually screen and contain roadside features, improve landscape integration and reinstate field boundaries using hard and soft landscaping, wherever practicable.
- Existing features such as walls and hedgerows along the existing A5025 and minor roads at junctions would be retained where possible, and not constrained by highway safety.
- The drainage design (see chapters G1 (Application Reference Number: 6.7.1) and G8 (Application Reference Number: 6.7.8)) collects the rainwater runoff from the paved areas and attenuates it prior to discharge.

4.3.54 The provision of additional mitigation at Llanfachraeth and Llanfaethlu to mitigate for the slight adverse effect on GCN is considered to have the potential to benefit the GCN populations in these localities. At section 3

(Llanfachraeth) this comprises the provision of approximately 3.5ha of replacement GCN habitat to the north-west of the carriageway, including marginal planting, log piles as refugia and fish management around both an existing pond and a proposed attenuation pond. At section 5 (Llanfaethlu) this comprises the provision of approximately 1.8ha of replacement great crested newt habitat including grassland seeding, shrub planting, log piles for refugia and new ponds.

- 4.3.55 In line with Policy PS 19 of the JLDP [RD27], the habitats (terrestrial and aquatic) to be provided are considered to be of a higher quality than those lost. The residual effect on GCN is considered to be positive.
- 4.3.56 The loss of potential tree roosts at section 7 (Cefn Coch) is considered to have the potential to be a slight adverse effect on the bat populations within the locality. The provision of bat boxes as replacement roosting habitat is therefore proposed to mitigate for the slight adverse effect on the bat species using the area at Cefn Coch. There are limited tree roosting opportunities within the locality and therefore in line with Policy PS 19 of the JLDP [RD27], which seeks to enhance the natural environment the provision of bat boxes is considered to provide greater more reliable roosting opportunities for bats, therefore the resulting effect on bats is considered to be slight positive.
- 4.3.57 In line with Paragraph 5.3.11 in NPS EN-1 [RD4] and GP20 of the Wylfa SPG [RD28], the A5025 Off-line Highway Improvements are not proposed to be located within any SSSIs. Chapter G9 of the ES (Application Reference Number: 6.7.9) sets out the proximity of the proposals to these designated sites and no potential adverse effects are expected.
- 4.3.58 Paragraph 5.3.14 of NPS EN-1 [RD4] confirms that ancient woodland is a valuable biodiversity resource. Ancient woodland in Anglesey is considered to be of national value due to its restricted range and highly limited potential for substitution. As such, this has been considered in the evolution of the design of the proposals and the alignment of section 7 Cefn Coch has been designed to avoid Ancient Woodland.
- 4.3.59 In line with PS19 and AMG 5 of the JLDP [RD27] which seek to enhance the natural environment, ecological improvements are proposed at section 1 and 3. In section 1 the area to the north-west of the new alignment would be enhanced for biodiversity gain. This would benefit water vole, GCN, birds and invertebrates. A new ditch would also be created through the area and would be profiled in such a way as to enable marginal planting at the ditch edge, shrub planting within 1–2m of the water's edge (but avoiding shading) and the provision of GCN refugia/hibernacula. These measures will be implemented via the Ecology and Landscape Management Strategy contained within the A5025 Off-line Highway Improvements Sub Code of Construction Practice (sub-CoCP).
- 4.3.60 In section 3 the area between the Afon Alaw and its southern side channel where the new viaduct crosses it would be enhanced for biodiversity gain. This would benefit water vole, otter, GCN, birds and invertebrates. The habitat would be enhanced to open up and diversify the marginal habitat. Shrubs and wet woodland species would be included with the planting and further

channels or ponds would be created to increase opportunity for water vole. GCN refugia/ hibernacula would also be created within these areas.

- 4.3.61 The predicted effects of the A5025 Off-line Highway Improvements and associated mitigation measures is described in detailed within volume G, chapter 9 of the ES. Appropriate mitigation will be employed in accordance with paragraphs 5.3.18 and 5.3.19 of NPS EN-1 [RD4] and importantly, the A5025 Off-line Highway Improvements will not result in significant harm to biodiversity, in accordance with paragraph 5.3.7 and 5.3.17 in NPS EN-1 [RD4].
- 4.3.62 In addition, the A5025 Off-line Highways Improvements accord with Strategic Policies PS5, PS9 and PS19 of the JLDP [RD27] which confirm that all proposals should be consistent with sustainable development principles; protecting and improving the quality of the natural environment, its landscapes and biodiversity.

Soils and geology

Policy Context

National Policy Statements

- 4.3.63 Paragraph 5.10.8 of NPS EN-1 [RD4] states that development should seek to minimise impacts on “best and most versatile” agricultural land and preferably use land in areas of poorer quality except where this would be inconsistent with other sustainability considerations. Paragraph 5.10.8 in NPS EN-1 [RD4] states that applicants should also identify any effects and seek to minimise impacts on soil quality taking into account any mitigation measures proposed. For developments on previously developed land, paragraph 5.10.8 confirms that applicants should ensure that they have considered the risk posed by land contamination.
- 4.3.64 Paragraph 5.10.15 of NPS EN-1 [RD4] states that the decision maker should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. Paragraph 5.10.15 continues to state that decision makers should give little weight to the loss of poorer quality agricultural land (in grades 3b, 4 and 5).
- 4.3.65 NPS EN-1 [RD4] states at paragraph 5.3.4 that the applicant should also show how the project has taken advantage of opportunities to conserve and enhance geological conservation interests. Paragraph 5.3.7 in NPS EN-1 [RD4] states that developments should aim to avoid significant harm to geological conservation interests, including through mitigation and consideration of reasonable alternatives. Where significant harm cannot be avoided, then appropriate compensation measures should be sought.

Welsh national and local policy

- 4.3.66 PPW [RD8] states at paragraph 13.7.1 that planning decisions need to take into account:

- the potential hazard that contamination presents to the development itself, its occupants and the local environment; and
 - the results of a specialist investigation and assessment by the developer to determine the contamination of the ground and to identify any remedial measures required to deal with any contamination.
- 4.3.67 PPW [RD8] states at paragraph 13.7.2 that where acceptable remedial measures can overcome contamination, permission may be granted subject to requirements specifying the necessary measures.
- 4.3.68 PPW [RD8] states at paragraph 4.10.1 that the best and most versatile agricultural land (Grades 1, 2 and 3a) should be conserved as a finite resource for the future and that considerable weight should be given to protecting such land from development, because of its special importance. This paragraph also clarifies that the best and most versatile agricultural land should only be developed if there is an overriding need for the development, and either previously developed land or land in lower agricultural grades is unavailable, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations. Paragraph 4.10.1 in PPW [RD8] also states that if the best and most versatile agricultural land does need to be developed, and there is a choice between sites of different grades, development should be directed to land of the lowest grade.
- 4.3.69 Strategic Policy PS6 in the JLDP [RD27] states that proposals will only be permitted where it is demonstrated with appropriate evidence that the applicant has fully taken account of and responded to the need to safeguarding the best and most versatile agricultural land.
- 4.3.70 Policy AMG 3 in the JLDP [RD27] confirms that proposals will be granted provided that they do not have a significant adverse impact upon features and qualities which are unique to the local landscape in terms of visual, historic, geological, ecological or cultural aspects.
- 4.3.71 GP 20 of the Wylfa SPG [RD28] states that SSSIs, RIGS and the Geopark status of Anglesey should not be subjected to significant adverse impacts, or if they are, sufficient mitigation should be implemented. GP20 also advocates the remediation of contaminated land.
- 4.3.72 GP 26 [RD28] of the Wylfa SPG [RD28] highlights that agricultural land should be reinstated where development is temporary.

Assessment

- 4.3.73 No potential significant adverse effects have been identified in respect of soils and geology (as confirmed in chapter G7 of the ES (Application Document Reference: 6.7.7)).
- 4.3.74 In line with GP 20 of the Wylfa SPG [RD28], good practice mitigation during construction would follow guidance on soil management such as the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. The measures would include:

- appropriate procedures for soil handling, such as stopping works when soil moisture exceeds specific limits;
 - appropriate segregation of soils, including the segregation of topsoils and subsoils, as well as soils of distinctly different qualities, types or composition;
 - soils would be stockpiled using methods appropriate to the soil moisture conditions;
 - soil storage mounds would have slopes of 1 in 2 (approximately 25°) or less; and
 - where soils would be stored for longer than six months, stockpiles would be seeded with an appropriate low-maintenance seed mix.
- 4.3.75 The implementation of the soil management measures set out within the CoCP (Application Document Reference: 8.6) and sub-CoCP (Application Document Reference: 8.12) for the A5025 Off-line Highway Improvements would reduce effects on soil resulting from the stripping, handling and reuse of soil during construction works. It is therefore considered that the A5025 Off-line Highway Improvements accord with paragraph 3.7.8 of NPS EN-6 [RD5] as the contamination of soils and water resources can be mitigated through the EIA process and managed through the implementation of Environmental Management Plans.
- 4.3.76 Implementation of the soil management measures set out within the CoCP and sub-CoCP (Application Document Reference: 8.12) for the A5025 Off-line Highway Improvements would reduce effects on soil resulting from the stripping, handling and reuse of soil during construction works, in accordance with paragraph 3.7.6 of NPS EN-6 [RD5].
- 4.3.77 In terms of Best and Most Versatile (BMV) agricultural land, a summary of the land-take for each section of the A5025 Off-line Highway Improvements is provided below.
- Section 1 (Valley) - The land class within the extent of land-take is Grade 4 (poorer quality non-BMV agricultural land).
 - Section 3 (Llanfachraeth) - There is a range of land classes in the study area from good quality BMV agricultural land (Grade 2) to poor quality (Grade 5) non-BMV agricultural land.
 - Section 5 (Llanfaethlu) - The predominant land class in the study area is Grade 3b (moderate quality (non-BMV agricultural land).
 - Section 7 (Cefn Coch) - The predominant land classes in the study area are Grade 3a (good quality BMV agricultural land) and Grade 3b (moderate quality non-BMV agricultural land).
 - Wylfa Newydd Power Station Access Road Junction - The predominant land class in the extent of land take is Grade 3a (good quality BMV agricultural land).

- 4.3.78 The design for the A5025 Off-line Highway Improvements has sought to comply with paragraph 5.10.8 of NPS EN-1 [RD4], paragraph 4.10.1 of PPW [RD8] and Strategic Policy PS6 of the JLDP [RD27] which state that development should seek to minimise impacts on BMV agricultural land. The majority of the land-take for the A5025 Off-line Improvements comprises non-BMV agricultural land however volume G7 of the ES (Application Reference Number: 6.7.7) confirms that the degradation of BMV soils Grade 2 and Subgrade 3a in sections 3, 5 and 7 during construction and the degradation of Subgrade 3b and Grades 4 and 5 soils in sections 1, 3, 5 and 7 and the Power Station Access Road Junction during construction will likely result in adverse effects. As such, implementation of the good practice mitigation measures outlined in chapter 9 of the Wylfa Newydd CoCP (Application Reference Number: 8.6) and the A5025 Off-line Highway Improvements sub-CoCP (Application Reference Number: 8.12) would be implemented to reduce the identified effects, for instance: stopping works when soil moisture exceeds specific limits would reduce the potential for compaction and smearing, and the appropriate segregation of soils would reduce the potential for mixing. The likely result on BMV agricultural land would be minor adverse.
- 4.3.79 In line with paragraph 5.3.7 of NPS EN-1 [RD4], volume G, chapter 7 of the ES (Application Reference Number: 6.7.7) confirms that no residual effects are expected on geological resources.
- 4.3.80 Potential exposure of construction workers to unexpected contamination during construction could occur in all sections however this is expected to be a minor adverse effect. As set out within chapter 9 of the Wylfa Newydd CoCP (Application Reference Number: 8.6), a Ground Investigation (GI) would be undertaken prior to construction in order to provide information on potential risks from land contamination. As such, the proposals are considered to accord with paragraph 13.7.2 of PPW [RD8].
- 4.3.81 In accordance with Policy AM3 in the JLDP [RD27], the proposals are not expected to have a significant adverse impact on features and qualities which are unique to the local landscape in terms of geological aspects.
- 4.3.82 Additionally, the above measures ensure that the proposed development would not result in unacceptable adverse impacts and therefore are in line with the above referenced policies.

Flood Risk

Policy Context

National Policy Statements

- 4.3.83 Paragraph 5.15.2 of NPS EN-1 [RD4] states that where a project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and impacts of the proposed project on, water quality, water resources and physical characteristics of the water environment as part of the ES.

- 4.3.84 NPS EN-6 [RD5] states at paragraph 3.6.11 that applicants need to submit a flood risk assessment in accordance with section 5.7 of NPS EN-1 [RD5]. Paragraph 3.6.16 in NPS EN-6 [RD5] states that applicants should set out measures to mitigate the risk of flooding on or from individual sites that may result from the development.
- 4.3.85 Paragraph 5.7.9 of NPS EN-1 [RD4] states that in determining an application for development consent, the decision maker should be satisfied that where relevant:
- the application is supported by an appropriate Flood Risk Assessment;
 - the Sequential Test has been applied as part of site selection;
 - a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;
 - the proposal is in line with any relevant national and local flood risk management strategy;
 - priority has been given to the use of Sustainable Drainage Systems; and
 - in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed over the lifetime of the development.
- 4.3.86 Paragraph 5.7.12 in NPS EN-1 [RD4] states that the decision makers should not consent development in Flood Zone 2 in England or Zone B in Wales unless it is satisfied that the sequential test requirements have been met. It should not consent development in Flood Zone 3 or Zone C unless it is satisfied that the Sequential and Exception Test requirements have been met. Paragraph 5.7.12 in NPS EN-1 [RD4] continues to confirm that the technology-specific NPSs set out some exceptions to the application of the sequential test. However, when seeking development consent on a site allocated in a development plan through the application of the Sequential Test, informed by a strategic flood risk assessment, paragraph 5.7.12 in NPS EN-1 [RD4] advises that applicants need not apply the Sequential Test, but should apply the sequential approach to locating development within the site.
- 4.3.87 Paragraph 5.7.13 in NPS EN-1 [RD4] describes the Sequential Test, stating:
- “Preference should be given to locating projects in Flood Zone 1 in England or Zone A in Wales. If there is no reasonably available site in Flood Zone 1 or Zone A, then projects can be located in Flood Zone 2 or Zone B. If there is no reasonably available site in Flood Zones 1 or 2 or Zones A & B, then nationally significant energy infrastructure projects can be located in Flood Zone 3 or Zone C subject to the Exception Test. Consideration of alternative sites should take account of the policy on alternatives set out in section 4.4 above”.
- 4.3.88 Paragraph 5.7.14 in NPS EN-1 [RD4] then explains the approach to be taken where the Sequential Test cannot be met:
- “If, following application of the sequential test, it is not possible, consistent with wider sustainability objectives, for the project to be located in zones of lower probability of flooding than Flood Zone 3 or Zone C, the Exception Test can

be applied. The test provides a method of managing flood risk while still allowing necessary development to occur”.

4.3.89 Paragraph 5.7.16 in NPS EN-1 [RD4] continues to state that:

“All three elements of the test will have to be passed for development to be consented. For the Exception Test to be passed:

- it must be demonstrated that the project provides wider sustainability benefits to the community that outweigh flood risk;
- the project should be on developable, previously developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously developed land subject to any exceptions set out in the technology-specific NPSs; and
- a Flood Risk Assessment must demonstrate that the project will be safe, without increasing flood risk elsewhere subject to the exception below and, where possible, will reduce flood risk overall”.

4.3.90 Paragraph 5.7.15 in NPS EN-1 [RD4] clarifies that the Exception Test is only appropriate for use where the sequential test alone cannot deliver an acceptable site, taking into account the need for energy infrastructure to remain operational during floods.

Welsh national and local policy

4.3.91 Section 13.4 of PPW [RD8] sets out the Welsh Government’s approach to flood risk and development in areas of high flood risk and dealing with contaminated land such that the development does not impact on the water environment.

4.3.92 Paragraph 13.4.2 of PPW [RD8] states that local planning authorities should ensure that development does not increase the risk of flooding elsewhere by loss of flood storage or flood flow route or increase the problem of surface water run-off. Paragraph 13.4.3 of PPW [RD8] confirms that flood risk is a material consideration in the determination of planning applications.

4.3.93 Strategic Policy PS 5 in the JLDP [RD27] seeks developments that manage flood risk and maximise use of Sustainable Drainage Systems.

4.3.94 Strategic Policy PS 6 in the JLDP [RD27] asserts that, in order to adapt to effects of climate change, proposals will only be permitted where they are located away from flood risk areas unless it can be clearly demonstrated that there is no risk or that the risk can be managed. JLDP Strategic Policy PS 8 [RD27] states that proposals should, as far as is appropriate or relevant, provide flood protection measures to manage flood risk and, where feasible, deliver improvements in the locality.

4.3.95 Policy PCYFF 3 in the JLDP [RD27] states that proposals would only be permitted where their drainage systems are designed to limit surface water run-off, flood risk and pollution.

4.3.96 Policy PCYFF 6 in the JLDP [RD27] requires development to incorporate water conservation measures where practicable, including Sustainable

Drainage Systems. This policy also notes that proposals should use flood minimisation or mitigation measures where possible, to reduce surface water run-off and minimise its contribution to flood risk elsewhere.

- 4.3.97 GP 21 of the Wylfa SPG [RD28] suggests that the Wylfa Newydd Project should include measures to control surface water runoff.

Assessment

- 4.3.98 In line with paragraph 3.6.11 of NPS EN-6 [RD5], the current flood risk to the land along the proposed route of the A5025 Off-line Highway Improvements is further detailed in the Flood Consequence Assessment included in appendix G8-1 of the accompanying ES (Application Document Reference: 6.7.8).
- 4.3.99 Land to the west and south of section 1, including the A5025 Off-line Highways Improvements roundabout junction with the A5, is located within Flood Zone C2, as defined in TAN 15 [RD52], indicating a high risk of tidal and fluvial flooding.
- 4.3.100 Three potential options were considered in volume 3 of the Site Selection Report (Application Document Reference: 8.24.7) for the route of the section 1 bypass. The alignment location for the selected approach (Option 3) for section 1 is further from the area of flooding. The most significant design changes to section 1 related to the movement of the horizontal alignment of the bypass further to the east, and amendments to the roundabout junction design to bring this closer to the existing A5. These amendments were made in response to flood modelling undertaken as part of the EIA process, which identified a need to take the bypass alignment and roundabout junction further outside areas at potential risk of flooding.
- 4.3.101 As short sections of the bypass would still need to be sited within the edge of the floodplain (due to local topographical variation), the EIA and design-development process identified a requirement to provide flood storage.
- 4.3.102 Accordingly, a flood compensation area was incorporated into the design between the existing A5025 and the bypass, the design of which was influenced by the flood modelling outcomes, landowner requests and opportunities to provide local ecological enhancement for water vole. Options considered for this area initially focused on the inclusion of an attenuation pond; however, this was later replaced with a solution based on the use of swales, ditches, ponds, culverts and marshy grassland due to flooding concerns. Potential discharge points from the area were also identified and incorporated into the drainage design in section 1.
- 4.3.103 Section 1 (Valley) is shown to provide negligible benefits to flood risk from tidal sources when considered alone, and would not be at risk itself. The influence that tidal flooding has on fluvial flood risk is notable in this location and under an extreme scenario where extreme tidal and fluvial flood risks are combined and with the effect of climate change, there is predicted to be both minor adverse and minor beneficial effects. However, given the very low probability of this scenario the overall conclusion is that the effect on flood risk from this source is negligible. The significance of effect on tidal flood risk is therefore assessed as neutral.

- 4.3.104 Section 3 is largely located in Flood Zone A, as defined in TAN 15 [RD52]. Zone A comprises land considered to be at little or no risk of fluvial or coastal/tidal flooding. The exception is land adjacent to the Afon Alaw, the Afon Llywenan and the Tan R'Allt, all of which is located in a narrow band of Flood Zone C2 and at high risk of flooding.
- 4.3.105 The most significant design changes to section 3 related to modifications to the viaduct design across the Afon Alaw. The position of the viaduct embankments were reviewed and repositioned further back from the watercourse and its associated tributary to provide a minimum 8m clearance to the banks, as advised by NRW through ongoing consultation with them during design-development. This buffer area was incorporated into the design to reduce the potential for effects on ecology, water quality and geomorphology associated with the construction and future maintenance of the viaduct crossing, and was based on the distance presented in NRW guidance on undertaking flood risk activities in proximity to main rivers.
- 4.3.106 As a result of the embankment modifications and flood modelling outputs, the length of the viaduct span also increased and the design of the columns were amended so that they could be skewed to cater for flood flows. The modelling also identified a need for an area of flood compensation to be provided within the design. Accordingly, an area of land to the east of the viaduct was identified and included in the design and refined to accommodate the flood compensation requirements, which also offered opportunities to provide environmental enhancements through the inclusion of new ponds for water voles.
- 4.3.107 Section 3 (Llanfachraeth) is shown to provide negligible benefits to flood risk from tidal sources to developed receptors when considered alone, and would not be at risk itself. There is however a minor adverse effect on undeveloped land within the floodplain. Tidal flood levels are higher in this location than fluvial flood levels. Despite this, the influence of tidal flooding on fluvial sources is only minor.
- 4.3.108 Section 5 is wholly located in Flood Zone A, as defined in TAN 15 [RD52], and lies outside of all main river floodplains, as indicated by NRW river and sea flood mapping. Therefore, section 5 is considered to be at low risk of fluvial and tidal flooding.
- 4.3.109 Section 5 is predicted to have a negligible effect on pluvial flooding and a minor beneficial effect on surface water flood risk locally and downstream, created through management of surface water generated by the scheme and adjacent to the scheme.
- 4.3.110 Section 7 (Cefn Coch) is largely within Flood Zone A and therefore at little or no risk of flooding from rivers. However, the floodplain of the Afon Cafnan lies to the west of the existing A5025 and immediately west of the A5025 Off-line Highway Improvements, and is identified by the TAN 15 Development Advice Map as being in Flood Zone C2. There are minor encroachments of the A5025 Off-line Highway Improvements into the floodplain upstream of the minor road crossing and downstream of Cefn Coch.

- 4.3.111 Section 7 is simulated to have an overall negligible effect on fluvial flood risk despite small increases in flood level in upstream undeveloped areas. The significance of effect on these sources of flood risk is therefore assessed as neutral.
- 4.3.112 The proposed junction for the Power Station Access Road on the A5025 is shown to lie on a topographical high point and it is therefore not at flood risk from any source and is within Flood Zone A.
- 4.3.113 The potential common effects on flood risk to the flood receptors at each section during site clearance and construction activities associated with the A5025 Off-line Highway Improvements are outlined below:
- high sediment loading within watercourses from construction activities reducing conveyance in culverts beneath existing roads and downstream, which could increase the existing flood risk; and
 - increase in surface water flood risk as a result of vegetation removal and soil compaction, causing greater rates of surface runoff.
- 4.3.114 Mitigation to prevent effects on water quality by suspended sediment would also serve to prevent an increase in flood risk caused by sediment build-up. The potential magnitude of change in flood risk due to sediment build-up is assessed as minor and the residual effects are assessed as neutral.
- 4.3.115 Localised surface water flooding due to runoff from compacted soil would be managed by several means. As set out in the A5025 Off-line Highways Improvements sub-CoCP (Application Reference Number: 8.12), where possible construction involving bulk earthworks would be undertaken in the summer months when rainfall and saturated soil conditions are least likely. In addition, sufficient drainage would be installed prior to topsoil strip and flood risk would be managed in line with the flood consequence assessment. The implementation of good practice and embedded mitigation outlined above is considered to result in a minor magnitude of change in flood risk during construction, which would result in a slight adverse residual effect on flood risk.
- 4.3.116 Floodplain compensatory storage has been incorporated into the design at section 1 (Valley). This compensatory storage will not impact on the highway drainage scheme. Appropriate design of compensation flood storage will be undertaken and agreements with key stakeholders and landowners will be implemented.
- 4.3.117 No additional mitigation is proposed to manage any residual risks of flooding to the scheme or elsewhere. The proposals have been located away from flood risk areas or it has been demonstrated that there is no risk or the risk can be managed, in line with Strategic Policy PS 6 and PS 8 of the JLDP [RD27]. An assessment of alternative sites for the A5025 Off-line Highway Improvements is provided in volume 3 of the Site Selection Report (Application Reference Number: 8.24.7). Section 1, volume 3 of the Site Selection Report (Application Reference Number: 8.24.7) shows that, whilst preference was given to locating this section within Flood Zone A, there were no reasonably available sites which would completely avoid Flood Zone B or C. As such,

section 1 meets the sequential test and the exception test, in accordance with paragraph 5.7.13 in NPS EN-1 [RD4].

4.3.118 For the reasons outlined below, the A5025 Off-line Highway Improvements are considered to have met the Exceptions Test provided at paragraph 5.7.16 in NPS EN-1 [RD4].

- The proposed bypasses to be delivered through the A5025 Off-line Highway Improvements will mitigate transport impacts resulting from the construction of the Wylfa Newydd DCO Project, to the benefit of local communities. In addition, the Wylfa Newydd DCO Project also provides wider sustainability benefits to the wider UK through the generation of low carbon energy. These benefits are considered to outweigh the flood risk identified.
- The A5025 Off-line Highway Improvements have sought to avoid areas of flood risk where possible and to prioritise the use of previously developed land. Reasonable alternative sites were carefully considered, as detailed in volume 3 of the Site Selection Report (Application Reference Number: 8.24.7).
- The Flood Consequence Assessment included in appendix G8-1 of the ES (Application Reference Number: 6.7.8), demonstrates that the A5025 Off-line Highway Improvements will be safe, and will not increase flood risk.

Surface Water and Groundwater

Policy Context

National Policy Statements

4.3.119 Paragraph 5.15.2 of NPS EN-1 [RD4] states that where a project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and impacts of the proposed project on, water quality, water resources and physical characteristics of the water environment as part of the ES.

4.3.120 Paragraph 5.15.5 of NPS EN-1 [RD4] states that the decision maker will generally need to give impacts on the water environment more weight where a project would have an adverse effect on the achievement of the environmental objectives established under the Water Framework Directive (WFD). The WFD (2000/60/EC) is European water legislation with the overarching objective of all water bodies in Europe attaining Good or High Ecological Status or Potential by 2027.

4.3.121 Paragraph 5.15.6 of NPS EN-1 [RD4] states that the decision maker should satisfy itself that a proposal "...has regard to the River Basin Management Plans and meets the requirements of the Water Framework Directive (including Article 4.7) and its daughter directives, including those on priority substances and groundwater".

- 4.3.122 Paragraph 5.15.9 in EN-1 [RD4] states that the risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution control practice. Additionally, paragraph 5.15.10 of EN-1 [RD4] confirms that the impact on local water resources can be minimised through planning and design for the efficient use of water, including water recycling.
- 4.3.123 Paragraph 4.10.8 in NPS EN-1 [RD4] states that the decision maker should not refuse consent on the basis of pollution impacts unless it has good reason to believe that any relevant necessary operational pollution control permits or licences or other consents will not subsequently be granted.
- 4.3.124 NPS EN-6 [RD5] states that contamination of water resources “...*can be mitigated through the EIA process and managed through the possible implementation of Environmental Management Plans,*” (paragraph 3.7.8).

Welsh national and local policy

- 4.3.125 Strategic Policy PS 5 in the JLDP [RD27] states that proposals should adapt to the unavoidable impacts of climate change, avoiding pollution and reducing the amount of water used and wasted and reducing the effect on water resources and quality.
- 4.3.126 Policy PCYFF 2 in the JLDP [RD27] states that proposals would be refused where they would have an unacceptable adverse impact on the quality of ground or surface water.
- 4.3.127 Policy PCYFF 6 in the JLDP [RD27] requires development to incorporate water conservation measures where practicable, including Sustainable Drainage Systems.
- 4.3.128 GP 20 of the Wylfa SPG [RD28] states that the release of potentially polluting substances to air, water or land should be minimised. GP 21 states that the Wylfa Newydd Project should include measures to control surface water runoff where the potential for adverse impacts is identified.

Assessment

- 4.3.129 In accordance with paragraph 5.15.2 of NPS EN-1 [RD4], Horizon has undertaken an assessment of the existing status of, and the impacts of the Wylfa Newydd DCO Project on water quality, water resources and physical characteristics of the water environment as part of the ES (see chapter G8 of the ES, Application Reference Number: 6.7.8).
- 4.3.130 In accordance with Policy PCYFF 2 of the JLDP [RD27], no significant adverse surface water and groundwater effects are identified for the construction phase.
- 4.3.131 In terms of surface water effects during the operational phase, a residential property at section 3 would experience an increase in flood depth of less than 10mm during the operation phase. The additional mitigation proposed is agreement with the land owner regarding allowing the land to flood. The post mitigation effect is therefore expected to be minor adverse.

- 4.3.132 In terms of fluvial geomorphological effects during the operational phase, the Afon Cafnan receptor at section 7 would experience the construction and operation of a new culvert over the bedrock cascade removing a unique feature of this watercourse, resulting in a residual effect of minor adverse.
- 4.3.133 In terms of groundwater effects during the operational phase, the Well at Erw Goch at Llanfachraeth (section 3) would experience a reduction in water levels and flow. In line with policy PCYFF2, following additional mitigation (monitoring at the water supply and if a change in the availability of quality of the water supply is identified Horizon will put measures in place to reinstate the private water supply to the quality and availability of pre-construction levels) there would be a neutral residual effect.
- 4.3.134 In line with paragraph 3.7.8 of NPS EN-6 [RD5], paragraph 5.15.9 of NPS EN-1 [RD4], and GP21 of the Wylfa SPG [RD28], the Wylfa Newydd CoCP (Application Reference Number: 8.6) and A5025 Off-line Highway Improvements sub-CoCP (Application Reference Number: 8.12) set out the overarching requirements to protect watercourses, control pollution and manage flood risk.
- 4.3.135 In accordance with Strategic Policy PS 5 and PCYFF 6 of the JLDP [RD27], the proposed drainage strategy incorporates Sustainable Drainage System (SuDS) features and silt traps, which will allow retention of sediment prior to the drainage outfall into watercourses. This, along with management and maintenance procedures for the SuDS features and drainage outfalls, would mean that the magnitude of change to water quality is likely to be beneficial neutral.
- 4.3.136 In line with paragraph 5.15.5 and 5.15.6 of NPS EN-1 [RD4], a WFD compliance assessment (Application Reference Number: 8.26) has been undertaken in parallel to the assessment of effects on surface water, groundwater and fluvial geomorphology provided within this chapter. When taking into account good practice and embedded mitigation, the WFD compliance assessment (Application Reference Number: 8.26) identified that for the A5025 Off-line Highway Improvements all construction and operation activities would be compliant with the legislative requirements.

Historic environment

Policy Context

National Policy Statements

- 4.3.137 Paragraph 1.7.2 of NPS EN-1 [RD4] states that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects on cultural heritage.
- 4.3.138 Paragraph 5.8.1 of NPS EN-1 [RD4] recognises that the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment.

4.3.139 In considering the proposed development and weighing the adverse impacts of the proposed development against its benefits, Paragraph 4.1.3 of NPS EN-1 [RD4] states that the decision maker should take into account:

- its potential benefits including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits; and
- its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.

4.3.140 Paragraph 5.8.14 of NPS EN-1 [RD4] states:

“Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II* listed buildings; grade I and II* registered parks and gardens; and World Heritage Sites, should be wholly exceptional”.

4.3.141 Paragraph 5.8.15 of NPS EN-1 [RD4] states that any harmful impacts on the significance of designated heritage assets should be “...weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss”.

4.3.142 Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010 states that when considering whether to give permission for development which affects a Listed Building or its setting, the decision maker must have regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

Welsh national and local policy

4.3.143 PPW [RD8] identifies objectives including conserving and enhancing the historic environment at section 6.5 PPW [RD8] confirms that the greater the significance and/or impact on the historic environment, then the greater the benefit needed to justify any harm (paragraph 6.5.1).

4.3.144 PPW [RD8] also clarifies at paragraph 6.5.5 that where nationally important archaeological remains, whether scheduled or not, and their settings are likely to be affected by proposed development, there should be a presumption in favour of their physical protection *in situ*. Paragraph 6.5.5 in PPW [RD8] states:

“It will only be in exceptional circumstances that planning permission will be granted if development would result in an adverse impact on a Scheduled Monument (or an archaeological site shown to be of national importance) or has a significantly damaging effect upon its setting. In cases involving less significant archaeological remains, local planning authorities will need to

weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development”.

- 4.3.145 TAN 12 [RD22] sets out advice on good design, including advice on considering the historic environment in design.
- 4.3.146 TAN 24 [RD26] sets out a presumption in favour of preservation in situ of Scheduled Monuments or other nationally significant archaeological remains. Where the significance of archaeological remains does not merit preservation in situ, a programme of archaeological recording may be undertaken, including analysis and publication of the results.
- 4.3.147 At the local level, Strategic Policy PS 5 in the JLDP [RD27] confirms that development will be supported where it is consistent with its sustainable development principles, including preserving and enhancing the quality of the built and historic environment assets including their setting.
- 4.3.148 Policy PCYFF 3 in the JLDP [RD27] states that all proposals will be expected to demonstrate high quality design taking into account the historic environmental context and to contribute to the creation of attractive, sustainable places.
- 4.3.149 Strategic Policy PS 9 in the JLDP [RD27] relates to Wylfa Newydd Project and states that the scheme layout and design of the Power Station and associated developments, and the scale of open spaces, landscaping, planting (including hedging and tree belts), waterways and similar features should avoid, minimise, mitigate or compensate for impacts on cultural and historic aspects of the landscape, both in the short and longer term.
- 4.3.150 Strategic Policy PS 20 in the JLDP [RD27] states that local planning authorities should endeavour to preserve or enhance heritage assets, both designated and undesignated. Policy PS 20 also states that proposals which preserve and where appropriate enhance the heritage assets, their setting and Significant Views into and out of the building/area will be granted.
- 4.3.151 Policy AT 4 in the JLDP [RD27] states that the importance and condition of archaeological sites, and the potential impact of development on this should be assessed prior to planning. It clarifies that consent will only be granted if development need outweighs the significance of the archaeology, and may include a requirement for archaeological investigation.

Assessment

- 4.3.152 During construction and operational stages, there would be significant residual effects on the following two archaeological remains (table G11-8 in chapter G11 of the ES (Application Document Reference: 6.7.11)):
- Capel Soar Standing Stone (asset 146) (due to noise and visual intrusion into the heritage asset's setting); and
 - two small orthostatic stones on Slight Mound, south of Tyn Felin (asset 241) (due to noise and visual intrusion into the heritage asset's setting).

4.3.153 During construction, there would be significant residual effects for the following three historic buildings, as set out in table G11-8 in chapter G11 of the ES (Application Document Reference: 6.7.11), and summarised below.

- Construction works would be intrusive to the setting of the grade II listed Siop Soar (asset 149), resulting in noise and visual intrusion, and detracting from the semi-rural character of its setting. This would result in a significant adverse but short term effect;
- Construction works would be intrusive to the setting of the grade II listed Black Lion Inn, Llanfaethlu (asset 150), resulting in noise and visual intrusion, and detracting from the semi-rural character of its setting. This would result in a significant adverse but short term effect; and
- Construction of the scheme on an embankment approximately 40m from the asset would sever the Melin Ty'n y Felin, possible former site of, Cylch y Garn (asset 243) from the rural landscape to the west and result in visual intrusion on its setting. The value of the asset deriving from its historic fabric and its relationship with adjacent historic buildings (assets 242 and 244) and the former mill race (asset 246) would be maintained. This would result in a significant adverse but short term effect.

4.3.154 Horizon has sought to ensure that the historic environment has been preserved and enhanced where practicable. The retention of historic field boundaries, maintaining the historic field pattern has also been proposed where possible. The development of an indicative internal layout of the temporary construction compounds to reduce noise and visual intrusion into the setting of heritage assets through the use of wooden perimeter fencing, (where required) and the careful positioning of stockpiled material and site accommodation has also been provided.

4.3.155 As explained in chapter G11 of the ES (Application Document Reference: 6.7.11) and the Site Selection Report (Application Document Reference: 8.24.7), the likely impacts on archaeology and cultural heritage have been minimised as far as reasonably possible. In line with TAN12 [RD22], heritage assets were considered during route optioneering and the design of the preferred route option in order to reduce impacts on setting.

4.3.156 In line with TAN24 [RD26], in the evolution of the proposals there has been a presumption in favour of preservation in situ of nationally significant archaeological remains. However, where this has not been possible a programme of archaeological recording may be undertaken. In order to address the potential significant effects on archaeology and cultural heritage, additional mitigation measures would be implemented. For example, archaeological excavation and recording, Level 2 Historic landscape surveys, recording and photographic surveys (see chapter G11 of the ES, Application Reference Number: 6.7.11).

4.3.157 The internal layouts of the Temporary Construction Compounds have also been designed to reduce noise intrusion into the setting of heritage assets and

will include consideration of fencing materials and stockpile and portacabin positioning.

- 4.3.158 In line with, Strategic Policy PS 9, PS20 and Policy PCYFF 3 of the JLDP [RD27] the A5025 Off-line Highway Improvements will demonstrate high quality design taking into account the historic environmental context and where possible, have preserved heritage assets and their settings. For example, the earthworks slopes at the Llanfaethlu off-line section have been slackened to reduce adverse effects on views from adjacent residential properties and to provide integration with the surrounding landform and reduce impacts on the setting of Capel Soar Standing Stone Scheduled Monument (asset 146), Siop Soar listed building (asset 149) and the Black Lion Inn listed building (asset 150) at Llanfaethlu, wherever practicable against existing land constraints. Shrub planting is also proposed on embankment slopes at Capel Soar to soften their appearance to reduce visual intrusion on the setting of Capel Soar Standing Stone scheduled monument (asset 146).
- 4.3.159 In addition, where stone walls require removal as part of construction, their loss would be mitigated by re-building them using the stone from the dismantled stone walls, where practicable, in order to maintain historic field patterns.
- 4.3.160 There are no permanent major adverse or very large residual archaeology or cultural heritage effects. Therefore, with reference to paragraph 5.8.14 of NPS EN-1 [RD4], no substantial harm to heritage assets is caused as a result of the A5025 Off-line Highway Improvements.
- 4.3.161 Paragraph 6.5.5 of PPW [RD8] states that it will be in exceptional circumstances that planning permission will be granted if development would result in an adverse impact on a Schedule Monument (or an archaeological site shown to be of national importance) or has a significantly damaging effect upon its setting. Similarly, Policy AT4 of the JLDP [RD27], states that consent will only be granted if the need for the development outweighs the significant of the archaeology. It is considered that the adverse impacts outlined above are considered acceptable in the balance of the benefits of the A5025 Off-line Highway Improvements.
- 4.3.162 It is acknowledged that, in accordance with Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010, when considering whether to grant permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the decision maker should have regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

Landscape and Visual

Policy Context

National Policy Statements

- 4.3.163 Paragraph 1.7.2 of EN-1 [RD4] states that the development of new energy infrastructure, at the scale and speed required to meet the current and future

need, is likely to have some negative effects inter alia on landscape and visual amenity. In general, it should be possible to satisfactorily mitigate the most significant potential negative effects of new energy infrastructure consented in accordance with the energy NPSs. However, paragraph 1.7.2 of EN-1 [RD4] acknowledges that the impacts on landscape and visual amenity in particular will sometimes be hard to mitigate.

4.3.164 EN-1 [RD4] states at paragraph 4.5.1 that the visual appearance of a building is sometimes considered to be the most important factor in good design. But high quality and inclusive design goes far beyond aesthetic considerations. It clarifies that the functionality of an object — be it a building or other type of infrastructure — including fitness for purpose and sustainability, is equally important.

4.3.165 Paragraph 4.5.1 in EN-1 [RD4] continues to state that:

“Applying ‘good design’ to energy projects should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible. It is acknowledged, however that the nature of much energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area”.

4.3.166 Paragraph 5.9.8 of EN-1 [RD4] states that virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.

4.3.167 Paragraph 5.9.9 in EN-1 [RD4] states that the conservation of the natural beauty of the landscape and countryside should be given substantial weight by the decision maker in deciding on applications for development consent in nationally designated landscapes, such as an AONB.

4.3.168 Paragraph 5.9.12 in EN-1 [RD4] confirms that the duty to have regard to the purposes of nationally designated sites also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints. Importantly, paragraph 5.9.13 in EN-1 [RD4] confirms that the fact that a proposed project will be visible from within a designated area should not in itself be a reason for refusing consent.

4.3.169 Paragraph 5.9.14 in EN-1 [RD4] confirms that local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.

4.3.170 Paragraph 5.9.15 in EN-1 [RD4] acknowledges that the scale of such projects means that they will often be visible within many miles of the site of the proposed infrastructure. The decision maker should therefore judge whether

any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the Project.

- 4.3.171 Paragraph 5.9.16 in EN-1 [RD4] states that the decision maker should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the decision maker considers reasonable.
- 4.3.172 Paragraph 5.9.17 in EN-1 [RD4] states that the decision maker "...should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation".
- 4.3.173 Paragraph C.9.71 and C.9.72 of EN-6 [RD5] state that there are likely to be some long lasting adverse direct and indirect effects on landscape character and visual impacts on the AONB. Further detailed assessment is therefore required to understand these effects and whether they affect the purpose of the designation.

Welsh national and local policy

- 4.3.174 Section 5.3 of PPW [RD8] sets out measures to conserve landscape and biodiversity.
- AONBs should be given the highest status of protection from inappropriate development. Great weight should be given to the conservation and enhancement of their natural beauty;
 - Non-statutory designations, such as, Special Landscape Areas (SLAs) should be protected; and
 - LANDMAP NRW, (2011 and 2013a-2013d) [RD47] provides an important information resource to use in undertaking landscape assessments which inform decision making.
- 4.3.175 Paragraph 5.3.2 of PPW [RD8] states that, while the value of all the landscapes of Wales is recognised local planning authorities should have regard to the relative significance of international, national and local designations in considering the weight to be attached to nature conservation interests and should take care to avoid placing unnecessary constraints on development (paragraph 5.3.2).
- 4.3.176 Strategic Policy PS 5 in the JLDP [RD27] states that proposals should protect and improve the quality of the natural environment, its landscapes and biodiversity assets.
- 4.3.177 Strategic Policy PS 9 in the JLDP [RD27] states that the design of all the Wylfa Newydd Project and related development should ensure the scheme layout and design and the scale of open spaces, landscaping, planting, waterways and similar features proposed should avoid, minimize, mitigate or compensate for visual and landscape 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. This policy clarifies that proposals will be expected to be commensurate with the scale of the development, and the extent of its impact.

4.3.178 Policy PCYFF 4 in the JLDP [RD27] states that all proposals should integrate into their surroundings and clarifies that those proposals that fail to show (in a manner appropriate to the nature, scale and location of the proposed development) how landscaping has been considered from the outset as part of the design proposal will be refused. This policy also requires that landscape schemes for developments should *inter alia*:

- give due consideration to the Landscape Character Area Assessment or Seascape Character Area Assessment;
- respect the natural contours of the landscape;
- respect and protect local and strategic views;
- respect, retain and complement any existing positive natural features, landscapes, or other features on site;
- identify trees, hedgerows, water courses and topographical features to be retained; and
- justify circumstances where the removal/loss of existing trees, hedgerows, water courses and topographical features cannot be avoided and provide details of replacements.

4.3.179 Strategic Policy PS 19 in the JLDP [RD27] states that development should conserve and where appropriate enhance the distinctive natural environment, countryside and coastline, and confirms that proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweigh the value of the site or area and national policy protection for that site and area.

4.3.180 This policy also states that consideration should be given to:

- Safeguarding the coastline and landscapes;
- Protecting or where appropriate enhance sites of international, national, regional and local importance and, where appropriate, their settings in line with National Policy;
- Having appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with National Policy;
- Protecting, retaining or enhancing the local character and distinctiveness of the individual Landscape Character Areas and Seascape Character Areas; and
- Protecting, retaining or enhancing trees, hedgerows or woodland of visual, ecological, historic cultural or amenity value.

- 4.3.181 Policy AMG 1 of the JLDP [RD27] states that proposals within or affecting the setting and/or Significant Views into and out of the AONB must, where appropriate, have regard to the relevant AONB management plan.
- 4.3.182 Policy AMG 2 of the JLDP [RD27] states that proposals within SLAs will need to appropriately consider the scale and nature of the development ensuring that there is no significant adverse detrimental impact on the landscape, adding that such development should aim to maintain, enhance or restore the recognised character and qualities of the SLA. However, this policy clarifies that in exceptional circumstances, where development is necessary and could result in significant impacts on the landscape, appropriate mitigation and compensation measures should be provided.
- 4.3.183 Policy AMG 3 of the JLDP [RD27] requires proposals that would have a significant adverse impact upon landscape character, as defined by the Landscape Character Areas, to demonstrate how landscape character has influenced the design, scale and nature and site selection of the development.
- 4.3.184 Policy CCC 3.1 of the Isle of Anglesey AONB Management Plan 2015-2020 [RD47] states that all development proposals within and up to 2km adjacent to the Isle of Anglesey AONB should be subjected to rigorous assessment to reduce inappropriate development.
- 4.3.185 Policy CCC 3.2 [RD47] 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.
- 4.3.186 The Wylfa SPG [RD28] also encourages the project promoter at policy GP20 to demonstrate that the Wylfa Newydd Project either alone or in combination with other proposals, would not have significant adverse impacts on the local landscape character with reference to the SLAs and Local Landscape Character Areas. GP 20 also clarifies that where adverse impacts cannot be avoided, IACC expect appropriate mitigation and/or compensation measures to be implemented.

Assessment

- 4.3.187 The landscape and visual impacts of the A5025 Off-line Highway Improvements have been assessed at chapter G10 of the ES (Application Document Reference: 6.7.10), taking into account relevant landscape character assessments and policies within the JLDP [RD27], in accordance with C.9.71 and C.9.72 of NPS EN-6 [RD5].
- 4.3.188 The A5025 Off-line Highway Improvements would have landscape and visual impacts, as do virtually all nationally significant energy infrastructure projects, as acknowledged at paragraphs 5.9.8 in NPS EN-1 [RD4]. In addition, paragraph 1.7.2 of NPS EN-1 [RD4] acknowledges that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects on landscape/visual amenity. The same paragraph anticipates that short-term construction impacts are also likely but clarifies that, in general, it should be possible to

mitigate satisfactorily the most significant potential negative effects of new energy infrastructure consented in accordance with the energy NPSs.

4.3.189 The design of the proposals has sought to minimise adverse impacts on landscape and reduce any of the visual intrusion, in accordance with paragraphs 5.9.8, 5.9.17 and 4.5.1 in NPS EN-1 [RD4], and Strategic Policies PS 5, PS 19, AMG3 and Policy PCYFF 4 of the JLDP [RD27].

4.3.190 For example, the alignment of section 7 Cefn Coch has been designed to avoid Ancient Woodland, the alignment of section 5 Llanfaethlu has been designed to avoid the Isle of Anglesey AONB and stone from dismantled stone walls are proposed to be saved for future re-use along the highway boundary. Other embedded mitigation proposed comprises:

- Slackening of earthwork slopes at Llanfaethlu off-line section to reduce adverse effects on views from adjacent residential properties.
- Slackening of earthwork slopes to the south of the viaduct at section 3 to reduce adverse effects on landscape character and views from adjacent residential properties and the AONB, wherever practicable against existing land constraints.
- Planting and seeding along the off-line sections to visually screen and contain roadside features and reduce adverse effects on landscape character and views, where appropriate. In appropriate locations, planting of hedgerow boundaries using hard and soft landscaping to reflect hedgerows in the area. Hedgerows are likely to take five to ten years to establish, whereas tree and shrub blocks would take 15 years to establish.
- Environmentally sensitive attenuation pond design to integrate the features into the surrounding landscape.
- Planting around attenuation ponds to help integrate them into the surrounding landscape.
- Softening of the shapes of attenuation ponds where physical constraints allow to help integrate the features into the surrounding landscape. This includes pond B at Llanfaethlu and ponds A and C at Cefn Coch.
- Lighting only proposed at the new roundabout at Valley and for a 105m length of road adjacent to the roundabout to reduce adverse effects on night-time views and the tranquillity of the AONB.
- Formal planting along the existing A5 route at Valley, to improve the sense of arrival into the village.
- Use of boundary treatments in keeping with the local vernacular, for example stone walls at Llanfaethlu.

4.3.191 The above mitigation measures have been incorporated into the design of the A5025 Off-line Highway Improvements, in accordance with paragraph 1.7.2 and 5.9.17 in NPS EN-1[RD4].

4.3.192 Furthermore, good practice mitigation is proposed to seek to limit adverse effects on landscape and visual amenity. This involves:

- protection of existing trees, scrub and hedgerows to be retained in accordance with the recommendations in BS 5837: 2012 Trees in relation to design, demolition and construction (British Standards, 2012); and
- limiting the height of topsoil and material storage mounds to 2m to reduce the potential visual impact and reduce the potential adverse impact on topsoil quality and the suitability for re-use.

4.3.193 However, as stated at paragraph 1.7.2 of NPS EN-1 [RD4], the impacts on landscape/visual amenity in particular will sometimes be hard to mitigate. Despite the good practice, embedded and additional mitigation outlined above, chapter G10 of the ES confirms that there would be significant adverse residual effects on LLCAs, local roads, and residential properties (see table G10-11 and G10-12 in chapter G10 of the ES (Application Document Reference: 6.7.10)).

4.3.194 There are a number of moderate adverse residual landscape and visual effects resulting from the construction of the A5025 Off-line Highway Improvements (see table G10-11 and G10-12 of chapter G10 of the ES). It is important to note that all the significant residual landscape and visual effects identified during construction would be short-term in nature.

4.3.195 The significant adverse residual landscape and visual effects predicted during the operation (winter year 1) of the A5025 Off-line Highway Improvement are as set out in table G10-11 and G10-12 of chapter G10 of the ES. All the landscape and visual effects during operation (winter year 1) would be short term in nature, with the exception of:

- Change to the LLCAs at Llanfachraeth (LLCA7 and LLCA10) landscape character due to operation of section 3;
- Change in views at R4 Glyn Villa and Preswylfa and Z1 Valley cemetery due to operation of section 1;
- Change in views at Residential properties at Llanfachraeth (R23, R28, R30, R33, R36 and R40), Residential properties at Llanfachraeth (R24 Erw Goch, R25 and R27), Footpaths at Llanfachraeth (PR8, PR10 and PR13), PR9 Along Afon Alaw, PR11 North-east Llanfachraeth, T1 Local road: Llanfachraeth to Llanfigael, T3 Local road: to Llanfigael, R56 Rhos-ty-mawr, Residential properties at Llanfaethlu (R49, R50, R52, R53 and R63), Footpaths at Llanfaethlu (PR16 and PR18), T4 Local road: Llanfaethlu to Llanddeusant, R76 Tyn Felin, R82 Ty Capel, and T8 Local road: Llanfairynghornwy to Mynydd Mechell, due to operation of section 3.

4.3.196 The significant adverse residual landscape and visual effects predicted during the operation (summer year 15) of the A5025 Off-line Highway Improvements are provided in table G10-12 of chapter G10 of the ES (Application Reference

Number: 6.7.10) . All landscape and visual impacts identified during the operation (summer year 15) would be permanent in nature:

- change in views due to operation of section 3 resulting in significant adverse effects on:
 - Residential properties at Llanfachraeth (R24, R25, R27, R30, R33, R36 and R40);
 - Footpaths at Llanfachraeth (PR9 and PR11); and
 - T1 local road: Llanfachraeth to Llanfigael.
- change in views due to operation of section 5 resulting in significant adverse effects on R56 Rhos-ty-mawr; and
- change in views due to operation of section 7 resulting in significant adverse effects on R76 Tyn Felin.

4.3.197 The impacts of the A5025 Off-line Highway Improvements on SLAs have been considered in line with Policy AMG2 of the JLDP [RD27]. Section 7 is located approximately 1km to the west of the Mynydd Mechell and Surrounds SLA. There are not however anticipated to be any significant effects on the landscape character of the Mynydd Mechell and Surrounds SLA during construction or operation as impacts would not be very perceptible due to distance.

4.3.198 Paragraph 5.9.9 of NPS EN-1 [RD4] states that conservation of the natural beauty of the landscape and countryside should be given substantial weight by the decision maker in deciding on applications for development consent in nationally designated landscapes, such as AONB. Paragraph 5.9.12 in NPS EN-1 [RD4] states that the aim should be to avoid compromising the purposes of the designation and that projects should be designed sensitively. In line with AMG 1 of the JLDP [RD27], the proposals have had regard to the Isle of Anglesey AONB Management Plan 2015-2020 [RD47]. In accordance with Policy CCC 3.1 and 3.2 of the Isle of Anglesey AONB Management Plan, the proposals have been subject to rigorous assessment and adopted the highest standards of design and landscaping to ensure that they complement the special qualities of the AONB (see chapter G10 of the ES (Application Reference Document: 6.7.10) and the DAS (Application Reference Document: 8.2.3)).

4.3.199 Section 3 would be close to the Isle of Anglesey AONB for approximately 500m at its southern end however there are not anticipated to be any significant effects on the landscape character of the Isle of Anglesey AONB during construction (see chapter G10 of the ES (Application Reference Number: 6.7.10)). In accordance with paragraph 5.9.12 of EN-1 [RD4] the design of the proposals has evolved with the aim of avoiding compromising the designation and has been designed sensitively. For example, alignment of section 5 has been designed to avoid Anglesey AONB and the preparation of detailed lighting design will incorporate measures such as lighting cowls to reduce light spill in turn reducing adverse visual effects and adverse effects on the tranquillity of the AONB.

4.3.200 The embedded and additional mitigation outlined above have sought to protect and improve the quality of the natural environment, its landscapes and biodiversity assets in line with Policy PS5 and PS9 of JLDP [RD27]. The mitigation has served to satisfactorily mitigate the most significant potential adverse effects of the A5025 Off-line Highway Improvements. Additional mitigation is also proposed to lessen predicted effects. This additional mitigation comprises the following:

- Light spill during temporary construction activities would be limited, due to the need to maintain safe working conditions. Horizon would use measures such as restricting heights of lighting columns and using directional or down lighting where practicable;
- The appearance of the Construction Compound fences (such as hoarding) and temporary structures would seek to mitigate the visual impact of those structures on the surrounding areas through the selection of visually recessive colours and types, whilst still maintaining a safe and secure barrier;
- Planting to be established as close to the completion of highway works as possible, in the next available planting/seeding season to reduce the amount of time bare earth is visible and enable establishment of vegetation;
- A landscape management strategy would be implemented for a period of three years, following the completion of the works, to ensure successful establishment of proposed landscaping and long-term viability of planting. In the event that these inspections identify that planting has not established, replacement planting on a like for like basis would be undertaken at the first available planting season;
- Permanent operational lighting would be designed to control light spill, within safe levels for road users; and
- The colour of the noise barrier would be selected to reduce visual effects.

4.3.201 The A5025 Off-line Highway Improvements are therefore considered to accord with paragraph 5.9.8 of NPS EN-1 [RD4], providing reasonable mitigation where possible and appropriate.

4.3.202 Paragraph 3.10.8 in NPS EN-6 [RD5] states that decision makers should not expect the visual impacts associated with a new nuclear power station to be eliminated with mitigation. Indeed, this paragraph confirms that the scope for visual mitigation will be quite limited. However, in accordance with paragraph 3.10.8 in NPS EN-6 [RD5], the mitigation proposed has been designed to reduce the visual intrusion of the project as far as reasonably practicable.

4.3.203 Importantly, there is an overriding public need for the A5025 Off-line Highway Improvements in order to satisfy the urgent need for low carbon energy such as nuclear power as set out in NPS EN-6 [RD5]. The benefits of the proposals (including need) overcome the residual adverse landscape and visual impacts.

- 4.3.204 As explained above, the proposals have had regard to the character of the site and its context and can be accommodated into its surroundings, in accordance with Paragraph 5.9.8-22 of EN-1 [RD4], as well as Strategic Policies PS5, PS9 and PS19 and Policies PCYFF4 and AMG3 in the JLDP [RD27].

Socio-economics

Policy Context

National Policy Statements

- 4.3.205 NPS EN-1 [RD4] states that where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake an assessment of these impacts as part of the ES (paragraph 5.12.2). Relevant socio-economic impacts are listed at paragraph 5.12.3 in NPS EN-1 [RD4] and include, for example, the creation of jobs and training opportunities and the provision of additional local services and improvements to local infrastructure. Paragraph 5.12.9 in NPS EN-1 [RD4] states that the decision maker should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development.
- 4.3.206 Paragraph 5.12.6 of NPS EN-1 [RD4] states that the decision maker should have regard to the potential socio-economic impacts of new energy infrastructure identified by the applicant and from any other sources that the decision maker considers to be both relevant and important to its decision.
- 4.3.207 Paragraph 5.12.8 of NPS EN-1 [RD4] states that the decision maker should consider any relevant positive provisions the developer has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts.
- 4.3.208 EN-6 [RD5] then refers to policy specific to nuclear power stations. Paragraph 3.11.4 of in NPS EN-6 [RD5] states that *"the assessment of socio-economic impacts should demonstrate that the applicant has taken account of, amongst other things, potential pressures on local and regional resources, demographic change and economic benefits"*.
- 4.3.209 It notes that as nuclear power stations involve large scale construction projects *"...there are likely to be positive effects of local economic significance, although these are less significant at the regional scale... There may also be negative effects,"* (paragraph 3.11.2, NPS EN-1 [RD4]).
- 4.3.210 The Strategic Siting Assessment at annex C of NPS EN-6 [RD5] makes some comments on socio-economic effects. It states that some consultees argued that socio-economic considerations should be a factor in deciding whether a site was potentially suitable, and that it was stated that *"...unemployment in Anglesey is high and that the benefits a new nuclear power station would bring should be a key factor in the decision whether to list the site on the Nuclear NPS,"* (paragraph C.9.110, NPS EN-6 [RD5]). It then clarifies that potential socio-economic effects of development should be considered when assessing development consent applications at a point where it is clearer how many

workers would be required for a development, or what proportion would come from outside the local area (paragraph C.9.111, NPS EN-6 [RD5]).

Welsh national and local policy

- 4.3.211 PPW [RD8] includes planning policies, to promote quality, lasting, environmentally sound and flexible employment opportunities for a low carbon economy, and to protect and, where possible, improve people's health and well-being. Chapter 4 (planning for sustainability) of PPW [RD8] sets out the Welsh government's objectives for achieving sustainable development and chapter 7 (economic development) confirms the Welsh government's objectives for economic development, i.e. development of land and buildings for activities that generate wealth, jobs and incomes.
- 4.3.212 Several policies within the JLDP [RD27] require proposals to accord with a number of criteria relating to socio-economic impacts. Strategic Policy PS 5 in the JLDP [RD27] states that development will be supported where it is demonstrated to be consistent with the principles of sustainable development. It clarifies that proposed developments should; give priority to effective use of land and protect, support and promote the use of Welsh language.
- 4.3.213 Strategic Policy PS 9 in the JLDP [RD27] specifically requires consideration to be given to the nature, scale, range and possible impact of any development. It confirms that local economic and community benefits need to be maximized, where feasible, through agreement of strategies for procurement, employment, education, training and recruitment with the Councils at an early stage of project development.
- 4.3.214 The Guiding Principles in the Wylfa SPG [RD28] are considered relevant to the socio-economic assessment and include the following principles.
- GP1: IACC will require the Wylfa Newydd Project promoter to support the delivery of the Energy Island Programme and Anglesey Enterprise Zone, maximising the economic opportunities available to the Island's local communities.
 - GP2: Local job creation and skills development through the implementation of an Employment and Skills Strategy, which should include the maximisation of local labour provision.
 - GP5: Supporting the visitor economy and ensuring that the construction and operation of the Power Station and any associated developments do not adversely affect the value and importance of tourism to the Island. One of the key elements of the island's tourism offer being the quality and diversity of its natural and historic environments. This includes the 125 mile coastline and the numerous beaches linked by the Wales Coast Path.
 - GP6: Maintaining and enhancing community facilities and services, including education, healthcare and leisure facilities.

Assessment

4.3.215 In accordance with NPS EN-1 (paragraph 5.12.2) [RD4], NPS EN-6 volume 2 (C.9.110-111 and paragraph 3.11.4) [RD5], Horizon has considered the socio-economic effects associated with the A5025 Off-line Highway Improvements. Chapter G3 of the ES (Application Reference Number: 6.7.3) provides this assessment. The residual effects can be summarised as follows:

- Section 1: A5 east of Valley Junction to north of Valley Junction (A5/A5025) - there would be a potential moderate/major adverse effect due to land-take, field severance and farm business viability.
- Section 3: north of Llanynghenedl to north of Llanfachraeth - there would be a potential major beneficial effect as existing traffic levels within Llanfachraeth would be reduced by more than 60%. Moderate/major adverse effects would however likely occur due to land take and the potential reduction in agricultural activities.
- Section 5: south of Llanfaethlu to north of Llanfaethlu - there would potentially be moderate/major adverse effects due to land take within this section and resultant field severance.
- Section 7: north of Llanrhyddlad to north of Cefn Coch - there would potentially be a moderate/major adverse effect as permanent land take may reduce agricultural activities and the associated viability of farm business.
- Wylfa Newydd Power Station Access Road Junction - there would likely be moderate adverse effects due to land take within this section and resultant field severance.

4.3.216 Paragraph 3.11.2 of NPS EN-6 [RD5] acknowledges that the construction, operation and decommissioning of energy infrastructure may have socio-economic impacts, some of which may be negative. Whilst there are moderate/major adverse socio-economic effects predicted due to the land take associated with the A5025 Off-line Highways Improvements, the proposals have sought to reduce these impacts as far as possible through consideration of different design options (noting that the options are somewhat limited due to the existing position of the A5025). Volume 3 of the DAS (Application Reference Number: 8.2.3) and chapter G2 of the ES (Application Reference Number: 6.7.2) explains these options.

4.3.217 The A5025 Off-line Highways Improvements are a critical competent of delivering the Wylfa Newydd DCO Project. There is an overriding public need for the A5025 Off-line Highway Improvements in order to satisfy the urgent need for low carbon energy such as nuclear power as set out in NPS EN-6 [RD5]. In line with GP1-GP4 of the Wylfa SPG [RD28], the Wylfa Newydd DCO Project is predicted to deliver major beneficial effects on the labour market in the Daily Construction Commuting Zone (moderately beneficial on Anglesey) and moderate beneficial effects on the local economy in north Wales during construction. During its operation, there would be major beneficial effects on the labour market on Anglesey and moderate beneficial effects on the local economy.

- 4.3.218 Policy PS 9 of the JLDP [RD27] clarifies that proposed developments should protect the use of Welsh language. In respect to potential effects on Welsh language and culture, the A5025 Off-line Highway Improvements themselves, are not expected to lead to any direct changes in the resident population of the study areas as they relate to the construction of new sections of road infrastructure, such as bypasses and road realignment works in five locations along the existing A5025 between Valley and the Wylfa Newydd Development Area (as highlighted in paragraph F4.6 of the WLIA, Application Reference Number: 8.21). Therefore, no change to the balance of Welsh/non-Welsh speakers would be expected to occur. Potential effects as a result of the required workforce of the A5025 Off-line Highway Improvements are considered under project-wide effects within volume B of the WLIA (Application Reference Number: 8.21).
- 4.3.219 Given this overriding public need and the wider beneficial socio-economic effects associated with the Wylfa Newydd DCO Project, it is considered that the benefits of the proposals overcome the limited adverse socio-economic impacts identified. It is therefore considered that the A5025 Off-line Highway Improvements comply with NPS EN-1 [RD4] and NPS EN-6 [RD5] as well as with the aims of PPW (chapters 4 and 7) [RD8] and Strategic Policy PS9 of the JLDP [RD27].

Traffic and Transport

Policy Context

National Policy Statements

- 4.3.220 NPS EN-1 [RD4] states that “*the consideration and mitigation of transport impacts is an essential part of Government’s wider policy objectives for sustainable development...*” (paragraph 5.13.2).
- 4.3.221 NPS EN-1 [RD4] advises that “the transport of materials, goods and personnel to and from a development during all project phases can have a variety of impacts on the surrounding transport infrastructure and potentially on connecting transport networks, for example through increased congestion” (paragraph 5.13.1). Paragraph 5.13.1 of NPS EN-1 also notes that impacts may involve economic, social and environmental effects (including noise and emissions).
- 4.3.222 Paragraph 5.13.3 of NPS EN-1 [RD4] requires a Transport Assessment where a project is likely to have significant transport implications. Paragraph 5.13.4 in EN-1 [RD4] confirms that, where appropriate, the applicant should prepare a travel plan including demand management measures to mitigate transport impacts. With specific regard to nuclear power, the Flags for Local Consideration to be considered by the decision maker includes impacts on “significant infrastructure and resources” (paragraph 3.5.2 of EN-6 [RD5]), which include motorways and major highways.
- 4.3.223 With regard to decision making, NPS EN-1 [RD4] recognises that a new energy NSIP may give rise to substantial impacts on the surrounding transport

infrastructure and that the decision maker should therefore ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development (paragraph 5.13.6). It requires that these impacts are mitigated in order to “...reduce the impact on transport infrastructure to acceptable levels...”, and that providing the applicant This concludes that NPS EN-1 and NPS EN-6 remain important and relevant matters which would carry significant weight in the determination of projects that will deploy after 2025. They continue to represent the primary policy basis for a decision made by the SoS on this application for development consent for the Wylfa Newydd DCO Project. (Paragraph 5.13.7, EN-1 [RD4]).

4.3.224 An important principle established by NPS EN-1 [RD4] is, therefore, that there is no need for the development to demonstrate “no impact”. There is recognition that it is likely that there will be some residual transport impacts from a new NSIP. The requirement is therefore to determine what mitigation is required to reduce impacts to “acceptable levels” in accordance with paragraph 5.13.6 in NPS EN-1 [RD4].

4.3.225 EN-6 [RD5] advises at paragraph 3.15.2 that:

“Applications should demonstrate that the proposed development would not have an unacceptable adverse impact on significant infrastructure. The Infrastructure Planning Commission should take into account any local authority impact report, advice from the relevant Nuclear Regulators and relevant policy in NPSs in assessing impacts on significant infrastructure and resources”.

Welsh national and local policies

4.3.226 Paragraph 8.5.3 of PPW [RD8] states that wherever possible decision-makers should promote the carriage of freight by water or pipeline rather than by road.

4.3.227 Paragraph 8.5.7 of PPW [RD8] states that great care should be taken to minimise the adverse impacts of new transport infrastructure, or improvements to existing infrastructure, on the natural, historic and built environment and on local communities, where neighbourhood severance should especially be avoided. It clarifies that routes should make the best use of existing landforms and other landscape features to reduce noise and visual effects, subject to safety and other environmental considerations. Paragraph 8.5.7 of PPW [RD8] states that where no other alternative routes or options are practicable, transport infrastructure schemes should provide mitigation measures to minimise the impacts caused by their construction and operation.

4.3.228 PPW [RD8] also promotes a sustainable and efficient transport system and states that, inter alia, the impacts of development on travel demand, transport infrastructure, traffic management measures, safety and user convenience should be considered (paragraph 8.7). PPW [RD8] requires the impacts on travel demand, the level and nature of public transport provision, accessibility to a range of transport modes and opportunities to promote active travel to be taken into account (paragraph 8.7.1).

- 4.3.229 Policy TRA 4 in the JLDP [RD27] states that proposals should be planned and designed in a manner that promotes the most sustainable modes of transport. Policy TRA 4 also states that proposals that would cause unacceptable harm to the safe and efficient operation of the highway, public transport and other movement networks including pedestrian and cycle routes, public rights of way and bridle routes, will be refused.
- 4.3.230 Strategic Policy PS 4 in the JLDP [RD27] confirms that IACC will support improvements that maximise accessibility for all modes of transport, but particularly by foot, cycle and public transport.
- 4.3.231 Strategic Policy PS 5 in the JLDP [RD27] states that all proposals should be consistent with its sustainable development principles. Proposals should reduce the need to travel and encourage opportunities for all users to use alternative modes.
- 4.3.232 Strategic Policy PS 9 in the JLDP [RD27] is specific for the Wylfa Newydd Project Associated Developments and requires highways and transport proposals to form part of an Integrated Traffic and Transport Strategy that has regard to Strategic Policy PS 4 and other relevant policies. Strategic Policy PS 4 states that adverse transport impacts should be minimised to an acceptable level at all project stages. It continues to state that proposals should, where feasible, make a positive contribution to transportation policy objectives in the locality, and should include multi-modal solutions and investment that encourages travel by public transport, walking and cycling and other sustainable forms of transport.
- 4.3.233 Policy GP 14 of the Wylfa SPG [RD28] confirms that the use of rail and waterborne modes should be prioritised in accordance with national planning policy and the need for road transport minimised. It also states that where the use of road transport is required, the applicant should assess the potential impacts on road infrastructure and seek to ensure highway improvements are provided where appropriate to minimise congestion, ensure safety and minimise environmental impacts.

Assessment

- 4.3.234 Horizon has sought to mitigate transport impacts resulting from the construction and operation of the Wylfa Newydd DCO Project, in part through the design of the A5025 Off-line Highway Improvements, in accordance with paragraph 5.13.2 and 5.13.6 of NPS EN-1 [RD4] and 8.5.7.
- 4.3.235 It is understood that the preference within PPW (paragraph 8.5.3 [RD8]) is for transportation of freight by water or pipeline rather than road. Although opportunities will be taken to transport freight in these manners, there is still a requirement to make improvements to the A5025.
- 4.3.236 Chapter C2 of the ES (Application Document Reference: 6.3.2) identifies significant residual effects for the following scenarios.

2020 opening year of the A5025 Off-line Highway Improvements (without bypasses)

- Motorised and public transport users would experience significant increases in HGV flow through Valley, Llanfachraeth, Llanfaethlu and Cefn Coch , resulting in a significant adverse effect.

2020 opening year of the A5025 Off-line Highway Improvements (with bypasses).

- Motorised and public transport users experience significant decreases in traffic flow on the existing A5025 at Llanfachraeth, resulting in a significant beneficial effect.
- Motorised and public transport users experience significant decreases in traffic flow on the existing A5025 at Cefn Coch, resulting in a beneficial effect of major significance.
- Motorised and public transport users experience an increase in journey times northbound along section 32 (A55 J6 to A5114 Llangefni), resulting in a significant adverse effect.
- Drivers travelling in both directions along section 3 (Llanfachraeth) experience a reduction in driver stress, resulting in a significant beneficial effect.

4.3.237 Comparison of the two scenarios listed above allows an assessment of benefits arising from the provision of the bypasses proposed as part of the A5025 Off-line Highway Improvements. It is clear that the provision of the A5025 Off-line Highway Improvements, including the associated bypasses would result in three significant beneficial effects and just a single significant adverse effect in 2020. Whereas, the omission of the A5025 Off-line Highway Improvements and the associated bypasses in 2020 is predicted to still result in a significant adverse effect, without providing any of the significant beneficial effects.

4.3.238 The proposed bypasses to be delivered through the A5025 Off-line Highway Improvements therefore mitigate transport impacts resulting from the construction of the Wylfa Newydd Project, in accordance with paragraph 5.13.6 in NPS EN-1 [RD4]. Importantly, the A5025 Off-line Highway Improvements would not have an unacceptable adverse impact on significant infrastructure and will deliver a range of significant beneficial effects, in accordance with paragraph 3.15.2 in NPS EN-6 [RD5]. . As noted above, Strategic Policy PS4 of the JLDP [RD27] requires proposals to ensure transport impacts are minimised to an acceptable level at all project stages. The A5025 Off-line Highway Improvements are one way in which Horizon seeks to minimise impacts on the existing road infrastructure, safety and user convenience on the A5025.

4.3.239 In line with paragraph 5.13.3 of NPS EN-1 [RD4] and 3.15.2 of EN-6 [RD5], a Transport Assessment has been submitted (Application Reference Number: 6.3.14). The Transport Assessment (Application Document Reference: 6.3.14) concludes that, with the implementation of the A5025 Off-line Highway Improvements, the potential transport impacts of the Wylfa Newydd Project

would be small and, in accordance with planning policy, will have no significant impact on the local road and public transport networks.

- 4.3.240 The A5025 Off-line Highway Improvements have been designed to ensure the safe and efficient operation of the highway and not cause unacceptable harm to public transport and other movement networks including pedestrian and cycle routes, PRow and bridle routes. There would likely be moderate adverse effects to PRow during construction and operation (table G4-7 of chapter G4 of the ES (Application Reference Number: 6.7.4) however it is considered that the benefits of the Wylfa Newydd DCO Project (as set out in section 6.2 of the Planning Statement, Application Reference Number: 8.1) outweigh these potential effects. In line with Policy TRA 4, paragraph 8.7.1 of PPW [RD8], and Strategic Policies PS4, PS5 and PS9 of the JLDP [RD27], which encourage maximising accessibility for all modes of transport, but particularly by foot and cycle, there are expected to be beneficial effects on active travel resulting from the provision of a new shared use footway/cycleway along the A5025 within section 5.
- 4.3.241 Project-wide effects of the Wylfa Newydd DCO Project are assessed in the Transport Assessment (Application Reference Number: 6.3.14) and the main body of the Planning Statement.

Welsh Language

Policy Context

National Policy Statements

- 4.3.242 Welsh language impact is not a Generic or Nuclear Impact. Volume 2 of NPS EN-6 [RD5] provides site assessments which set out why the sites included in EN-6 [RD5] have been found potentially suitable for providing nuclear power. Paragraph C.9.110 of EN-6 [RD5] does however advise that some responses from consultees to the draft NPS expressed concerns that an influx of workers into the area could be damaging to its language, culture and welfare. EN-1 [RD4] and EN-6 [RD5] do not however otherwise provide specific guidance in respect of Welsh language and culture.

Welsh national and local policy

- 4.3.243 Paragraph 4.13.1 of PPW [RD8] and TAN 20 [RD23] identify the Welsh language as being a part of cultural and social fabric of Wales and that the Welsh Government is committed to ensuring the Welsh language is supported and encouraged to flourish. PPW [RD8] states that Welsh language should be supported by the planning system and that considerations related to the use of Welsh language may be taken into account by decision makers so far as they are material to applications for planning permission (paragraph 4.13.5).
- 4.3.244 Part B of the TAN 20 [RD23] provides Practice Guidance on planning and the Welsh language and states:

"The planning system can contribute to the future well being of the Welsh language, by establishing the conditions to allow sustainable communities to thrive. For example, creating conditions for well-paid employment opportunities and a range of quality housing options are integral to planning for sustainable communities," (paragraph 1.7.3, TAN 20 [RD23]).

4.3.245 Furthermore, TAN 20 [RD23] confirms that where the use of Welsh language is a significant part of the social fabric of a community, the interest and needs of the Welsh language should be taken into account. Paragraph 3.1.2 in TAN 20 [RD23] confirms:

"...in determining individual planning applications and appeals, considerations relating to the use of the Welsh language may be taken into account so far as they are material. Section 70(2) TCPA does not give any additional weight to the Welsh language above any other material consideration and decisions on all applications for planning permission must be based on planning grounds only and be reasonable".

4.3.246 Planning policy continues the strong support for promoting the Welsh language. Strategic Policy PS 1 of the JLDP [RD27] confirms that the IACC will promote and support the use of the Welsh language in the area and require a Welsh Language Impact Assessment (WLIA) (Application Reference Number: 8.22) to be submitted as part of the application to show how the proposed development would protect, promote and enhance the Welsh language. Strategic Policy PS 1 also states that proposals, which would cause significant harm to the character and language balance of a community that cannot be avoided or suitably mitigated by appropriate planning mechanisms, would be refused.

4.3.247 Strategic Policy PS 5 in the JLDP [RD27] states that all proposals should protect, support and promote the use of the Welsh language in accordance with Strategic Policy PS 1.

4.3.248 Policy GP13 of the Wylfa SPG [RD28] similarly confirms that Welsh language and culture should be maintained and where possible strengthened and that all planning applications for Associated Development will be expected to demonstrate how a Welsh language strategy will be delivered by the proposed development. It also clarifies that a WLIA should be undertaken. GP 13 also sets out several measures which could be deployed to mitigate potential adverse impacts on, and strengthen, Welsh language and culture.

4.3.249 Whilst Associated Development can now be included within the DCO application (rather than as separate TCPA [RD2] applications) the principles of protecting and promoting the Welsh language through all proposals are relevant.

Assessment

4.3.250 Volume 2 of EN-6 [RD5] provides site assessments which set out why the sites included in EN-6 [RD5] have been found potentially suitable for providing nuclear power. Paragraph C.9.110 of EN-6 [RD5] does however advise that some responses from consultees to the draft NPS expressed concerns that

an influx of workers into the area could be damaging to its language, culture and welfare. EN-1 [RD4] and EN-6 [RD5] do not however otherwise provide specific guidance in respect of Welsh language and culture.

- 4.3.251 In line with PPW [RD8] (paragraph 4.13.5) [RD8] and TAN 20 (paragraph 4.1.2) [RD23] which require consideration of Welsh language, the application is accompanied by a WLIA (Application Reference Number: 8.22). Additionally, the provision of a WLIA is also supported by Strategic Policy PS1 in the JLDP [RD27]. The findings of the WLIA also demonstrate that the A5025 Off-line Highway Improvements also comply with Policy PS5 of the JLDP which states that proposals should protect, support and promote the use of the Welsh language.
- 4.3.252 The construction and operation of the A5025 Off-line Highway Improvements would not have a significant impact upon the Welsh language and culture during construction and operation, as confirmed in chapter F4 of the WLIA (Application Reference Number: 8.22). The impact of the A5025 Off-line Highway Improvements during the decommissioning has not been assessed as the A5025 Off-line Highway Improvements would remain beyond the decommissioning phase.
- 4.3.253 As a result, the A5025 Off-line Highway Improvements are considered to address the concerns detailed in paragraph C.9.110 of volume 2 of the NPS EN-6 [RD5]. Given the conclusions of the WLIA (Application Reference Number: 8.22), no additional mitigation and/or enhancement measures are considered to be necessary.
- 4.3.254 Measures to mitigate adverse effects and enhance beneficial effects relating to the project-wide assessment are presented in chapter B2 of the WLIA (Application Reference Number: 8.22).
- 4.3.255 The A5025 Off-line Highway Improvements are also in accordance with the objectives of GP13 in the Wylfa SPG [RD28] which encourages Welsh language and culture be maintained and where possible strengthened.

5 Planning Balance

- 5.1.1 The proposed bypasses to be delivered through the A5025 Off-line Highway Improvements represent significant mitigation of the transport impacts which would otherwise be experienced as a result of the construction of the Wylfa Newydd DCO Project. The A5025 Off-line Highway Improvements accord with the requirements of NPS EN-1 [RD4] and NPS EN-6 [RD5], in addition to *“important and relevant”* policy most notably including PPW [RD8] and the JLDP [RD27].
- 5.1.2 Horizon has demonstrated that the A5025 Off-line Highway Improvements are integral to successful delivery and implementation of the Wylfa Newydd Project. These improvements are required in order to mitigate the predicted impacts of increased traffic associated with the construction and operation of the proposed Wylfa Newydd Project. The proposal would maximise the opportunity for sustainable travel, reduce traffic congestion and improve road safety.
- 5.1.3 It is however necessary to assess the location and form of the A5025 Off-line Highway Improvements. This appendix has demonstrated that the A5025 Off-line Highway Improvements as proposed are appropriate having had regard to the site specific planning issues and the IACC's locational guidance in the adopted Wylfa SPG [RD28] and draft SPG [RD14].
- 5.1.4 The proposed A5025 Off-line Highway Improvements have been demonstrated to be in the most appropriate locations. The suitability of the alignments has been rigorously tested as part of the application for development consent with further information provided within the A5025 Off-line Highway Improvements DAS (Application Document Reference: 8.2.3), volume G of the ES (Application Document Reference: 6.7.1-6.7.12) and the Site Selection report (Application Document Reference: 8.24.7).
- 5.1.5 The analysis in chapter 4 has shown that the A5025 Off-line Highway Improvements, as described in chapter 2, do not cause any individual potential adverse effect that is so severe that the decision maker should refuse the application. A summary is provided below.
- 5.1.6 In line with paragraph 5.2.6 and 5.2.7 of NPS EN-1 [RD4], chapter G5 of the ES (Application Document Reference: 6.7.5) considers air quality impacts. This concludes that no potentially significant air quality effects have been identified and there is no requirement for additional mitigation.
- 5.1.7 The proposals have taken advantage of opportunities to conserve and enhance biodiversity in accordance with Paragraph 5.3.4 of NPS EN-1 [RD4]. Strategic Policies PS 5, PS 9, PS 19 and Policies AMG 5 and AMG 6 in the JLDP [RD27]. The proposals comply with paragraph 5.3.7 of NPS EN-1 [RD4] as the scheme is likely to avoid significant harm to biodiversity interests.
- 5.1.8 There are no permanent major adverse or very large residual archaeology or cultural heritage effects. Therefore, with reference to paragraph 5.8.14 of NPS EN-1 [RD4], no substantial harm to heritage assets is caused as a result of the A5025 Off-line Highway Improvements.

- 5.1.9 The A5025 Off-line Highway Improvements would not cause any potentially significant health effects and the application satisfies the requirements of Paragraph 3.12.7 of NPS EN-6 [RD5].
- 5.1.10 Importantly, paragraph 3.12.8 of NPS EN-6 [RD5] states that the decision maker should consider the positive effect of employment and other socio-economic impacts on human health and wellbeing. At section 3 of the A5025 Off-line Highway Improvements there would be a potential major beneficial effect as existing traffic levels within Llanfachraeth would be reduced by more than 60%.
- 5.1.11 In line with GP5 and GP8 of the Wylfa SPG [RD28], chapter G4 of the ES (Application Document Reference: 6.7.4) provides the assessment of effects of the A5025 Off-line Highway Improvements on public access and recreation. It is noted that the permanent closure of PRoW 18/018/1 prior to the construction of section 1 would result in a moderate adverse effect during construction, and the introduction of an at-grade crossing within the route of PRoW 27/020/1 would cause a moderate adverse effect during operation.
- 5.1.12 Paragraph 5.10.24 of EN-1 [RD4] requires appropriate mitigation measures to address adverse effects on PRoWs and Policy PS 4 of the JLDP [RD27] states that PRoW should be safeguarded, improved, enhanced and promoted. Whilst the assessed effect remains moderate adverse, an alternative route to RRoW 178/018/1 would be provided that would run along the existing A5025 carriageway. Users of PRoW 27/020/1 would be required to cross the A5025 at grade and the approach to this crossing location would involve a short diversion. There are no such reasonable or practicable alternative opportunities.
- 5.1.13 No potential significant adverse effects have been identified in respect of soils and geology. The design for the A5025 Off-line Highway Improvements has sought to comply with paragraph 5.10.8 of NPS EN-1 [RD4], paragraph 4.10.1 of PPW [RD8] and Strategic Policy PS6 of the JLDP [RD27] which state that development should seek to minimise impacts on BMV agricultural land. Given good practice mitigation measures would be put in place there would likely be minor adverse effects on BMV agricultural land.
- 5.1.14 The proposed development, including mitigation, has sought to avoid significant adverse impacts from construction noise and vibration on health and quality of life in accordance with paragraph 5.11.9 of NPS EN-1 [RD4]. Whilst the proposals will result in adverse impacts on amenity, these effects have been limited as far as possible.
- 5.1.15 In accordance with paragraph 5.12.6 of NPS EN-1 [RD4], Horizon has considered the socio-economic effects associated with the A5025 Off-line Highway Improvements. Whilst there are moderate/major adverse socio-economic effects predicted due to the land take associated with the A5025 Off-line Highway Improvements, the proposals have sought to reduce these impacts as far as possible through consideration of different design options (noting that the options are somewhat limited due to the existing position of the A5025).

- 5.1.16 In accordance with Policy PCYFF 2 of the JLDP [RD27], no significant adverse surface water and groundwater effects are identified for the construction phase. Minor adverse effects are expected for surface water and on fluvial geomorphology during the operational phase following mitigation.
- 5.1.17 In accordance with the objectives of GP13 of the Wylfa SPG [RD28], the construction and operation of the A5025 Off-line Highway Improvements would not have a significant impact upon the Welsh language and culture.
- 5.1.18 The embedded and additional mitigation has sought to protect and improve the quality of the natural environment, its landscapes and biodiversity assets in line with Policy PS5 and PS9 of the JLDP [RD27]. The mitigation has served to satisfactorily mitigate the most significant potential adverse effects of the A5025 Off-line Highway Improvements. The A5025 Off-line Highway Improvements are therefore considered to accord with paragraph 5.9.8 of NPS EN-1, providing reasonable mitigation where possible and appropriate. The proposals have had regard to the character of the site and its context and can be accommodated into its surroundings, in accordance with Paragraph 5.9.8-22 of EN-1 [RD4], as well as Strategic Policies PS5, PS9 and PS19 and Policies PCYFF4 and AMG3 in the JLDP [RD27].
- 5.1.19 The A5025 Off-line Highway Improvements include a number of significant benefits as listed below, and these should be given significant weight in the planning balance.
- The principle of the A5025 Off-line Highway Improvements is acceptable and is supported by adopted planning policy. The overriding need for the A5025 Off-line Highways Improvements, which are required in order to deliver the Power Station and therefore satisfy the urgent need for low carbon energy as set out in NPS EN-6 [RD5], outweighs the adverse impacts;
 - The A5025 Off-line Highway Improvements would mitigate the predicted impacts of increased traffic associated with the construction and operation of the proposed Wylfa Newydd Project and to divert a significant amount of traffic away from the villages to be bypassed;
 - The A5025 Off-line Highway Improvements would address existing physical and operational constraints on the A5025 between Valley and the proposed Power Station Access Road Junction; and
 - The A5025 Off-line Highway Improvements have been sensitively designed to respect the scale and character of the surrounding area, and to prevent as far as possible any adverse impacts on surrounding residential amenity, ecological receptors and the setting of heritage assets.
- 5.1.20 For the reasons outlined above, the A5025 Off-line Highway Improvements as proposed are considered compliant with NPS EN-1 [RD4] and NPS EN-6 [RD5] and national and local planning policy where relevant. In summary, the proposed development of the A5025 Off-line Highway Improvements is appropriate in planning terms in its own right.

- 5.1.21 The A5025 Off-line Highway Improvements are, like the other Associated Development, integral to the delivery of the Wylfa Newydd Project and its associated benefits, and need to be considered in the context of the urgent need for nuclear power.
- 5.1.22 This Planning Statement has concluded that the development is acceptable as an individual scheme component, however, its contribution to the Project as a whole weighs further in its favour.

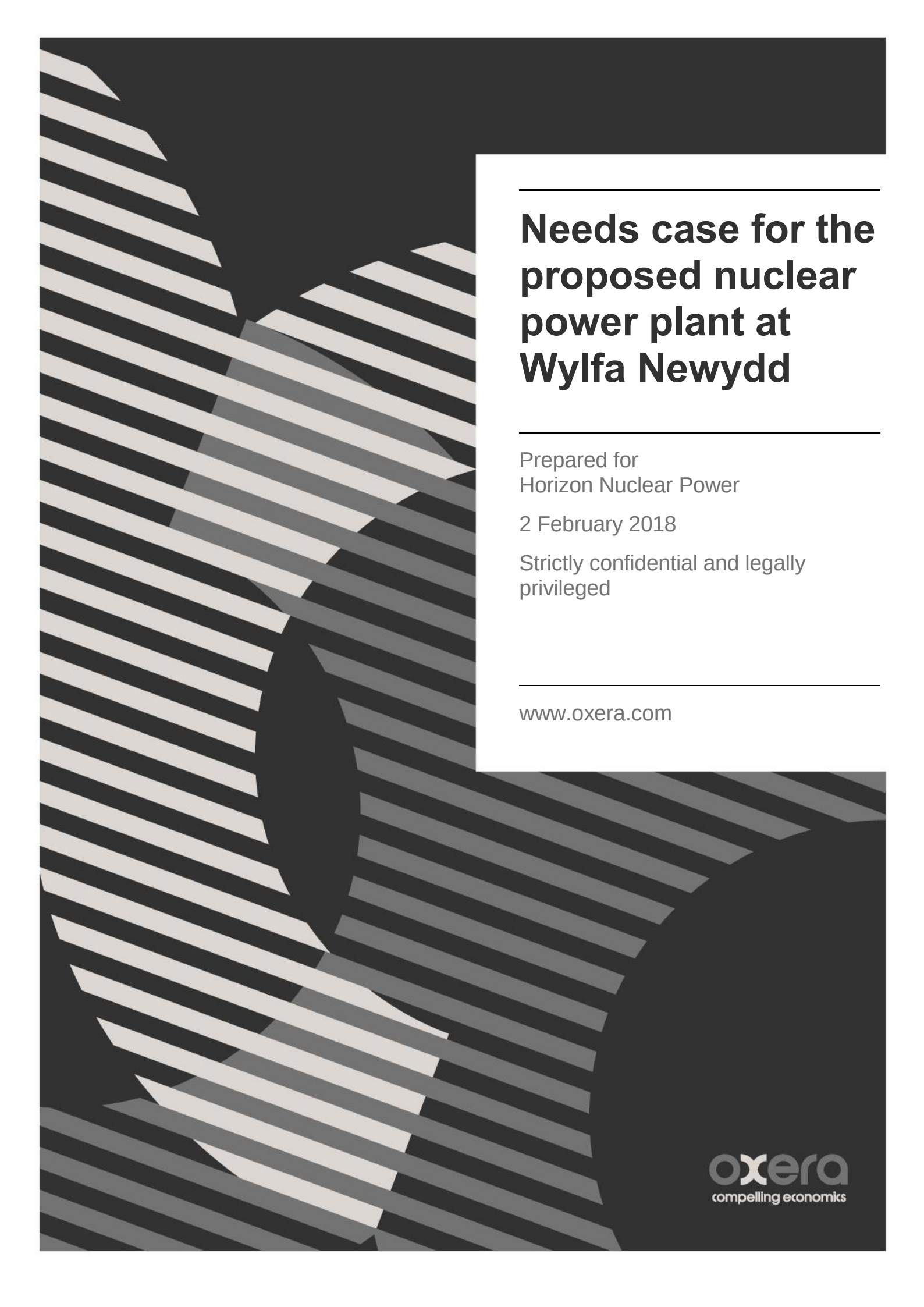
6 Conclusion

- 6.1.1 This appendix considers relevant national and local planning policies within the overarching context of NPS EN-1 and NPS EN-6. It demonstrates that, when assessed against these relevant policies and material considerations, the Off-Line Highways benefit from strong policy support and is acceptable in land use planning terms.
- 6.1.2 Whilst the Wylfa Newydd Project as a whole will, in common with any national infrastructure project, result in some adverse effects to the environment and local community, the main report states that these (considered individually or collectively) do not outweigh the important benefits. These benefits would be delivered for the UK as a whole, including a vital role in the provision of safe and secure low carbon electricity, as well as local benefits including jobs creation, investment in the local economy and provision of skills for the local workforce. Together these benefits have the potential to create a significant lasting positive legacy for Anglesey, north Wales and the UK.

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Appendix G Needs case for the proposed nuclear power plant at Wylfa Newydd

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Needs case for the proposed nuclear power plant at Wylfa Newydd

Prepared for
Horizon Nuclear Power

2 February 2018

Strictly confidential and legally
privileged

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Contents

1	Introduction	1
1A	Purpose and objective of this document	1
1B	Sources and references	2
1C	Structure of the report	3
2	Is there an urgent need for new nuclear?	4
2A	Electricity demand is expected to increase substantially by 2035	4
2B	A significant proportion of existing electricity generating capacity is expected to close by 2035	6
2C	Increasing demand but decreasing supply: the generation shortfall	8
2D	There is an apparent absence of proven, low-carbon technologies that could provide credible alternatives to new nuclear generation and also be deployed at sufficient scale	10
2E	The UK's obligations towards meeting emissions targets further accentuate the need for nuclear	13
2F	Conclusion—there is an urgent need for new nuclear plant	17

Figures and tables

Table 1.1	List of key documents and evidence	2
Figure 2.1	The loss of existing nuclear generation capacity	8
Figure 2.2	National Audit Office on the UK's energy challenge until 2035	9
Table 2.1	Lifecycle emissions of different generating technologies	11
Table 2.2	National Grid 'Future Energy Scenarios' summary	16
Figure 2.3	Nuclear installed capacity requirements projected by National Grid	17

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1 Introduction

1A Purpose and objective of this document

1.1 Horizon Nuclear Power Wylfa Limited (Horizon) is in the process of submitting its Development Consent Order (DCO) application to the Planning Inspectorate for a new nuclear power plant at Wylfa Newydd (Wylfa) on the Isle of Anglesey.

1.2 In this context, Horizon has commissioned Oxera to examine the available evidence pertaining to the urgent need for new nuclear power, beyond that considered in the current National Policy Statements (NPS), EN-1 and EN-6.¹

1.3 Nuclear energy is expected to remain an important part of the UK's future energy mix. The Department for Business, Energy and Industrial Strategy (BEIS) makes it clear that the UK government continues to support new nuclear power generation. It states:

[n]ew nuclear power stations have an important role to play [...] nuclear is a vital part of our [UK] energy mix [...] it is important that there is a strong pipeline of new nuclear power to contribute to the UK's future energy system.²

1.4 In particular it indicates that:

[f]or projects yet to apply for development consent and due to deploy beyond 2025, Government continues to give its strong in principle support to project proposals at those sites currently listed in EN-6.³

1.5 Additional nuclear generating capacity at Wylfa is listed in EN-6 and it is clear, therefore, that it continues to benefit from strong in principle policy support.

1.6 This report sets out Oxera's analysis and conclusions regarding the need for nuclear power in meeting the UK's energy requirements in the period beyond 2025, given the UK's environmental commitments and the potential deployment of other generation technologies.

1.7 In conducting its review, Oxera has primarily relied on analysis and statements contained in UK government policy documents, ministerial statements, reports from independent bodies such as the National Audit Office (NAO) and the Intergovernmental Panel on Climate Change, academic studies, and industry reports from National Grid and Bloomberg.

¹ Department of Energy and Climate Change (2011), 'Overarching National Policy Statement for Energy (EN-1)', July; and Department of Energy and Climate Change (2011), 'National Policy Statement for Nuclear Power Generation (EN-6)', July.

² Department for Business, Energy and Industrial Strategy (2017), 'Statement on Energy Infrastructure', <http://www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Lords/2017-12-07/HLWS316/>, accessed 10 January 2018. The Department of Energy and Climate Change was merged into the Department for Business, Energy and Industrial Strategy in 2016.

³ Ibid.

1B Sources and references

1.8 The key evidence relied upon in preparing this report is listed in Table 1.1 below.

Table 1.1 List of key documents and evidence

Author	Year	Title
Government publications		
HM Government	2008	Climate Change Act
Department of Energy and Climate Change	2011	Overarching National Policy Statement for Energy (EN-1)
Department of Energy and Climate Change	2011	National Policy Statement for Nuclear Power Generation (EN-6)
Department of Energy and Climate Change	2013	2050 pathways
Department of Energy and Climate Change	2015	Amber Rudd's speech on a new direction for UK energy policy
National Audit Office	2016	Nuclear power in the UK
HM Government	2017	The clean growth strategy
HM Treasury	2017	Control for low carbon levies
HM Government	2017	Hinkley Point C
Ofgem	2017	State of the energy market
Department for Business, Energy and Industrial Strategy	2017	NPS siting consultation
Department for Business, Energy and Industrial Strategy	2017	Statement on Energy Infrastructure (House of Lords)
Department for Business, Energy and Industrial Strategy	2017	Statement on Energy Infrastructure (House of Commons)
National Audit Office	2017	Hinkley Point C
Committee on Climate Change	2018	An independent assessment of UK's clean growth strategy
Department for Business, Energy and Industrial Strategy	2018	Updated energy and emissions projections 2017
Department for Business, Energy and Industrial Strategy	2018	Implementing the end of unabated coal by 2025
Department for Business, Energy and Industrial Strategy	2018	The future of coal generation in Great Britain — impact assessment
Office for National Statistics	2018	Gross Domestic Product: chained volume measures
HM Government	n.a.	Hinkley Point C value for money
HM Government	n.a.	Table of past and present UK nuclear reactors
Ofgem	n.a.	Electricity interconnectors
Industry reports		
Intergovernmental Panel on Climate Change	2014	Technology-specific Cost and Performance Parameters
E3G	2015	G7 coal phase out: United Kingdom
Energy Research Partnership	2015	Managing flexibility whilst decarbonising the GB electricity system
National Grid	2017	Future energy scenarios
Bloomberg New Energy Finance	2017	Beyond the tipping point

Academic papers

Heard, B.P., Brook, B.W., Wigley, T.M.L. and Bradshaw, C.J.A.	2017	Burden of proof: a comprehensive review of the feasibility of 100% renewable electricity systems

Source: Oxera.

1C Structure of the report

1.9 The remainder of this report elucidates whether there is a clear and urgent need for new nuclear power in the UK by:

- exploring the expected growth in future demand for electricity in the UK to 2035;
 - estimating the forecast retirement of current generation capacity by 2035;
 - analysing the resultant shortfall in generation capacity in the context of constraints imposed by emission reduction obligations;
 - commenting on whether other low-carbon technologies can be deployed at sufficient scale to meet this shortfall;
 - considering the impact of the UK's obligation to reduce greenhouse gas emissions on the nuclear power need.
-

2 Is there an urgent need for new nuclear?

2A Electricity demand is expected to increase substantially by 2035

- 2.1 Recent (2017) evidence from BEIS indicates that the demand for electricity in the UK is projected to increase by 20% by 2035.⁴ This section discusses the available evidence on expected demand growth in more detail.
- 2.2 The forecast increase in demand for electricity can, at least in part, be explained by the UK's obligations in meeting emissions targets. Under the Climate Change Act 2008, the UK is committed to reducing its greenhouse gas emissions by at least 80% by 2050 relative to 1990 levels.⁵ It is therefore necessary that the UK reduces its use of fossil fuels, particularly in the four largest sectors for emissions: transport, industry, heating for buildings, and electricity generation.⁶
- 2.3 Switching away from fossil fuels in these sectors is anticipated to be achieved partly through electrification, such as increased use of electric vehicles (EVs). To ensure that electrification does reduce overall emissions, electricity has to be generated from low-carbon sources. This explains why the erstwhile Department of Energy and Climate Change (DECC) lists the increase in the supply of low-carbon electricity as an 'essential prerequisite' to meeting the UK's emissions targets.⁷ The continued need for low-carbon electricity is further stressed in the 2015 Paris Agreement. The latest consultation document on a new National Policy Statement for nuclear power states that:

the need for the UK to continue its efforts in transitioning to a low carbon electricity market is underlined by the 2015 United Nations Framework Convention on Climate Change ('UNFCCC') Paris Agreement.⁸

⁴ Oxera analysis of Department for Business, Energy and Industrial Strategy (2018), 'Updated energy and emissions projections 2017', Annex F, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/666260/Annex-f-final-energy-demand.xls, accessed 10 January 2018. This forecast is also reflected in Department for Business, Energy and Industrial Strategy (2017), 'Statement on Energy Infrastructure', <http://www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Lords/2017-12-07/HLWS316/>, accessed 10 January 2018. Tab 'Reference scenario' in Annex F shows that final consumption of electricity amounts to 26,370ktoe and 31,539ktoe in 2017 and 2035 respectively. The resulting increase therefore amounts to 20% (100-(31,539/26,370) - 100).

⁵ Climate Change Act 2008, Chapter 27, Part 1, section 1, para. 1.

⁶ Specifically, according to Ofgem's 2017 state of the energy market publication, transport accounts for 26% of emissions, industry for 22%, heating for buildings for 19%, and electricity generation for 17%. See Ofgem (2017), 'State of the energy market', October, p. 80.

⁷ Department of Energy and Climate Change (2011), 'Overarching National Policy Statement for Energy (EN-1)', July, para. 3.3.13.

⁸ Department for Business, Energy and Industrial Strategy (2017), 'Consultation on the siting criteria and process for a new National Policy Statement for nuclear power with single reactor capacity over 1 gigawatt beyond 2025', December, para. 1.8,

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/666057/061217_FINAL_NPS_Siting_Consultation_Document-1.pdf, accessed 31 January 2018.

- 2.4 Moreover, even major improvements in energy efficiency are not expected to offset the growth in electricity demand as a result of electrification. EN-1 states:

even with major improvements in overall energy efficiency, we expect that demand for electricity is likely to increase, as significant sectors of energy demand (such as industry, heating and transport) switch from being powered by fossil fuels to using electricity. As a result of this electrification of demand, total electricity consumption (measured in terawatt hours over a year) could double by 2050.⁹

- 2.5 EN-1 thus concludes that, overall, there will be a substantial increase in demand for electricity.¹⁰

- 2.6 More recently, BEIS has forecast a c. 20% increase in electricity demand by 2035 relative to 2017 under its reference case.¹¹ Even on the assumption of low economic growth, BEIS forecasts a c. 17% increase in electricity demand.¹²

- 2.7 The NAO in its 'Nuclear Power in the UK' publication has also examined the government's demand forecast. While the NAO makes clear that long term demand forecasts are inherently uncertain and that there are material differences between the estimates of different forecasters, its report highlights the potential for:

a 20% increase in demand for electricity over the next two decades because of demographic changes, economic growth and the electrification of heat and transport.¹³

- 2.8 In particular, the NAO states that demand for generation capacity is expected to increase by a further 31GW by 2035.¹⁴

⁹ Department of Energy and Climate Change (2011), 'Overarching National Policy Statement for Energy (EN-1)', July, para. 3.3.14.

¹⁰ Department of Energy and Climate Change (2011), 'Overarching National Policy Statement for Energy (EN-1)', July, para. 3.3.14.

¹¹ The reference case forecasts how the UK energy system could evolve if 'implemented, adopted and agreed Government policies were implemented but no new policies or changes to existing policies were introduced', and is based on 'central projections for the key drivers of energy and emissions, such as fossil fuel prices, Gross Domestic Product (GDP) and population'. See Department for Business, Energy and Industrial Strategy (2018), 'Updated energy and emissions projections 2017', pp. 7 and 9, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/671187/Updated_energy_and_emissions_projections_2017.pdf, accessed 18 January 2018. Tab 'Reference scenario' in Annex F shows that final consumption of electricity amounts to 26,370ktoe and 31,539ktoe in 2017 and 2035 respectively. The resulting increase therefore amounts to 20% $(100 \cdot (31,539/26,370) - 100)$.

¹² Oxera analysis of Department for Business, Energy and Industrial Strategy (2018), 'Updated energy and emissions projections 2017', Annex F, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/666260/Annex-f-final-energy-demand.xls, accessed 10 January 2018. Tab 'Low Growth' in Annex F shows that final consumption of electricity amounts to 26,358ktoe and 30,869ktoe in 2017 and 2035 respectively. The resulting increase therefore amounts to 17% $(100 \cdot (30,869/26,358) - 100)$.

¹³ National Audit Office (2016), 'Nuclear power in the UK', para. 8.

¹⁴ National Audit Office (2016), 'Nuclear power in the UK', Figure 1. The NAO estimate is based on DECC's projection of the generating capacity required to meet its security of electricity supply and decarbonisation objectives.

2.9 Furthermore, National Grid's projections demonstrate that a rapid uptake of EVs alone could increase *peak* demand by c. 15GW by 2035. This figure is then expected to double by 2050.¹⁵

2.10 Going beyond EVs, in total National Grid estimates that by 2050 peak electricity demand will have risen by up to c. 40% relative to 2016.¹⁶

2.11 In summary, and on the basis of the analysis and evidence presented by government bodies and the industry, there appears to be unanimous agreement that demand for electricity is expected to rise significantly and steadily over the next few decades (i.e. well beyond 2025).

2B A significant proportion of existing electricity generating capacity is expected to close by 2035

2.12 EN-1 states that at least 22GW of existing generating capacity will need to be replaced by 2020 as a result of environmental regulation and ageing power stations.¹⁷ Looking to the period 2016 to 2035, the NAO estimates indicate that c. 64GW—i.e. over 60% of current UK generating capacity—is expected to be lost due to plant retirements by 2035.¹⁸

2.13 The expected decrease in generation capacity is particularly acute for coal and nuclear plants, which have been recently estimated to generate almost half of the UK's power.¹⁹

2.14 The combined impact of widespread closures of coal and nuclear generating plants has previously been recognised by DECC (as reported by the NAO in July 2016):

the Department expects almost all existing nuclear and coal-fired power stations, which together generate almost half of the UK's power, to close by the end of the 2020s.²⁰

2.15 Regarding coal, 8.4GW of capacity closed between 2010 and 2015 as a result of the EU's Large Combustion Plants Directive.²¹ Moreover, on 18 November

¹⁵ National Grid (2017), 'Future energy scenarios', p. 100, <http://fes.nationalgrid.com/media/1253/final-fes-2017-updated-interactive-pdf-44-amended.pdf>, accessed 15 January 2018.

¹⁶ Calculated using National Grid (2017), 'Future Energy Scenarios', 'Consumer Power scenario', under which 85.4GW of peak demand is forecast in 2050 relative to 60.9GW of peak demand in 2016. See tab 'Figure 3.2' of the spreadsheet '2017-fes-charts-v22.xlsx'.

¹⁷ Department of Energy and Climate Change (2011), 'Overarching National Policy Statement for Energy (EN-1)', July, para. 3.3.7.

¹⁸ National Audit Office, 'Nuclear power in the UK', p. 6.

¹⁹ National Audit Office (2016), 'Nuclear power in the UK', para. 1.6.

²⁰ National Audit Office (2016), 'Nuclear power in the UK', para. 1.6.

²¹ E3G (2015), 'G7 Coal phase out: United Kingdom', p. 19, https://www.e3g.org/docs/UK_G7_Analysis_October_2015_Final.pdf, accessed 15 January 2018.

2015, DECC announced plans to close all unabated coal-fired power stations by 2025.²² This planned course of action was reconfirmed in October 2017 in the Clean Growth Strategy,²³ and backed up by the government's response to the unabated coal closure consultation published in January 2018:

the majority of our remaining coal power stations will close (or invest to abate emissions) in the early 2020s, with around 1.5GW of unabated coal capacity likely to remain until 2025.²⁴

Given an installed coal capacity of 13.8GW as of 2017,²⁵ this represents an 89% reduction in current coal capacity by 2025, with the potential that almost all coal capacity will be closed by 2035.

- 2.16 Regarding nuclear, two Magnox power plants have closed since EN-1 was published—Oldbury in 2012 and Wylfa in 2015—resulting in a capacity loss of 1.4GW.²⁶ In addition, a significant amount of existing nuclear capacity is planned to be closed by 2030. According to the projections presented in the NAO's 'Nuclear Power in the UK' publication, only 3.6GW of existing nuclear capacity will remain operational in 2030.²⁷ More recent evidence from EDF shows that this figure is even lower—1.2GW,²⁸ which represents a 88% decrease in existing nuclear capacity. Figure 2.1 below illustrates the loss of existing nuclear generation capacity over time.

²² Department of Energy and Climate Change (2015), 'Amber Rudd's speech on a new direction for UK energy policy', November, <https://www.gov.uk/government/speeches/amber-rudds-speech-on-a-new-direction-for-uk-energy-policy>, accessed 3 January 2018.

²³ '[w]e confirm the Government's intention to phase out unabated coal generation by 2025'. See HM Government (2017), 'The Clean Growth Strategy', p. 99, para. 1, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/651916/BEIS_The_Clean_Growth_online_12.10.17.pdf.

²⁴ Department for Business, Energy and Industrial Strategy (2018), 'Implementing the end of unabated coal by 2025', p. 8, para. 21, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/672137/Government_Response_to_unabated_coal_consultation_and_statement_of_policy.pdf, accessed 15 January 2018.

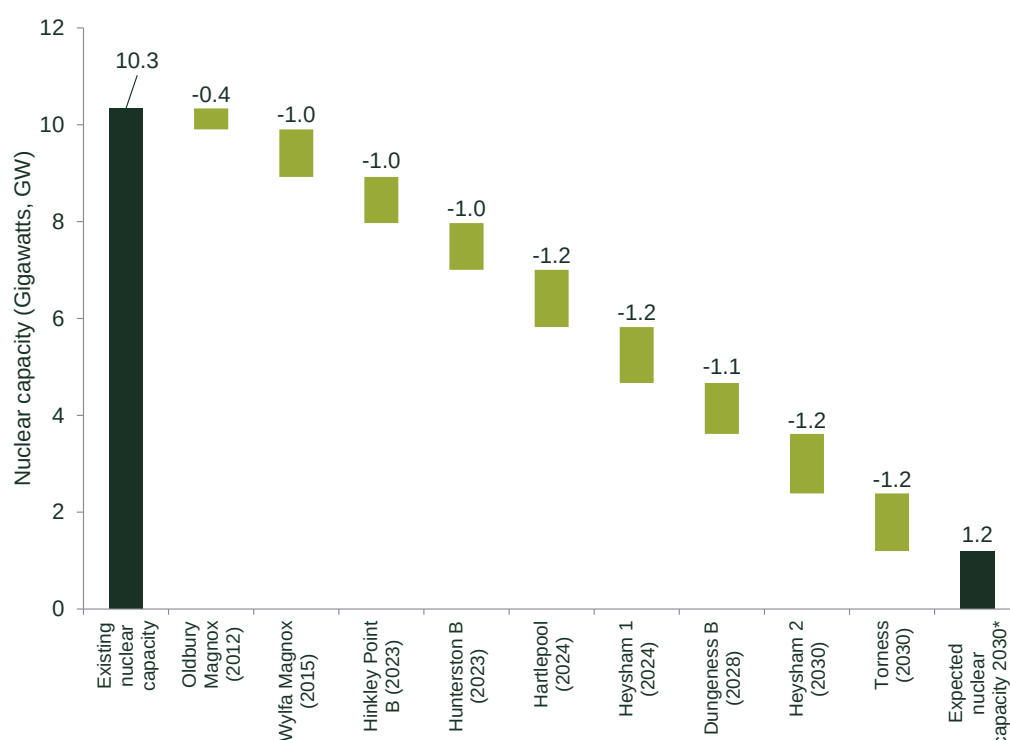
²⁵ Department for Business, Energy and Industrial Strategy (2018), 'The future of coal generation in Great Britain – impact assessment', p. 8, para. 13, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/671959/FINAL_updated_unabated_coal_Impact_Assessment_Jan_2018.pdf, accessed 15 January 2018.

²⁶ For the Oldbury closure date see UK government, 'Table of past and present UK nuclear reactors', https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/421705/Table_of_past_and_present_UK_nuclear_reactors.pdf, accessed 31 January 2018. For the Wylfa closure see BBC (2015), 'Wylfa: Last day for Anglesey nuclear plant', 30 December, <http://www.bbc.co.uk/news/uk-wales-north-west-wales-35158939>, accessed 1 February 2018.

²⁷ National Audit Office (2016), 'Nuclear power in the UK', Figure 3.

²⁸ Oxera analysis of EDF closure plans, <https://www.edfenergy.com/energy>, accessed 15 January 2018.

Figure 2.1 The loss of existing nuclear generation capacity



Note: * Assuming no new nuclear capacity comes online. Values in the chart are rounded to the nearest one decimal place and hence the expected nuclear capacity in 2030 will not be equal to the exact figure, if calculated based on the figures in the chart.

Source: Oxera analysis of EDF closure plans, <https://www.edfenergy.com/energy>, accessed 15 January 2018.

2.17 In essence, almost 90% of current coal and nuclear capacity—which together contribute almost 50% of UK’s current power needs—is expected to close by 2035.

2C Increasing demand but decreasing supply: the generation shortfall

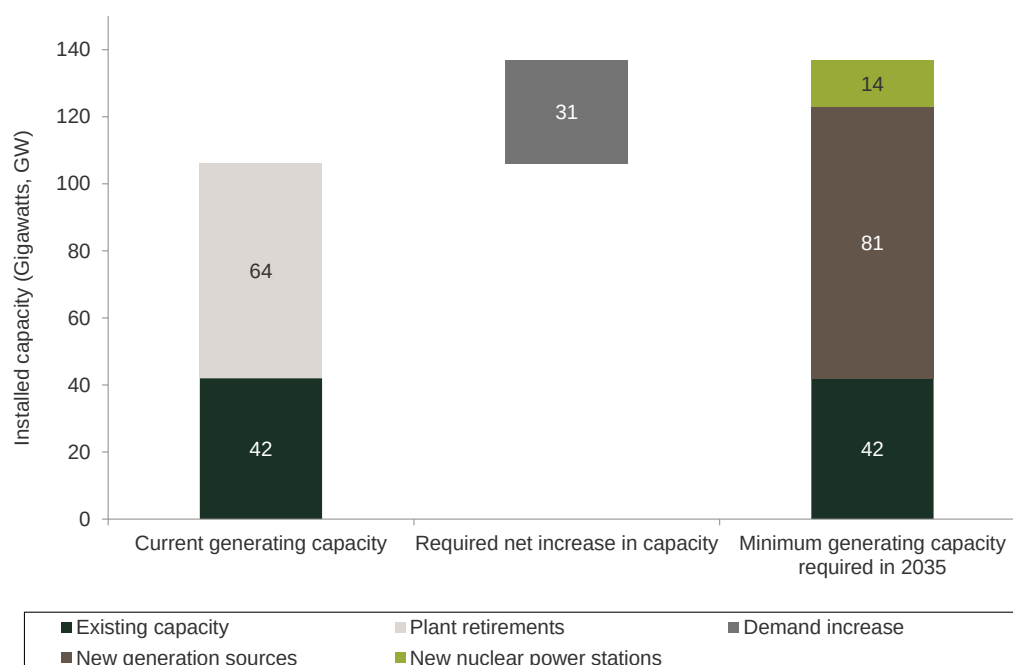
2.18 In addition to the fact that a significant amount of existing capacity is expected to retire, the expected increase in demand relative to existing capacity is sufficiently large to result in a shortage of generation capacity in the future unless substantial new low-carbon generation capacity, and particularly new nuclear generation capacity (as highlighted in section 2D), is developed in the 2020s.

2.19 As outlined in EN-1, reflecting (inter alia) the requirement to maintain security of supply while also meeting greenhouse gas emission commitments, the UK will require an additional 59GW of new build electricity capacity by 2025

relative to the 2011 baseline, which translates to at least 113GW of total electricity generating capacity.²⁹

- 2.20 Looking further to 2035, the NAO has specifically analysed the expected generation capacity shortfall arising from increased demand in the context of shrinking supply.³⁰ Figure 2.2 illustrates that, according to the NAO, at least 31GW of additional capacity over and above the existing resources is needed to meet the minimum generating capacity required in 2035. Given that 64GW of existing capacity is expected to retire, this adds up to a capacity requirement of at least 95GW by 2035, a sizeable proportion of the total 137GW of minimum generating capacity required in 2035.

Figure 2.2 National Audit Office on the UK's energy challenge until 2035



Source: National Audit Office, 'Nuclear power in the UK', p. 6.

- 2.21 The NAO notes that:

electricity demand may increase at the same time that a large proportion of existing generating capacity retires.³¹

- 2.22 In addition to the need for capacity resulting from the expected shortfall in electricity generation capacity, greater reliance on renewable, but intermittent, generating technologies such as wind and photovoltaics (PVs) in the future

²⁹ Department of Energy and Climate Change (2011), 'Overarching National Policy Statement for Energy (EN-1)', July, para. 3.3.22.

³⁰ National Audit Office (2016), 'Nuclear power in the UK', Figure 1.

³¹ National Audit Office (2016), 'Nuclear power in the UK', Figure 1.

means that total generating capacity may need to be even greater, to ensure that peak demand can always be met. EN-1 states:

if there was very strong electrification of energy demand and a high level of dependence on intermittent electricity generation, then the capacity of electricity generation could need to triple.³²

This point has also recently been noted by the NAO:

an increasing proportion of generation coming from intermittent sources such as wind and solar power [means that] the total generating capacity needs to be higher to ensure that there is sufficient capacity to meet demand.³³

- 2.23 In this context, and given that lost coal capacity will also need to be replaced by low-carbon sources, the importance of also developing substantial quantities of generation capacity from non-intermittent sources appears to be particularly high.
- 2.24 Overall, the combination of the expected increase in demand, retirement of capacity, and increased future reliance on intermittent generation creates significant need for new electricity generation infrastructure. Moreover, the need for new electricity generation capacity is on a large scale—95GW of new capacity by 2035 is equivalent to approximately 30 plants the size of Hinkley Point C.
- 2D There is an apparent absence of proven, low-carbon technologies that could provide credible alternatives to new nuclear generation and also be deployed at sufficient scale**
- 2.25 This sub-section discusses the lack of proven alternatives to new nuclear generation that can be deployed at the required scale to meet the capacity shortfall while remaining consistent with the government's commitment to decarbonisation and ensuring security of supply.
- 2.26 Table 2.1 below shows the median carbon emissions of the main generation technologies, as presented by the Intergovernmental Panel on Climate Change.³⁴

³² Department of Energy and Climate Change (2011), 'Overarching National Policy Statement for Energy (EN-1)', July, section 3.3.14.

³³ National Audit Office (2016), 'Nuclear power in the UK', p. 6.

³⁴ Data extracted from Working Group III Technical Support Unit (2014), 'Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change', p. 1335, https://www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_annex-iii.pdf, accessed 16 January 2018.

Table 2.1 Lifecycle emissions of different generating technologies

Technologies	Lifecycle emissions (Median gCO ₂ eq/kWh)
Wind onshore	11
Nuclear	12
Wind offshore	12
Hydropower	24
Concentrated solar power	27
Geothermal	38
Solar PV—rooftop	41
Solar PV—utility	48
Biomass—dedicated	230
Gas—combined cycle	490
Biomass—cofiring	740
Coal—pulverised coal	820

Source: Working Group III Technical Support Unit (2014), 'Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change', p. 1335.

- 2.27 As shown, nuclear and wind are comparable in terms of emissions, with median lifecycle emissions of 11–12gCO₂eq/kWh. Notably, the median emissions of nuclear are at least twice as low as those of hydropower or solar. Nuclear has significantly lower emissions than, for example, biomass and coal.
- 2.28 It is, however, far from clear how the technologies that are equivalently low-carbon to nuclear could, on their own, meet future energy needs. According to industry research by Bloomberg, weather conditions in the UK are such that solar could perhaps account for only 8% of the UK's generation by 2040.³⁵
- 2.29 Moreover, while wind speeds in the UK appear 'favourable',³⁶ the proportion of electricity demand that needs to be met by generation sources other than wind and solar by 2040 is still forecast to be as high as 50%.³⁷ The research also predicts that:

[e]ven in 2040, [there are] entire weeks and months where non-wind/solar generation meets 80% and 72% of demand respectively³⁸

with the implication that:

70GW of dispatchable resources (generation, storage, flexible demand, interconnectors) are needed in 2040 to meet peak demand during periods of low wind and solar generation.³⁹

³⁵ See Bloomberg New Energy Finance (2017), 'Beyond the tipping point', p. 2, <https://uk.eaton.com/content/content-beacon/RE-study/GB/home.html>, accessed 17 January 2018.

³⁶ Ibid., p. 2.

³⁷ Ibid., p. 2.

³⁸ Ibid., p. 4.

³⁹ Ibid., p. 4.

- 2.30 The NAO has recognised this issue and has drawn attention to the reliability of nuclear, stating that:

nuclear power is a 'firm' source of electricity that can be relied upon to deliver during periods of high demand, in contrast to wind and solar power which are intermittent.⁴⁰

- 2.31 The intermittency and unreliability of renewables therefore poses issues in terms of their adequacy and efficacy in bridging the capacity shortfall, even in the long term.⁴¹

- 2.32 In addition to the industry concerns mentioned above, academic research indicates that there is no significant evidence to support the notion of an electricity system that is 100% reliant on renewables. An extensive review of the literature on the feasibility of electricity systems that are 100% reliant on renewables finds that:

[t]here is a near total lack of historical evidence for the technical feasibility of 100% renewable-electricity systems operating at regional or larger scales. The only developed nation today with electricity from 100% renewable sources is Iceland, thanks to a unique endowment of shallow geothermal aquifers, abundant hydropower and a population of only 0.3 million people⁴² [emphasis added]

The paper reviews 24 studies in terms of four feasibility criteria,⁴³ and finds that:

none of the 100% renewable-electricity studies we [the authors] examined provided a convincing demonstration of feasibility⁴⁴

moreover:

[the] assessment of studies proposing 100% renewable-electricity systems reveals that in all individual cases and across the aggregated evidence, the case for feasibility is inadequate for the formation of responsible policy directed at responding to climate change⁴⁵

⁴⁰ National Audit Office (2017), 'Hinkley Point C', para. 2.7, <https://www.nao.org.uk/wp-content/uploads/2017/06/Hinkley-Point-C.pdf>, accessed 17 January 2018.

⁴¹ Ibid., p. 78.

⁴² Heard, B.P., Brook, B.W., Wigley, T.M.L. and Bradshaw, C.J.A. (2017), 'Burden of proof: a comprehensive review of the feasibility of 100% renewable-electricity systems', *Renewable and Sustainable Energy Reviews*, p. 1,123, <https://www.sciencedirect.com/science/article/pii/S1364032117304495>, accessed 11 January 2018.

⁴³ **Criterion 1:** the electricity demand to which supply will be matched must be projected realistically over the future time interval of interest; **Criterion 2:** the proposed supply of electricity must be simulated/calculated to be capable of meeting the real-time demand for electricity for any given year, together with additional back-up margin, to within regulated reliability limits, in all plausible climatic conditions; **Criterion 3:** any transmission requirements for newly installed capacity and/or growth in supply must be described and mapped to demonstrate delivery of generated electricity to the user network such that supply meets both projected demand and reliability standards; **Criterion 4:** the proposed system must show how critical ancillary services will be provided to ensure power quality and the reliable operation of the network, including distribution requirements. See Heard et al. (2017), op. cit., pp. 1123–1125.

⁴⁴ Ibid., p. 1125.

⁴⁵ Ibid., p. 1130.

- 2.33 Aside from the intermittency issue itself, it is unclear whether electricity storage represents a viable option for overcoming these issues. According to industry research by Bloomberg:

[b]atteries and flexible demand technologies are not currently able to shift energy across weeks or months, due to their economics and characteristics. Demand cannot be deferred for weeks, and the sheer scale (and cost) of batteries needed for seasonal storage would be prohibitive.⁴⁶

This implies that, at present, a combination of renewable electricity generation and batteries would be unable to provide adequate security of supply during periods of low generation available from intermittent renewable sources.

- 2.34 Overall the government recognises that:

there are technical and commercial barriers to deploying other technologies to produce the same annual generation as that of nuclear power⁴⁷

and:

[i]n order for large-scale solar and onshore wind to produce the same amount of electricity provided by [Hinkley Point C], there would be significant upgrades to the grid required (such as connection and planning costs) as well as increased costs to keep the system in balance.⁴⁸

2E The UK's obligations towards meeting emissions targets further accentuate the need for nuclear

- 2.35 As EN-1 stresses:

[f]or the UK to meet its energy and climate change objectives, the Government believes that there is an **urgent need** for new electricity generation plant, including new nuclear power.⁴⁹[emphasis added]

- 2.36 The urgent need for nuclear also features in industry research. Energy Research Partnership (ERP) has previously said that:

A significant amount of new zero carbon firm capacity is essential to decarbonisation but leading technologies such as nuclear and CCS require long lead times. Therefore meeting emissions targets for 2030 requires action today⁵⁰

- 2.37 In terms of the scale of need that the government believes necessary, EN-1 states that, of the 59GW of new electricity capacity required by 2025, relative

⁴⁶ Bloomberg New Energy Finance (2017), 'Beyond the tipping point', p. 78, <https://uk.eaton.com/content/content-beacon/RE-study/GB/home.html>, accessed 17 January 2018.

⁴⁷ Department for Business, Energy and Industrial Strategy (2017), 'Statement on Energy Infrastructure', <http://www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Lords/2017-12-07/HLWS316/>, accessed 10 January 2018.

⁴⁸ UK Government (2016), 'Hinkley Point C Value for Money', https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/556917/3_-_Value_for_Money_Assessment.pdf, accessed 16 January 2018.

⁴⁹ Department of Energy and Climate Change (2011), 'Overarching National Policy Statement for Energy (EN-1)', July, para. 3.5.1.

⁵⁰ Energy Research Partnership (2015), 'Managing flexibility whilst decarbonising the GB electricity system', August, p. 6.

to the 2011 baseline, 18GW is to come from new non-renewable sources, and specifically nuclear.⁵¹ Regarding this balance, the government has previously stated that it:

would like a significant proportion of this balance [capacity requirement] to be filled by new low carbon generation and believes that, in principle, **new nuclear power should be free to contribute as much as possible** towards meeting the need for around 18 GW of new non-renewable capacity by 2025⁵² [emphasis added]

- 2.38 The required scale of nuclear new build is also confirmed by ERP, which shows that 20GW–25GW of nuclear is required to meet the emission targets, even if UK’s National Renewable Energy Action Plan target for wind is met.⁵³
- 2.39 Recent evidence from National Grid corroborates the important role of new nuclear power in the future electricity system, and in meeting emissions targets in particular. In its ‘Future Energy Scenarios’ report, National Grid presents four very different scenarios for the future of the UK’s energy system, and states that:
- [n]ew nuclear build is required **in all scenarios**, and a gap is predicted between old plants being decommissioned and new nuclear stations beginning to generate⁵⁴ [emphasis added]
- 2.40 Moreover, National Grid’s analysis implies that the need for new nuclear generation is especially acute if the 2050 emissions targets are to be met. Its ‘Two Degrees’ scenario, the only scenario where the 2050 emissions targets are met, assumes 14.5GW of nuclear new build by 2035.⁵⁵ Since Hinkley Point C will provide only 3.2GW of capacity and all of the existing nuclear generation is expected to close by 2035,⁵⁶ a significant amount of new nuclear capacity is urgently needed to meet the 2050 emissions targets.
- 2.41 Moreover, the above-mentioned need for nuclear may prove to be even greater and more urgent if the potential delay and uncertainty in the development of other low-carbon technologies is considered. In particular, the ‘Two Degrees’ scenario assumes that 74GW of low-carbon generation will be available by

⁵¹ Department of Energy and Climate Change (2011), ‘Overarching National Policy Statement for Energy (EN-1)’, July, para. 3.3.22.

⁵² Department of Energy and Climate Change (2011), ‘Overarching National Policy Statement for Energy (EN-1)’, July, para. 3.3.22.

⁵³ Energy Research Partnership (2015), ‘Managing flexibility whilst decarbonising the GB electricity system’, August, p. 14.

⁵⁴ National Grid (2017), ‘Future Energy Scenarios’, July, p. 59, <http://fes.nationalgrid.com/media/1253/final-fes-2017-updated-interactive-pdf-44-amended.pdf>, accessed 9 January 2018.

⁵⁵ Ibid., p. 61.

⁵⁶ Department for Business, Energy and Industrial Strategy (2017), ‘Hinkley Point C’, <https://www.gov.uk/government/collections/hinkley-point-c>, accessed 16 January 2018.

2025.⁵⁷ However, a recent publication from HM Treasury indicates that only 48GW of low-carbon generation will be available by that date.⁵⁸ This implies a further 26GW gap in the required low-carbon capacity. Furthermore, even if all of the interconnector projects currently envisaged by Ofgem successfully start operations on time (reducing the need by c. 12GW), this would leave a further capacity gap equivalent to approximately four Hinkley Point C plants.⁵⁹

- 2.42 This finding is corroborated by projections produced by the Department of Energy and Climate Change for its '2050 pathways calculator', which reveal that, if new nuclear power plant is not installed, the UK is expected to miss its 2050 emissions targets by at least 3% and by up to 25%.⁶⁰ Indeed, the Committee on Climate Change (CCC) stated in January 2018 that current policies fall short of what is needed to meet the UK government's emission reduction commitments:

The Government has set out plans for the decarbonisation of UK power generation to below 100 gCO₂ per kWh by 2030 [...] there remains a gap to meeting the fourth and fifth carbon budgets, and new policies beyond those in the Clean Growth Strategy are required to close this gap.⁶¹

- 2.43 BEIS's Energy and Emissions Projections assume two to three new nuclear reactors commissioned between 2028 and 2032, in addition to the Hinkley Point C plant (which is currently expected to commence operation in 2025).
- 2.44 The scenarios considered by National Grid are summarised in Table 2.2 below.

⁵⁷ This includes biomass, CCS, hydro, marine, wind, solar and other renewable. It excludes interconnectors and nuclear for the purposes of comparability with the HM Treasury publication. See National Grid (2017), 'Future Energy Scenarios—Charts workbook', tab 'Figure 4.5', <http://fes.nationalgrid.com/media/1256/2017-fes-charts-v22.xlsx>, tab 'ES4', accessed 9 January 2018.

⁵⁸ The publication does not cover interconnectors and nuclear. See HM Treasury (2017), 'Control for low carbon levies', Table 1.B, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/660986/Control_for_Low_Carbon_Levies_web.pdf, accessed 2 February 2018.

⁵⁹ Ofgem, electricity interconnectors, <https://www.ofgem.gov.uk/electricity/transmission-networks/electricity-interconnectors>, accessed 2 February 2018.

⁶⁰ Department of Energy and Climate Change (2013), '2050 Pathways', January, <https://www.gov.uk/guidance/2050-pathways-analysis>, accessed 9 January 2018. Navigate to 'Control' tab. To obtain the lower end of the range, copy the values from cells T5:T57 into cells E5:E57 (i.e. select the 'Higher CCS, more bioenergy' scenario). Change the value of cell E5 to 1 (this corresponds to the scenario where no new nuclear power is installed). Click F9 to recalculate the model. The projected reduction in the greenhouse gas emission is reported in cell E43 of the 'GHG' tab. For the 'Higher CCS, more bioenergy' scenario this amounts to 77%, which implies that the target is missed by 3%. Repeating the exercise for the 'Higher nuclear, less energy efficiency' scenario (cells S5:S57 in the 'Control' tab) yields the projected emissions reduction of 55%, which implies that the target is missed by 25%.

⁶¹ Committee on Climate Change (2018), 'An independent assessment of UKs clean growth strategy', January, pp. 11, 16, 60, <https://www.theccc.org.uk/wp-content/uploads/2018/01/CCC-Independent-Assessment-of-UKs-Clean-Growth-Strategy-2018.pdf>, accessed 2 February 2018.

Table 2.2 National Grid ‘Future Energy Scenarios’ summary

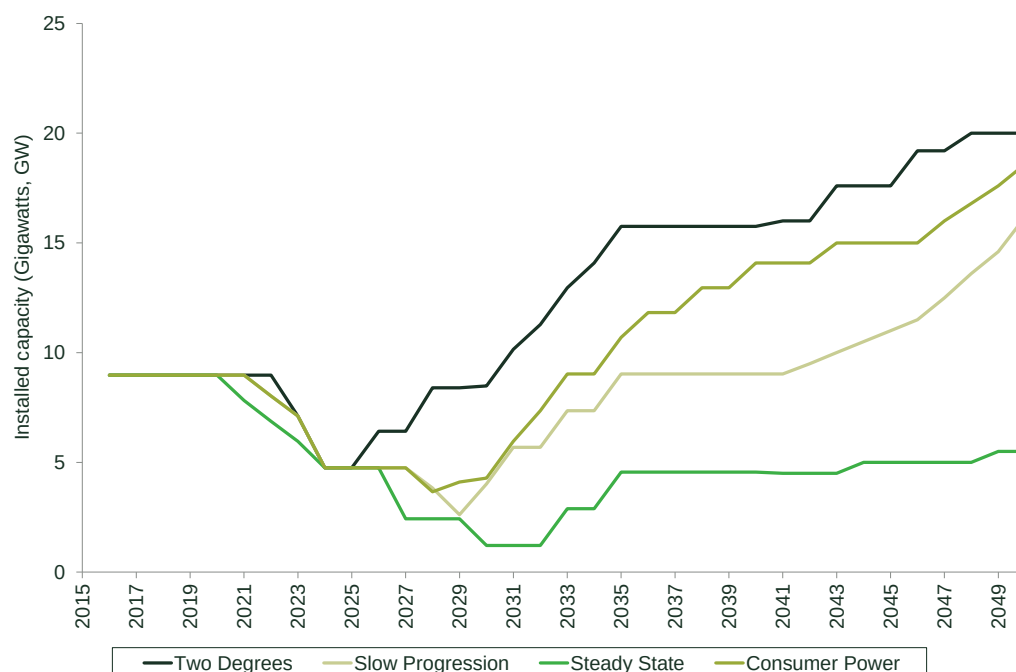
Scenario	Political	Economic	Social	Technological	Environmental
Steady State	Short-term policies focused on security of supply and affordability	Lowest growth rate	Society focused on short-term savings	Low-risk innovation maximising short-term value, leading to gas being the preferred choice for generating and heating	Reduced low-carbon policy support
Slow Progression	Focus on cost-efficient long-term environmental energy policies	Low growth rate	Society engaged in ‘going green’ but choices limited by cost	Medium levels of innovation	Policy interventions constrained by affordability
Consumer Power	Localism and reduced UK government intervention	High growth rate	Consumerism and lifestyle-comfort-driven behaviour	High innovation and market-led investment in R&D	Carbon and renewables ambition more relaxed
Two Degrees	Highly effective policy intervention with long-term environmental energy policy certainty	Highest growth rate	Society actively engaged with reducing carbon and mitigating climate change	High levels of R&D with a focus on low-carbon technology	All carbon budgets and 2050 targets met

Source: Oxera analysis of National Grid (2017), ‘Scenario Framework’.

2.45 Accordingly, the volume of nuclear installed capacity as projected by National Grid under each scenario is presented in Figure 2.3.⁶²

⁶² National Grid (2017), ‘Future Energy Scenarios—Charts workbook’, tab ‘Figure 4.5’, <http://fes.nationalgrid.com/media/1256/2017-fes-charts-v22.xlsx>, accessed 9 January 2018.

Figure 2.3 Nuclear installed capacity requirements projected by National Grid



Source: National Grid (2017), 'Future Energy Scenarios'.

2F Conclusion—there is an urgent need for new nuclear plant

- 2.46 So far it has been demonstrated that BEIS, the NAO and National Grid all expect electricity demand to increase. In particular, BEIS forecasts that electricity demand will increase by c. 20% by 2035.⁶³
- 2.47 It has also been noted that a significant amount of electricity capacity is set to be retired over the next two decades, including almost 90% of existing nuclear capacity and coal capacity.⁶⁴

⁶³ See Department for Business, Energy and Industrial Strategy (2018), 'Updated energy and emissions projections 2017', pp. 7 and 9, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/671187/Updated_energy_and_emissions_projections_2017.pdf, accessed 18 January 2018. Tab 'Reference scenario' in Annex F shows that final consumption of electricity amounts to 26,370ktoe and 31,539ktoe in 2017 and 2035 respectively. The resulting increase therefore amounts to 20% ($100 \cdot (31,539/26,370) - 100$).

⁶⁴ See Department for Business, Energy and Industrial Strategy (2018), 'Implementing the end of unabated coal by 2025', para. 21, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/672137/Government_Response_to_unabated_coal_consultation_and_statement_of_policy.pdf, accessed 15 January 2018, p. 8; and Department for Business, Energy and Industrial Strategy (2018), 'The future of coal generation in Great Britain – Impact assessment', p. 8, para. 13, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/671959/FINAL_updated_unabated_coal_Impact_Assessment_Jan_2018.pdf, accessed 15 January 2018.

- 2.48 It is therefore forecast that there will be a generation shortfall which, according to the NAO, will amount to 95GW by 2035 (i.e. 70% of the UK's forecast energy needs in 2035).⁶⁵
- 2.49 The prospect of all or a significant proportion of this shortfall being met by wind and solar alone is highly unlikely given that the industry estimates that by 2040, at least 50% (and up to 80% at certain times of the year) of the UK's energy needs will still be supplied by sources other than wind and solar.⁶⁶ This apparent lack of proven low-carbon alternatives to new nuclear that can be deployed at sufficient scale, in combination with the UK's binding emissions targets, highlights the urgent need for new nuclear plants.
- 2.50 To reemphasise, the previous needs case as identified in EN-1, which stated that nuclear power generation is:

anticipated to play an increasingly important role as we move to diversify and decarbonise our sources of electricity⁶⁷

continues to remain relevant, something that has recently been confirmed in BEIS's Statement on Energy Infrastructure made on 7 December 2017:

[m]y Department's annual updated energy and emissions projections state that by 2035 overall demand for electricity is expected to have increased. Therefore, with a number of the existing coal and nuclear fleet due to close by 2030, **new nuclear power generation remains key to meeting our 2050 obligations** [...] Government has noted previously that there are technical and commercial barriers to deploying other technologies to produce the same annual generation as that of nuclear power [emphasis added]⁶⁸

with BEIS concluding that:

[t]he Government believes that it is important that there is a strong pipeline of new nuclear power to contribute to the UK's future energy system.⁶⁹

- 2.51 In further support of this position is the recent National Policy Statement consultation, which states:

[t]he Government's view is that the assessment of the need for new electricity generation carried out to support EN-1 remains valuable and continues to be relevant. Currently all but one of the existing fleet of nuclear reactors are due to cease generating before 2030, so the need for new nuclear power remains

⁶⁵ National Audit Office (2016), 'Nuclear power in the UK', Figure 1.

⁶⁶ See Bloomberg New Energy Finance (2017), 'Beyond the tipping point', p. 2, <https://uk.eaton.com/content/content-beacon/RE-study/GB/home.html>, accessed 17 January 2018.

⁶⁷ Ibid.; Department of Energy and Climate Change (2011), 'Overarching National Policy Statement for Energy (EN-1)', July, para. 3.5.1.

⁶⁸ Department for Business, Energy and Industrial Strategy (2017), 'Statement on Energy Infrastructure', <http://www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Commons/2017-12-07/HWS322/>, accessed 10 January 2018.

⁶⁹ Department for Business, Energy and Industrial Strategy (2017), 'Statement on Energy Infrastructure', <http://www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Lords/2017-12-07/HWS316/>, accessed 10 January 2018.

significant [...] it is important that there is a strong pipeline of new nuclear power to contribute to the UK's energy mix and security of supply in the future.⁷⁰

- 2.52 This section has presented evidence for the continued need for new nuclear power to deliver the UK's energy requirements to 2025 and beyond. Moreover, the significant lead time required to successfully deliver new nuclear plants combined with the 2030 'policy gap' identified by the CCC generation makes this need urgent.⁷¹

⁷⁰ Department for Business, Energy and Industrial Strategy (2017), 'Consultation on the siting criteria and process for a new National Policy Statement for nuclear power with single reactor capacity over 1 gigawatt beyond 2025', December, para. 1.7, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/666057/061217_FINAL_NPS_Siting_Consultation_Document-1.pdf, accessed 31 January 2018.

⁷¹ In particular, EN-1 states that '[e]nergy NSIPs [Nationally Significant Infrastructure Projects] take a long time to move from design conception to operation and they are generally designed to operate for 30 to 60 years [...] [a] failure to decarbonise and diversify our energy sources now could result in the UK becoming locked into a system of high carbon generation, which would make it very difficult and expensive to meet our 2050 carbon reduction target. We cannot afford for this to happen.' See Department of Energy and Climate Change (2011), 'Overarching National Policy Statement for Energy (EN-1)', July, para. 3.3.16.

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