national**grid**

T 7.14

Planning Statement

National Grid (North Wales Connection Project)



national**grid**

North Wales Connection Project Volume 7 Document 7.14 Planning Statement

i

National Grid National Grid House Warwick Technology Park Gallows Hill Warwick CV34 6DA

North Wales Connection Project

Page intentionally blank

Document Control				
Document Properties				
Organisation		AECOM		
Author		Nicole Walsh / Jane Knowles		
Approved by		Nigel Pilkington		
Title		Planning Statement		
Document Reference		7.14		
Version His	Version History			
Date	Version	Status	Description/Changes	
September 2018	Rev A	Final	Final for submission	

Page intentionally blank

Executive Summary

- 1 This Planning Statement has been prepared to accompany an application by National Grid Electricity Transmission (plc) (National Grid) for a Development Consent Order (DCO) under Section 37 of the Planning Act 2008 (the Act), for a new 400,000 kilovolt (400 kV) electricity transmission connection between the existing 400 kV substation at Wylfa on Anglesey and the existing electricity transmission network at Pentir Substation in Gwynedd to facilitate the export of power from the proposed Wylfa Newydd Power Station. This connection is known as the North Wales Connection Project (the Proposed Development).
- 2 The Proposed Development is situated in North Wales, and crosses the administrative boundaries of the Isle of Anglesey County Council and Gwynedd Council.
- 3 The Proposed Development has been developed in an iterative manner to identify the most appropriate means of connection and route corridor between Wylfa Substation and Pentir Substation. The Proposed Development includes a range of mitigation measures, including mitigation by design, control and management measures and other mitigation measures that seek to eliminate or reduce significant adverse effects associated with its construction, operation, maintenance and decommissioning.
- 4 The purpose of this Planning Statement is to consider the compliance of the Proposed Development with relevant planning policies, primarily National Policy Statements. To this extent, an assessment has been made against the Overarching National Policy Statement for Energy (EN-1) and the National Policy Statement for Energy Networks Infrastructure (EN-5).
- 5 The assessment demonstrates that the Proposed Development has been designed, and mitigation measures identified and secured, in accordance with the requirements of both EN-1 and EN-5.
- 6 An assessment has also been made against national and regional planning policies specific to Wales, as well as local development plan policies set by the Isle of Anglesey County Council and Gwynedd Council that are considered to be of relevance to the Proposed Development. The Proposed Development is compliant with the majority of local planning policies, and where it is not fully compliant, this is considered to be outweighed by the

benefits of the Proposed Development, and its importance in helping to support national planning policy objectives.

7 The Planning Act 2008 requires that an application for a Development Consent Order (DCO) should be decided in accordance with the relevant NPS, except where certain legal tests would be infringed (which is not the case for this development), or the 'adverse impacts of the project would outweigh its benefits'. This Planning Statement has concluded that the Proposed Development accords with the NPS.

Contents

1	Introduction	1
1.1	Purpose of the Planning Statement	1
1.2	Structure of the Planning Statement	2
2	Background	4
2.1	Need for the Proposed Development	4
2.2	The Applicant	5
2.3	Summary of the Proposed Development	5
2.4	Consents Required For The Development	6
2.5	Statements of Common Ground	6
2.6	The Application Documents	7
3	The Proposed Development	13
3.1	Introduction	13
3.2	The Proposed Development	13
3.3	Overhead Line	14
3.4	Tunnel	17
3.5	Substations	19
3.6	Design Mitigation Measures	19
3.7	Controls	20
4	Approach to New Electricity Transmission	22
4.1	Introduction	22
4.2	Statutory Duties	22
4.3	Approach to the Design and Routeing of New Electricity Transmission Lir	nes 23
4.4	Summary	36
5	National Policy Statements EN-1 and EN-5	40
5.1	Introduction	40
5.2	National Policy Statements	40
5.3	Compliance with National Policy Statement EN-1 and EN-5	47
5.4	Summary	177
6	Welsh National Planning Policy	178
6.1	Introduction	178
6.2	Introduction to Welsh National Planning Policy	178
6.3	Welsh National Planning Policy	181
6.4	Technical Advice Notes	181

6.5	Summary	204
7	Local Planning Policy	205
7.1	Introduction	205
7.2	Context	205
7.3	Local Policy	205
7.4	Consideration of Local Planning Policy	206
7.5	Summary	285
8	Summary, and Planning Balance	286
9	References	288

TABLES:

Table 1: Application Documents	7
Table 2: Summary of the OHL Element of the Proposed Development	16
Table 3: Supporting Documents	38
Table 4: Compliance with NPS EN-1	48
Table 5: Compliance with NPS EN-5	150
Table 6: Proposed revisions to PPW relevant to the Proposed Developmoutlined in the Consultation Report	ient 180
Table 7: Compliance with Welsh National Planning Policy	182
Table 8: Compliance with Technical Advice Notes (TAN)	189
Table 9: JLDP for Anglesey and Gwynedd Planning Policies	207
Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidanc	e 258

ii

1 Introduction

1.1 PURPOSE OF THE PLANNING STATEMENT

- 1.1.1 This Planning Statement has been prepared by National Grid Electricity Transmission (plc) (National Grid) to accompany a Development Consent Order (DCO) application to construct, operate and maintain a new 400,000 kilovolt (kV) electricity transmission connection between Wylfa Substation and Pentir Substation, together with various associated developments and other works ('The Proposed Development').
- 1.1.2 Part of the Proposed Development comprises an 'electric line above ground' as defined within Section 16 of the Planning Act 2008 as a Nationally Significant Infrastructure Project (NSIP) for the purposes of that Act. Under Section 31 of the Planning Act 2008, development consent is required for development to the extent that it is or forms part of an NSIP. Development consent is granted by the making of a DCO for which an application is made under Section 37 of the Planning Act 2008.
- 1.1.3 The purpose of this Planning Statement is primarily to consider the compliance of the Proposed Development as a whole with national policy as set out in National Policy Statements. It also presents information about relevant Welsh and local land use and planning policies. The planning system plays a key role in protecting and improving the natural and built environment, public health and safety, and amenity. This document summarises national and local planning policies, and related guidance documents that are relevant to the Proposed Development.
- 1.1.4 This Planning Statement has been prepared in compliance with the requirements of Regulation 5(2)(q) of the Infrastructure Planning Regulations (Applications: Prescribed Forms and Procedures Regulations 2009 (The APFP Regulations)) and in accordance with the Department for Communities and Local Government (DCLG) guidance 'Planning Act 2008: Application Form Guidance (Ref.1) and Planning Inspectorate Advice Note 6 (Ref.2) Preparation and Submission of Application Documents.
- 1.1.5 The APFP Regulations do not specifically require a Planning Statement to accompany an application for a DCO. However, National Grid considers that a Planning Statement would assist both the Planning Inspectorate (PINS) in examining this DCO application, and the Secretary of State (SoS) in

determining the application, by setting out relevant policies and their requirements together in one statement.

1.1.6 This Planning Statement addresses the planning issues raised by the application and considers project-wide issues within its scope. It describes the planning policy context and reviews the planning issues raised by the Proposed Development in light of National Policy Statement (NPS) EN-1 (Ref.3), EN-5 (Ref.4), national policy specific to Wales in the form of Planning Policy Wales (edition 9) and the Joint Local Development Plan for Isle of Anglesey County Council and Gwynedd Council. The New Nuclear Build at Wylfa: Supplementary Planning Guidance has also been considered, though it is primarily directed at the 'Wylfa New Nuclear Build project promoter' (Horizon Nuclear Power).

1.2 STRUCTURE OF THE PLANNING STATEMENT

- 1.2.1 The Planning Statement is structured as follows:
 - Section 2: Background provides a description of the need for the Proposed Development, an overview of the applicant, summary of the Proposed Development, consents required and a summary of the application documents;
 - Section 3: The Proposed Development provides an overview of the different elements which form the Proposed Development. This includes the overhead line (OHL), tunnel, works at the substations, Order Limits, limits of deviation (LOD) and control measures
 - Section 4: Approach to New Electricity Transmission summarises the design rationale for the Proposed Development, setting out the design evolution and approach and explaining how the design choices have sought to minimise the potential effects arising from the Proposed Development;
 - Section 5: National Policy Statements provides a summary and analysis of the Proposed Development against NPS EN-1 and EN-5;
 - Section 6: National Planning Policy provides a summary and analysis of the Proposed Development against Welsh Planning Advice and Policies, this includes the Planning (Wales) Act, Wales Spatial Plan, Planning Policy Wales and Technical Advice Notes;
 - Section 7: Local Planning Policy provides a summary and analysis of the Proposed Development against the Joint Local Development Plan (Anglesey and Gwynedd) and New Nuclear Build at Wylfa Supplementary Planning Guidance

• Section 8: Conclusion – provides an overview of how the Proposed Development is in accordance with relevant guidance documents and planning policies.

2 Background

2.1 NEED FOR THE PROPOSED DEVELOPMENT

- 2.1.1 The UK is facing a major challenge to meet projected energy needs over the coming decades, whilst at the same time tackling climate change. A significant challenge for National Grid and the UK energy industry is to deliver low carbon energy in an affordable, secure and sustainable way.
- 2.1.2 The majority of electricity is currently generated by burning gas or coal, or by the use of nuclear power stations or renewable generation such as solar and wind. However, there is potential for around 20 per cent of generating capacity to be removed from the electricity transmission network by 2020, as a proportion of existing power stations close because they have reached the end of their operating lives or are unable to meet the requirements of climate change legislation. This means that a major investment in new electricity generation is needed to replace power stations due for closure and to meet future energy demand.
- 2.1.3 Under the Climate Change Act 2008 (Ref.5), the UK government is committed to reducing carbon dioxide (CO₂) emissions to at least 80% of 1990 levels by 2050.
- 2.1.4 The UK energy market therefore needs to generate and supply electricity from renewable sources such as wind power, and also from nuclear power, to help tackle climate change and enable the country to meet its national and international obligations. The introduction of new wind and nuclear power generation over the next few years will require the reinforcement and extension of the existing electricity transmission system.
- 2.1.5 National Grid has a statutory duty to promote competition in the supply of electricity and is obliged to offer a connection to the system to anyone who applies for a connection.
- 2.1.6 Horizon Nuclear Power (HNP) has applied to National Grid to connect their proposed new nuclear power station to the national system at Wylfa, Anglesey (referred to hereafter as Wylfa Newydd Power Station). The proposed Wylfa Newydd Power Station would be within a site already identified for this type of development in the UK Government's NPS EN-6 'Nuclear Power Generation' (Ref.6).

2.1.7 National Grid owns and operates an existing substation at Wylfa, to which the proposed Wylfa Newydd Power Station would connect. This substation is connected to the main transmission system on the mainland in North Wales by a 400 kV overhead electricity line, connecting at the existing National Grid substation at Pentir, in Gwynedd. To provide reliable electricity supplies, National Grid cannot allow more than 1,800 mega-watts (MW) of power generation to be connected by any single overhead line (OHL). As the HNP proposal would exceed this, a second connection is required between Wylfa and the transmission system on the mainland. Project Need Case (**Document 7.1**) details further the need for this second connection.

2.2 THE APPLICANT

- 2.2.1 National Grid operates the electricity transmission system in Great Britain and owns the system in England and Wales. The system operates at 400 kV and 275 kV, connecting electricity generators to substations where the higher voltages are transformed to lower voltages, enabling the power to be distributed to homes and businesses by the Distribution Network Operators (DNOs).
- 2.2.2 National Grid is the only company licensed to transmit electricity in England and Wales. National Grid's Transmission Licence was granted under the Electricity Act 1989, Section 6 (1) (b).
- 2.2.3 Under Section 9 of the Electricity Act 1989 (Ref.7) National Grid is required, in this capacity, to develop and maintain an efficient, coordinated and economical system of electricity transmission and to facilitate competition in the supply and generation of electricity.

2.3 SUMMARY OF THE PROPOSED DEVELOPMENT

- 2.3.1 The Proposed Development has been applied for by National Grid to develop a new 400 kV connection between the existing 400 kV Wylfa Substation on Anglesey and Pentir Substation in Gwynedd. This would facilitate the export of power from the proposed Wylfa Newydd Power Station. The Proposed Development in its entirety is known as The North Wales Connection Project.
- 2.3.2 The Proposed Development consists of the following principal components:
 - modifications to the existing substation at Wylfa;
 - section of new 400 kV OHL between Wylfa Substation and Braint Tunnel Head House (THH) and Cable Sealing End Compound (CSEC) on Anglesey including modifications to parts of the existing 400 kV OHL between Wylfa and Pentir;

- Braint THH and CSEC, including a permanent access track;
- a tunnel (containing 400 kV cables) between Braint and Tŷ Fodol THHs;
- Tŷ Fodol THH and CSEC including a permanent access track;
- a new section of OHL connection between Tŷ Fodol THH and CSEC and Pentir Substation;
- an extension to the existing substation at Pentir; and
- temporary construction compounds, access tracks, construction working areas and third party works that are required to construct the infrastructure listed above.

2.4 CONSENTS REQUIRED FOR THE DEVELOPMENT

- 2.4.1 Sections 14 and 31 of the Planning Act 2008 state that a project that 'is or forms part of' an electric line installed above ground with a nominal voltage greater than or equal to 132 kV and greater than 2 kilometres (km) in length requires an application for a DCO (subject to certain other exceptions pursuant to Section 16 of the Planning Act 2008), to be determined by the SoS in accordance with the requirements of The Planning Act 2008. As a result, an application for a DCO under Section 37 of the Planning Act has been made.
- 2.4.2 Albeit the DCO is the primary consent there may be a need for other consents or licences which need to be applied for outside of the DCO. Details of these are included in Details of Other Consents and Licences (**Document 7.15**.
- 2.4.3 In all other cases, National Grid is in discussion with relevant authorities, seeking to agree the principles against which applications for the consents, licences, and permits should be considered, in order that all relevant issues may be explored during the examination of its application for development consent.

2.5 STATEMENTS OF COMMON GROUND

2.5.1 In accordance with guidance published by the (former) Department of Communities and Local Government (DCLG) (Ref.8), National Grid has been developing Statements of Common Ground (SoCG) with a number of statutory consultees, statutory undertakers and interested parties during the pre-application stage. The SoCGs seek to identify matters upon which parties agree and to track progress towards the resolution of any matters where agreement has not yet been reached.

2.5.2 National Grid will continue to review and update the SoCGs throughout the acceptance, pre-examination and examination stages. Draft SoCGs will be submitted to the Examining Authority as required during the examination.

2.6 THE APPLICATION DOCUMENTS

2.6.1 Documentation submitted with the DCO application meets the requirements of the APFP Regulations. Table 1 provides a summary of all the documents submitted.

Table 1: Application Documents				
Document Reference	Document Name			
Volume 1: Ap	Volume 1: Application Information			
1.1	Navigation Document			
1.2	Application Letter and s55 Acceptance of Applications Checklist			
1.3	Application Form			
1.4	Glossary			
1.5	Guide to the Application			
1.6	PINs Electronic Application Index			
1.7	Order Limits electronic shapefile			
Volume 2: Dr	aft Development Consent Order			
2.1	Draft Development Consent Order			
2.2	Draft Explanatory Memorandum			
Volume 3: Co	Volume 3: Compulsory Acquisition Information			
3.1	Statement of Reasons			
3.2	Funding Statement			
3.3	Book of Reference			
Volume 4: Plans				
4.0.1	Overall Location Plan			

Table 1: Application Documents			
Document Reference	Document Name		
4.0.2	Master Key Plans		
4.0.3	Key Plan		
4.1	Land Affected Plans		
4.2	Land Plans		
4.3	Crown and Special Category Land Plan		
4.4	Works Plans		
4.5	Access and Rights of Way Plans		
4.6	Other Environmental Features Plan		
4.7	Statutory or Non-statutory Sites or Features Of Nature Conservation, Habitats and Water Bodies Plans		
4.8	Habitats of Protected Species, Important Habitats or Other Diversity Features		
4.9	CONFIDENTIAL: Habitats of Protected Species: Location of Badger Setts Plans		
4.10	Statutory or Non-Statutory Sites or Features of the Historic Environment Plan		
4.11	Trees and Hedgerows Potentially Affected Plans		
4.12	Traffic Regulation Order Plans		
4.13	Design Drawings		
4.14	Plans Guidance Document		
Volume 5: Environmental Information			
5.0	Environmental Statement - Non Technical Summary		
5.1	Chapter 1: Introduction		
5.2	Chapter 2: Alternatives, Project History and Non Statutory Consultation		

Table 1: Application Documents			
Document Reference	Document Name		
5.3	Chapter 3: Description of the Proposed Development		
5.4	Chapter 4: Construction, Operation, Maintenance and Decommissioning of the Proposed Development		
5.5	Chapter 5: EIA Consultation		
5.6	Chapter 6: EIA Methodology and Basis of Assessment		
5.7	Chapter 7: Landscape Assessment		
5.8	Chapter 8: Visual Assessment		
5.9	Chapter 9: Ecology and Nature Conservation		
5.10	Chapter 10: Historic Environment		
5.11	Chapter 11: Geology, Hydrogeology and Ground Conditions		
5.12	Chapter 12: Water Quality, Resources and Flood Risk		
5.13	Chapter 13: Traffic and Transport		
5.14	Chapter 14: Air Quality		
5.15	Chapter 15: Construction Noise and Vibration		
5.16	Chapter 16: Operational Noise		
5.17	Chapter 17: Socio-Economics		
5.18	Chapter 18: Agriculture		
5.19	Chapter 19: Intra-Project Effects		
5.20	Chapter 20: Inter-Project Effects		
5.21	Chapter 21: Statement of the Combined Effects with the Wider Works		
5.22	Summary of Residual Effects		

Habitat Regulations Assessment Report

Statement of Statutory Nuisance

5.23

5.24

Table 1: Application Documents			
Document Reference	Document Name		
5.25	Electric and Magnetic Fields Report		
5.26	Welsh Language Impact Assessment		
5.27	Well-being Report		
5.28	Schedule of Mitigation		
5.29	Photomontages		
5.30	Arboricultural Assessment		
Volume 6: Co	onsultation Report		
6.1	Consultation Report		
6.2	Consultation Report Appendices		
Volume 7: Ot	her Reports		
7.1	Project Need Case		
7.2	Strategic Options Report		
7.3	History of the Project		
7.4	Construction Environmental Management Plan		
7.5	Outline Construction Traffic Management Plan		
7.6	Public Rights of Way Management Plan		
7.7	Biodiversity Mitigation Strategy		
7.8	Archaeological Strategy		
7.9	Noise & Vibration Management Plan		
7.10	Outline Soil Management Plan		
7.11	Outline Waste Management Plan		
7.12	Outline Materials Management Plan		
7.13	Enhancement Strategy		

Table 1: Application Documents			
Document Reference	Document Name		
7.14	Planning Statement		
7.15	Details of Other Consents and Licences		
7.16	Design and Access Statement		
7.17	Design Report		
7.18	Back Check of Wylfa-Pentir Design Decisions		
7.19	Design Guide		
Volume 8: Welsh Translation			
8.1	Navigation Document		
8.2	Draft Explanatory Memorandum		
8.3	Statement of Reasons		
8.4	Funding Statement		
8.5	Plans Guidance Document		
8.6	Environmental Statement - Non Technical Summary		
8.7	Welsh Language Impact Assessment		
8.8	Consultation Report		
8.9	Planning Statement		
8.10	Design Report		
8.11	History of the Project		
Volume 9: Reference Documents			
9.1	Wylfa to Pentir Overhead Electricity Transmission Line – Route Corridor Identification Report (Oct 2012)		
9.2	Wylfa to Pentir Preferred Route Corridor Selection Report (Oct 2015)		
9.3	Wylfa to Pentir Route Options Report (Oct 2015)		

Table 1: Application Documents			
Document Reference	Document Name		
9.4	Preferred Route Option Selection Report Wylfa to the Menai Crossing Area (Sep 2016)		
9.5	Draft Route Alignment Report Wylfa to the Menai Crossing Area (Sep 2016)		
9.6	Menai Strait Crossing Report (Sep 2016)		
9.7.1	Historic Need Case 2012		
9.7.2	Historic Need Case 2015		
9.7.3	Historic Need Case 2016		
9.8.1	Historic Strategic Options Report 2012		
9.8.2	Historic Strategic Options Report 2015		
9.8.3	Historic Strategic Options Report 2016		

3 The Proposed Development

3.1 INTRODUCTION

3.1.1 This section provides an overview of the Proposed Development. A full description of the Proposed Development has been provided in ES Chapter 3, Description of the Proposed Development (**Document 5.3**) and Chapter 4, Construction, Operation, Maintenance and Decommissioning of the Proposed Development (**Document 5.4**) submitted as part of the DCO application.

3.2 THE PROPOSED DEVELOPMENT

- 3.2.1 The Proposed Development is located in north-west Wales and crosses the administrative boundaries of the Isle of Anglesey County Council and Gwynedd Council. The location of the Proposed Development is illustrated on Figure 1 (**Document 7.14.1.1**).
- 3.2.2 Sections have been identified along the route of the Proposed Development. The Sections are illustrated on Figure 2 (**Document 7.14.1.2**) and comprise:
 - Section A Wylfa to Rhosgoch;
 - Section B Rhosgoch to Llandyfrydog;
 - Section C Llandyfrydog to B5110 north of Talwrn;
 - Section D B5110 north of Talwrn to Ceint;
 - Section E Ceint to the Afon Braint; and
 - Section F Afon Braint to Pentir.
- 3.2.3 The Proposed Development would provide a new 400 kV connection between the existing substations at Wylfa and Pentir and includes the following principal components:
 - modifications to the existing substation at Wylfa;
 - sections of new 400 kV OHL between Wylfa Substation and Braint THH and CSEC on Anglesey including modifications to parts of the existing 400 kV OHL between Wylfa and Pentir;
 - Braint THH and CSEC on Anglesey;
 - tunnel including 400kV cables between Braint and Tŷ Fodol THHs;

- Tŷ Fodol THH and CESC in Gwynedd;
- new section of 400 kV OHL between Tŷ Fodol THH and CSEC and Pentir Substation;
- extension to the existing substation at Pentir; and
- temporary construction compounds, access tracks, construction working areas, localised widening of the public highway and third party works that are required to construct the infrastructure listed above.

3.3 OVERHEAD LINE

- 3.3.1 The proposed 400 kV connection would be achieved through the construction of approximately 35 km of new 400 kV OHL between Wylfa Substation on the north coast of Anglesey to Braint THH and CSEC to the south-west of Llanfairpwll. The connection would then be placed in a tunnel for approximately 4 km to Tŷ Fodol THH and CSEC south of A4087 in north-west Gwynedd. There would then be a further approximate 1.8 km section of new 400 kV OHL from Tŷ Fodol THH and CSEC to Pentir Substation.
- 3.3.2 Where practicable the new 400 kV OHL parallels the existing 400 kV OHL. A summary of the justification for the routeing of the Proposed Development is contained within the Design Report (**Document 7.17**).
- 3.3.3 In order to ensure the proposed OHL runs parallel to the existing OHL, some sections of the existing 400 kV OHL would need to be dismantled and re-built. Therefore, the Proposed Development also includes approximately 3 km of new parallel 400 kV OHL in two sections. Figure 3 (Document 7.14.1.3) illustrates the sections of new and existing 400 kV OHL.

Options

- 3.3.4 Two options are being applied for in relation to the 400 kV OHL. Option A would oversail a residential property at Talwrn (R4/01483) and removes proposed pylon 4AP065 and Option B would avoid oversailing the same property. Proposed pylons 4AP064 and 4AP066 are in different locations for Option A and Option B; all other proposed pylons are broadly contiguous for both options. Options A and B are illustrated on Figure 3 (**Document 7.14.1.3**).
- 3.3.5 National Grid will progress Option A if an agreement can be reached with the owners of the residential property at Talwrn (Receptor ID: R4/01483). Option A would result in the property not being in residential use to prevent the oversailing of the property with OHLs. If National Grid is unable to reach an

agreement, the construction of the Proposed Development will go ahead using Option B.

Transpositions

- 3.3.6 Transposition points are a reconfiguration of the existing 400 kV OHL to allow OHL routes to remain parallel without the need for a line 'duck-under' or crossing, in order to minimise potential effects, particularly in regard to visual and landscape effects. Transpositions points allow for the continuation of a route from a section of new pylons to a section of existing pylons, whilst the other route is in effect a continuation of a route from a section of new pylons. Transpositions are achieved by removing a section of the existing line and connecting the two newly formed 'ends' to two sections of new line approaching from either side.
- 3.3.7 In routeing the new connection, there would be three areas of transposition points with the existing 400 kV OHL. These are between Rhosgoch and Rhosybol, near Llandyfrydog and close to Maenaddwyn. At these locations there would be two parallel sections of new 400 kV OHL as illustrated on Figure 3 (**Document 7.14.1.3**).
- 3.3.8 As a result of the transpositions both the new and the existing connection would contain sections of new 400 kV OHL and sections of existing 400 kV OHL. Figure 3 (**Document 7.14.1.3**) illustrates where the new and existing sections would be located.

Pylon Details

- 3.3.9 The western alignment is referred to as the 4AP and the eastern alignment is referred to as the 4ZA. Each would comprise part new and part existing OHL.
- 3.3.10 A summary of the OHL element of the Proposed Development is provided in Table 2.

Table 2: Summary of the OHL Element of the Proposed Development				
	4AP	4ZA	Total	
Number of New Pylons	Option A – 65 Option B – 66	35 35	Option A – 100 Option B – 101	
Number of Retained Pylons	25 (two of which would be modified)	70 (three of which would be modified)	95	
Number of Dismantled Pylons	N/A	10 2 Gantries at Wylfa	10 2 Gantries at Wylfa	
Total Length of New Line Build	22 km	12 km	35 km	
Total Length of Existing Line to be retained	8.53 km	3.52 km	22.31 km	

- 3.3.11 The detailed design work undertaken to identify the 400 kV OHL design of the Proposed Development has set out to develop a synchronised design wherever practicable.
- 3.3.12 Where sections of the existing and new OHLs would run in close proximity or parallel to each other, the siting of the new pylons relative to the existing pylons becomes particularly important in visual terms. If the pylons and sag of the conductor in each span were substantially out of step, then the visual 'flow' of the two lines would be discordant, potentially resulting in greater visual effects than a synchronised design.
- 3.3.13 This visual effect could be reduced or avoided if new pylons are located adjacent to the existing pylons and are of a similar height, synchronising the rise and fall of the two lines across the landscape. This has been considered in detail during development of the design as shown on the Works Plans (**Document 4.4**).
- 3.3.14 The following conclusions are made on the definition of synchronisation when referring to two parallel 400 kV OHLs using approximately 50 m high pylons.
 - Synchronised Pylons are considered to be synchronised when they are located directly perpendicular to each other or are almost

perpendicular within a maximum deviation of 20 m from the centre of the two pylons.

- **Broadly Synchronised** Pylons are considered to be broadly synchronised when they sit almost perpendicular to each other within a maximum horizontal deviation (up and down the alignment) of between 20 and 50 m from the centre of the pylons up or down the line. Being broadly synchronised still gives a level of coherency between the two lines as in some views the pylons would still give an impression of being paired, but less so in views perpendicular from the line.
- 3.3.15 Localised constraints to siting of individual pylons have precluded this where an unpaired or less synchronised design would be locally preferable based upon the nature of the receptors local to a given pylon. The Design Report (**Document 7.17**) provides a summary regarding the evolution of the design of the Proposed Development.

3.4 TUNNEL

- 3.4.1 National Grid has committed to the use of underground cables through the Anglesey Area of Outstanding Natural Beauty (AONB), and across the Menai Strait, to reduce effects on the landscape of the AONB and to protect iconic views along the Menai Strait.
- 3.4.2 In order to place the connection underground in Section F the following permanent components are proposed:
 - Braint THH and CSEC on Anglesey;
 - tunnel containing the underground cables between Braint and Tŷ Fodol THHs; and
 - Tŷ Fodol THH and CSEC in Gwynedd.
- 3.4.3 The tunnel would have an internal diameter of up to 4 m and would be approximately 4 km in length. An indicative alignment of the tunnel is illustrated on the Illustrative Tunnel Longitudinal Section, Design Plan DCO_DE/PS/07_01 Sheet 1 of 2 (**Document 4.13**) and an illustrative cross section on Design Plan DCO_DE/PS/07_02 Sheet 2 of 2 (**Document 4.13**).
- 3.4.4 The tunnel would be constructed using either a Tunnel Boring Machine (TBM) or the Drill and Blast Method, as described in section 2.3 of ES Chapter 4 Construction, Operation, Maintenance and Decommissioning of the Proposed Development (**Document 5.4**).

- 3.4.5 There are three scenarios for tunnel construction, these are:
 - Scenario 1 –TBM from Braint to Tŷ Fodol;
 - Scenario 2 TBM from Tŷ Fodol to Braint; and
 - Scenario 3 Drill and Blast from both shafts.
- 3.4.6 All three scenarios have been considered within the Environmental Impact Assessment (EIA) as explained in ES Chapter 6 EIA Methodology and Basis of Assessment (**Document 5.6**).
- 3.4.7 Construction of the tunnel would require the sinking of vertical shafts at each end of the tunnel, to enable access for the subsurface excavation.
- 3.4.8 Shaft construction would be split into two phases; phase 1 would be the sinking of shafts to enable the tunnelling works to commence and phase 2 would be works to the shaft undertaken following completion of the tunnelling works.
- 3.4.9 The Proposed Development tunnel shaft at Braint would be approximately 75 m in depth and at Tŷ Fodol approximately 95 m in depth. Both shafts would have an internal diameter of up to 15 m. An illustrative shaft cross section is shown on Design Plan DCO_DE/PS/07_02 Sheet 2 of 2 (**Document 4.13**).

Tunnel Head Houses and Cable Sealing End Compounds

- 3.4.10 Where the connection transitions from an OHL to underground cable a CSEC is required to provide a point of connection.
- 3.4.11 THHs are required to provide maintenance access to the tunnel and tunnel shafts. They contain ventilation equipment to regulate the temperature in the tunnel as well as pumping equipment to remove any water ingress from the tunnel.
- 3.4.12 To minimise environmental effects each CSEC has been sited adjacent to each of the associated THHs and are collectively referred to as THH and CSECs.
- 3.4.13 Braint THH/CSEC is centred on Grid Reference SH 517 710 and is approximately 4.7 hectares (ha) (7.9 ha inclusive of the permanent access track).
- 3.4.14 Tŷ Fodol THH/CSEC is centred on Grid Reference SH 546 683 and is approximately 3.4 ha which is inclusive of the permanent access track.

3.5 SUBSTATIONS

- 3.5.1 In order to facilitate the new connection, work would be required to modify and extend Wylfa Substation and extend Pentir Substation.
- 3.5.2 Wylfa Substation is located adjacent to the existing Wylfa Nuclear Power Station and is centred on Grid Reference SH 352 938. The potential extension size to the existing substation is 127 m x 4 m. Items of existing equipment would need to be removed and new equipment installed within the site boundary.
- 3.5.3 Pentir Substation is located in north-west Gwynedd and is centred on Grid Reference SH 559 677. The substation would be extended to the north-west (approximately 1 ha), south-east (approximately 1.64 ha) and to the northeast (approximately 0.75 ha), to accommodate the additional equipment required for the new connection.

3.6 **DESIGN MITIGATION MEASURES**

- 3.6.1 National Grid has sought to identify mitigation to minimise adverse effects, associated with the construction, operation and decommissioning of the Proposed Development. The development of measures to avoid, reduce or compensate for any significant adverse effects of a project is an intrinsic part of the EIA process, and, from the outset, the route selection process outlined in the Design Report (**Document 7.17**) sought to take into account environmental constraints and to avoid them as far as practical.
- 3.6.2 Potential measures to mitigate effects were considered during the preparation of the DCO application, and, where appropriate have been incorporated into the design of the Proposed Development. Further detail can be found in the Schedule of Mitigation (**Document 5.28**).
- 3.6.3 Design measures, for example the sensitive routeing of the OHL and careful siting of the THH/CSECs, have been critical in avoiding or reducing a number of potential environmental effects. Where the design of the Proposed Development has been unable to resolve potentially significant effects, further mitigation measures have been identified that would be implemented. Commitments to certain further design measures or mitigation are summarised in the Schedule of Environmental Commitments (Document 7.4.2.1), which forms an appendix to the Construction Environmental Management Plan (CEMP) (Document 7.4). These committed measures are secured either through individual DCO Requirements, through the CEMP (which itself is secured by Requirement 6) or through other management plans (also secured by Requirement), such as the Outline Materials

Management Plan (**Document 7.12**) and the Outline Construction Traffic Management Plan (**Document 7.5**), for example.

3.6.4 In order to ensure that the necessary measures can be delivered (i.e. where rights are required as part of the DCO), and where they are location specific, they have been included within the Order Limits.

3.7 CONTROLS

Order Limits

3.7.1 The Order Limits delineate the extent of the 'authorised development' for which development consent is being sought; and are the full extent of area required to locate and construct the Proposed Development. The Order Limits are illustrated on Figure 1 (**Document 7.14.1.1**).

Limits of Deviation and Parameters

- 3.7.2 As recognised by the Planning Inspectorate's Advice Note 9 (Ref.21) a necessary and proportionate degree of flexibility often needs to be incorporated into the design of a development so that unforeseen issues encountered can be addressed. In this instance, for example, previously unidentified poor ground conditions or the identification of significant unrecorded archaeological remains may require a pylon to be re-sited. Therefore, to allow for this the linear elements of the connection would be constructed within the specified limits of deviation (LOD). The proposed alignment of the new build 400 kV OHL sections are subject to LOD to provide this necessary and proportionate degree of flexibility. The above ground LOD provides a maximum distance or measurement of variation within which every element of the 400 kV OHL would be located. In respect of the OHL, LOD are applied horizontally and vertically.
- 3.7.3 The final route of the tunnel would be subject to below ground LOD which would provide a necessary and proportionate degree of flexibility as to the final alignment of the tunnel. There are two types of below ground LOD: horizontal and vertical (minimum depth below the top of the bedrock). For more information please read ES Chapter 3 Description of the Proposed Development (**Document 5.3**).
- 3.7.4 Parameters are applied to non-linear works; these set the maximum design envelope within which the final works must be located.

Requirements

- 3.7.5 The draft DCO (**Document 2.1**) contains the Draft Requirements that would need to be complied with should the DCO be granted.
- 3.7.6 A number of Draft Requirements include elements that would require the submission to, and approval of, the relevant local planning authorities prior to the commencement of the Proposed Development, as well as those with which National Grid must comply post construction.
- 3.7.7 A summary of the Requirements included in the draft DCO (**Document 2.1**) is provided below:
 - time limits;
 - design and LOD;
 - tunnel head house design;
 - stages of the authorised development;
 - Construction Environmental Management Plan (CEMP);
 - Approval and implementation of construction mitigation plans; :
 - construction hours;
 - mitigation planting scheme;
 - implementation of mitigation planting;
 - Maintenance of implemented mitigation planting scheme; :
 - retention and protection of existing trees and hedgerows;
 - reinstatement schemes;
 - contaminated land and controlled waters;
 - inspection of temporary watercourses;
 - removal of temporary bridges and culverts;
 - highway works;
 - decommissioning; and
 - operational noise..

4 Approach to New Electricity Transmission

4.1 INTRODUCTION

4.1.1 This chapter presents a summary of the design evolution of the Proposed Development and explains how the design choices have sought to minimise the environmental effects. It intends to demonstrate how mitigation by design has been implemented in order to avoid significant environmental effects where appropriate.

4.2 STATUTORY DUTIES

- 4.2.1 National Grid is required by the Electricity Act 1989, to develop, maintain and operate an economic and efficient network, and to facilitate competition in the supply and generation of electricity. This means that National Grid has a responsibility to deliver new electricity transmission infrastructure but also to be responsible for the cost of projects, as costs will ultimately be borne by electricity users.
- 4.2.2 National Grid is required, under Section 38 of the Electricity Act 1989, to comply with the provisions of Schedule 9 of the Act. Schedule 9 requires licence holders, in the formulation of proposals to transmit electricity, to:
 - Schedule 9(1)(a) '... have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest';
 - Schedule 9(1)(b) '...do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects'; and
 - Schedule 9 additionally requires National Grid to have a responsibility when assessing the effects of its proposals to:

"...mitigate any effect which the proposals would have on the natural beauty of the countryside or any flora, fauna, features, sites, buildings or objects."

4.2.3 These responsibilities formed part of National Grid's approach to the evolution and design of the Proposed Development.

4.3 APPROACH TO THE DESIGN AND ROUTEING OF NEW ELECTRICITY TRANSMISSION LINES

- 4.3.1 In order to demonstrate compliance with its responsibilities as a licence holder under the Electricity Act 1989 and in order to provide transparency over the design process, National Grid has published its approach to the Design and Routeing of New Electricity Transmission Lines (Ref.9).
- 4.3.2 National Grid's guidance states that:

'Whether the preferred route corridor is predominantly overhead, underground or sub-sea, detailed survey and assessment work is carried out to find the alignment of the transmission line which best satisfies all of our obligations and the needs of stakeholders. In doing this we seek to avoid as far as possible any impacts on people, settlements, and environmentally sensitive areas. We continue to refine the route alignment to minimise any visual and other environmental impacts, in consultation with stakeholders and communities.'

- 4.3.3 National Grid's approach sets out a six stage process for developing projects that comply with the requirements of the Electricity Act 1989 and National Policy Statements EN-1 and EN-5, as well as the principles of the 'Holford Rules' (Ref.22)¹. National Grid employs the Holford Rules to inform the design and routeing of OHLs. In overview, the Holford Rules seek to minimise any adverse impacts associated with new OHLs through the adoption of a series of 'common sense' rules. The seven rules and supplementary notes seek to inform the design of OHLs by, for example, guiding them away from areas which that are considered to be of the highest amenity value and maintain as direct and straight an alignment as possible (in order to minimise the use of larger angle towers). These rules have become accepted within the electricity transmission industry as the basis for overhead transmission line routeing. Paragraph 2.8.5 of EN-5 states that the Holford Rules should be followed by developers when designing their proposals.
- 4.3.4 The siting and design of substations and other permanent facilities are set out in National Grid's Substations and the Environment: Guidance on Siting and Design (Ref 23)

¹ The Holford Rules are guidelines for the routeing of a new high voltage overhead transmission line. The Holford Rules are a valuable tool in the selecting and assessing potential route options as part of the environmental assessment process.

- 4.3.5 National Grid considers the relative merits of using an underground cable rather than an OHL on a case by case basis. The cost of high voltage underground transmission, coupled with the environmental impacts and operational challenges are important factors when deciding on the use of underground cables at 400 kV.
- 4.3.6 When planning the routeing for transmission connections in highly constrained areas, consideration may be given to the use of underground cables. Exceptionally constrained areas include:
 - urban areas where due to the density of residential, community and associated development and public open space, a reasonable direct overhead route is impracticable;
 - rural areas where landscape features are protected at an international or national level e.g. National Parks, World Heritage Sites and Areas of Outstanding Natural Beauty; and
 - estuary and major river crossings where there is an exceptionally difficult and costly OHL solution which would be comparable with or exceed the cost of an underground cable.
- 1.1.1 The approach to the routeing of new electricity transmission lines is summarised in Image 1 and is used as guidance for all of National Grid's project teams and also provided to stakeholders to provide a transparent and clear understanding of how National Grid designs its transmission lines to meet its statutory obligations.





The Design and Routeing of New Electricity Transmission Lines

Stage 1 Strategic Options

- 4.3.7 At the first stage of the process, National Grid, as part of its duties under the Electricity Act, explores the different ways in which it might meet an identified need for new infrastructure. This need could be to connect new power generation to the existing network, an investment in anticipation of new generation, or the creation of more capacity where needed.
- 4.3.8 Where new infrastructure is needed, as is the case with the Proposed Development, National Grid considers how this could be delivered through the identification and assessment of strategic options. These options and how they will be assessed, are explored and discussed with stakeholders. For the Proposed Development these included affected local authorities and other bodies such as Natural Resources Wales (NRW).
- 4.3.9 In considering an identified need National Grid firstly seek to:
 - determine whether the existing network can accommodate the customer or capacity needs economically and efficiently before considering new build solutions;

- consider alternatives to meet the need, e.g. adjusting arrangements with the generator or considering different approaches to operating the network; or
- consider investing in new equipment to optimise the use of the existing network.
- 4.3.10 Where new infrastructure is required, National Grid considers the ways in which this could be achieved, this approach might include:
 - different technologies such as underground cables, gas-insulated lines, OHLs or sub-sea high voltage direct current (HVDC) cables;
 - different geographical connection points; or
 - a combination of the two.
- 4.3.11 Identified Strategic options are subject to a technical compliance filter to ensure that they would be deliverable on the network. Options are then subject to appraisal to analyse their relative costs and benefits. As part of this process, National Grid considers relevant environmental, socio-economic and technical issues, alongside a capital and lifetime cost for each strategic option.
- 4.3.12 For the Proposed Development, having identified the need for an additional connection, National Grid identified and consulted on a range of options for locations where the power from the proposed Wylfa Newydd Power Station could be connected to the transmission system, and how that power might be transmitted there.
- 4.3.13 Each potential Strategic Option was initially assessed by National Grid to ensure that it meet the reinforcement need and that the resultant transmission system would comply with the minimum standards with which National Grid must comply (as defined in the National Electricity Transmission System Security and Quality of Supply Standards (NETS SQSS)). Potential Strategic Options that would not meet the reinforcement need or otherwise would not meet the standards set out in the NETS SQSS were discounted.
- 4.3.14 Six Strategic Options were identified for the reinforcement of the electricity transmission system in North Wales. National Grid considered that each of these options would be able to meet the additional transmission system requirements in North Wales and took these options forward for strategic option appraisal. These options were:
 - Option 1 Two subsea cable circuits between Wylfa and Connah's Quay substations;

- Option 2 One subsea circuit between Wylfa and Connah's Quay substations and one subsea cable circuit between Wylfa and Pembroke;
- Option 3 Two new onshore circuits connecting Wylfa and Pentir, one new alternating current (AC) circuit between Pentir and Trawsfynydd to be installed on existing pylons, a new connection between Wern and Y Garth, a new substation in west Gwynedd, re-conductoring of existing circuits in North Wales and modifications at existing substations;
- Option 4 Two new offshore circuits east of Anglesey connecting Wylfa and Pentir, one new AC circuit between Pentir and Trawsfynydd to be installed on existing pylons, a new connection between Wern and Y Garth, a new substation in west Gwynedd, re-conductoring of existing circuits in North Wales and modifications at existing substations;
- Option 5 Two new offshore circuits west of Anglesey connecting Wylfa and Pentir, one new AC circuit between Pentir and Trawsfynydd to be installed on existing pylons, a new connection between Wern and Y Garth, a new substation in west Gwynedd, re-conductoring of existing circuits in North Wales and modifications at existing substations; and
- Option 6 Replace the existing 132 kV OHL between Wylfa and Valley with a 400 kV OHL, two new circuits (largely offshore) between Valley and a new substation in the vicinity of west Gwynedd, one new AC circuit between Pentir and Trawsfynydd to be installed on existing pylons, a new connection between Wern and Y Garth, reconductoring of existing circuits in North Wales and modifications at existing substations.
- 4.3.15 An assessment of each of the six Strategic Options was undertaken based on the following criteria:
 - technology;
 - cost;
 - ecology and biodiversity;
 - cultural heritage, landscape and visual;
 - other environmental considerations;
 - consideration of combined environmental topics; and
 - socio-economic (economic activity, people and communities).
- 4.3.16 Following the strategic options appraisal it was concluded that Strategic Option 3 consisting of new OHL circuits connecting Wylfa and Pentir Substations (potentially with appropriate mitigation, including the use of underground technologies) was the best option to achieve an appropriate

balance between National Grid's technical, economic, amenity and environmental obligations and was therefore identified as the preferred Strategic Option.

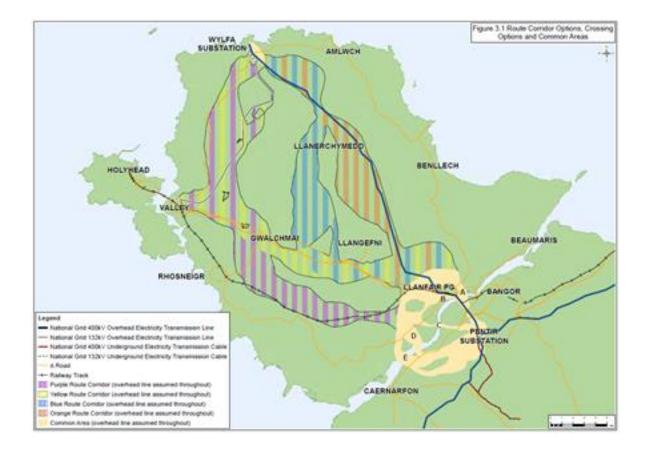
4.3.17 National Grid took forward Strategic Option 3 to the next stage of the appraisal which sought to identify a suitable potential route corridor for the connection, including locations where the use of underground cables might be appropriate.

Stage 02 Outline Routeing and Siting

- 4.3.18 At Stage 02, routeing studies are carried out to identify broad potential corridors for the new transmission route for the strategic option(s) that National Grid are considering. Siting studies are also carried out to identify suitable locations for required infrastructure, such as construction compounds and operational compounds.
- 4.3.19 When routeing OHLs, as discussed in Section 4.3.3 of this document, National Grid apply the Holford Rules and in turn considers the types of mitigation that could offset any landscape or visual effects.
- 4.3.20 Where the use of underground cables is proposed, this would necessitate the construction of CSECs to enable the transition from underground cable to OHL and vice versa). The siting of CSEC infrastructure also requires careful consideration.
- 4.3.21 Route corridor options are then subject to consultation with National Grid's core stakeholders, followed by an options appraisal. This options appraisal is used to determine the environmental, socio-economic, technical and cost implications that would be associated with different route options.
- 4.3.22 At this stage, public consultation is undertaken in order to seek views both on the preferred strategic option and the potential route corridors. National Grid produces a feedback report which identifies all of the comments received and how they have been taken into account. The results of the consultation together with all of the studies carried out are used to identify the preferred route corridor (or corridors).
- 4.3.23 For the Proposed Development the different route corridor options were subject to an options appraisal to determine the associated environmental, socio-economic, technical and cost implications.
- 4.3.24 Public consultation was undertaken in order to seek views both on the preferred strategic option and the potential route corridors.

- 4.3.25 Following selection of the preferred strategic option, National Grid identified broad potential route corridors for a new 400 kV OHL between Wylfa and Pentir, using a desk-based study, supplemented by specialist surveys of 'baseline' environmental, socio-economic and technical data within the study area. The baseline information was reviewed to identify features or sensitive sites that had the potential to pose significant constraints to the development of a new connection (e.g. location of large residential areas, conservation sites or other developments such as wind farms).
- 4.3.26 From this review, four potential broad route corridors were identified that either avoided or minimised the potential effects associated with these constraints; in addition, five possible locations for crossing the Anglesey AONB and Menai Strait were identified. Each of the four route corridors could be connected to each of these crossing points through an area common to the route corridors (known as the Common Area). Taking account of the data and assessments available at that time, a preliminary conclusion was reached that a transmission connection could be achieved with a fully OHL connection between Wylfa and Pentir.
- 4.3.27 The four route corridors identified were referred to as the Orange, Blue, Yellow, and Purple Route Corridors. These are are shown on Image 2 below and a full description of each is presented in the North Wales Connection Project Wylfa to Pentir Overhead Electricity Line – Route Corridor Identification Report, October 2012 (**Document 9.1)** (Ref.11).

Image 2 Route Corridor Options



4.3.28 Also shown on Image 2 are the five corridors identified to cross the Menai Strait and connect to Pentir Substation; these were referred to as Crossing Options A-E. Each of the crossing options connected to a Common Area, which in turn linked to the four route corridor options described above.

Preferred Route Corridor

- 4.3.29 Following a review of differentiators between the route corridors, and a review of consultation feedback it was determined that the Orange Route Corridor was the preferred route corridor to be taken forward to develop a specific alignment as it provided an opportunity to significantly reduce potential environmental impacts when compared the other routes.
- 4.3.30 An important factor in the selection of the Orange Route Corridor as the Preferred option was the results of consultation feedback. Where members of the public gave feedback on the route corridor options, the majority of the 153 responses (79%) preferred the Orange Route Corridor as it was the shortest, most direct route and followed the existing OHL. The Blue and Yellow Route

Corridors were also highlighted as having a potential risk of effects on views for tourists entering Wales along the A55 from Holyhead.

4.3.31 The detailed explanation for the preference of the Orange Route Corridor is set out in the Preferred Route Corridor Selection Report (**Document 9.2**) (Ref.12) published in October 2015.

Crossing of the AONB and Menai Strait

4.3.32 In January 2015, National Grid published information on its latest analysis which included a preference to use underground cables through the Anglesey AONB and across the Menai Strait, avoiding the development of an OHL within this sensitive area. It was considered that the additional cost associated with this mitigation was justified to reduce effects upon the landscape of the AONB and to protect iconic views along the Menai Strait. It was also considered that an OHL proposal in this area would be likely to conflict with national planning policy, and that avoidance of the use of an OHL would be the most appropriate way to fulfil National Grid's statutory duty to have regard to the conservation and enhancement of the AONB. It was considered that while technically difficult, a viable means to cross the Menai Strait using buried cables should be sought. Further investigation was required to ascertain the best technology and location to cross the Anglesey AONB and Menai Strait.

Stage 03 Detailed Routeing and Siting

- 4.3.33 Once a broad route corridor has been identified for a project, National Grid looks in detail at the route corridor to identify and appraise a preferred route alignment and locations of any associated infrastructure. This involves detailed survey and assessment work to find the alignment of the transmission line which best satisfies National Grid's obligations and the needs of stakeholders. In doing this, National Grid seeks to avoid as far as possible any impacts on people, settlements, and environmentally sensitive areas.
- 4.3.34 In relation to the Proposed Development, this stage looked in detail at routeing within the preferred corridor. The process was undertaken in line with the principles of the Holford Rules as well as considering environmental constraints already identified within the route corridor.
- 4.3.35 National Grid identified and undertook a preliminary assessment of the possible environmental effects of the potential route options within the Orange Route Corridor, between Wylfa Substation and the Anglesey AONB at the Menai Strait, and on the mainland side of the Menai Strait, in Gwynedd, to

Pentir Substation. The route options consisted of 100 m wide swathes of land within which an OHL could be routed.

- 4.3.36 In addition to the 100 m wide route options, a search area was defined to illustrate where National Grid could install the connection underground through the Anglesey AONB and under the Menai Strait. This included five CSEC search areas, (three on Anglesey, referred to as Anglesey North, Anglesey Central and Anglesey South), and two on the mainland, (referred to as Gwynedd North and Gwynedd South). The CSEC search areas encompassed large areas of land either side of the Menai Strait where a CSEC could be sited.
- 4.3.37 These route options and CSEC search areas, as well as the factors influencing the selection of the short-listed route options taken forward, are described in the North Wales Connection Wylfa to Pentir Route Options Report, October 2015 (**Document 9.3**) (Ref.13). The report concluded with an overview describing how these might be further refined and appraised in light of further assessment and consultation feedback, and how a single proposed route might then be selected.
- 4.3.38 The identified Route Options were presented at the Stage 2 Consultation in October 2015, together with CSEC search areas required for the proposed cabled crossing of the Anglesey AONB.

Pylon Design

- 4.3.39 When selecting a pylon design, National Grid considers the type of landscape proposed to be built in, including near and long distance views. National Grid also looks at opportunities to use existing woodland, valleys and other natural features to help provide screening and backgrounding for OHL development.
- 4.3.40 National Grid also considers noise, local economic activity, heritage, ecology, transport, water resources, engineering and cost together with any feedback from local landowners, local communities and technical specialists and technical bodies, such as environmental and heritage bodies.
- 4.3.41 For the North Wales Connection Project, the existing OHL was a key consideration due to the intention to parallel the existing and proposed OHLs as far as possible.
- 4.3.42 The existing 400 kV OHL between Wylfa and Pentir uses a design of pylon that is no longer used for new build projects as its use has been replaced by a new design since the existing line was installed in the 1960's. This is the largest pylon design used in Britain. Whilst similar in appearance, the modern

design is not identical to the existing pylons on Anglesey. Other more slender, less bulky lattice steel pylon designs are also available for use in Britain.

- 4.3.43 National Grid has selected a similar steel lattice pylon (to the existing OHL) for the proposed OHL. This is considered the best option to reduce visual effects as far as possible as it would not introduce conflicting shapes into the environment. The connection design has been based on the use of the lightest, most slender lattice steel pylon capable of carrying the size of conductors that are required to reduce potential effects of operational noise to an appropriate level. However, the overall design would not preclude the use of an alternative lattice steel pylon design in some locations should the need arise.
- 4.3.44 A detailed appraisal of the pylon design options that are available to meet the technical needs of the North Wales Connection Project has been set out in the Preferred Route Option Selection Report 2016 (**Document 9.4**). This concluded that the standard lattice steel pylon design would be the most appropriate design, having regard to a range of environmental, socio-economic, technical and cost considerations.

Stage 04 The Proposed Application

- 4.3.45 At Stage 04, public consultation on the proposed application is carried out (in the case of the Proposed Development in accordance with Sections 42, 47 and 48 of the Planning Act 2008). At the close of the consultation period, National Grid reviews the proposals and makes any necessary amendments in light of consultation responses received.
- 4.3.46 To prepare for Stage 04, the potential route options were further refined and appraised in light of further assessment and Stage 2 consultation feedback, and a single proposed route ('the Preferred Route Option') was selected.
- 4.3.47 The Draft Route Alignment Report Wylfa to the Menai Crossing Area 2016 (Document 9.5) was prepared by National Grid to explain the design rationale for a substantive part of the new electricity transmission connection.
- 4.3.48 The Report provided a description of the proposed design for the new connection within Sections A to D and focussed on the local environmental, socio-economic and technical considerations that helped to shape the draft route alignment proposal that was the subject of statutory consultation under the 2008 Planning Act.
- 4.3.49 The Draft Route Alignment Report Wylfa to the Menai Crossing Area 2016 (Document 9.5) highlighted the role that the opportunity for the new line to closely parallel the existing OHL for much of the route had played in the

design considerations. The report detailed how the Proposed Development sought to synchronise the design of the parallel sections of the new and existing lines, so as to further reduce the potential environmental and socioeconomic effects of the connection.

- 4.3.50 The design of the connection within Sections E and F was described in the Menai Strait Crossing Report (**Document 9.6**). Together these two Reports described the proposed design of the project at that time.
- 4.3.51 Statutory consultation on the proposed DCO application was carried out in accordance with Sections 42 47 and 48 of the Planning Act 2008 and was undertaken from 5 October 2016 to 16 December 2016. This consulted on the detailed proposals, including pylon locations, the location of the tunnel underneath the Menai Strait and associated shafts, proposed extensions to Wylfa and Pentir Substations and associated infrastructure such as the THHs, CSEC and construction compounds.
- 4.3.52 A Preliminary Environmental Information Report (PEIR) was prepared for the Consultation. This presented the findings of environmental surveys and reported the preliminary assessment of the likely environmental effects of the proposed development and the measures proposed to limit these effects.
- 4.3.53 Information was provided on all options considered throughout the development of the project, so that people were able to comment on any aspect of the project's development.

Stage 05 Application for Development Consent

- 4.3.54 During Stage 05 the outcomes of the consultation undertaken at Stage 04 of the approach are assessed and any appropriate amendments are made to the proposals. An application for development consent is then submitted to the Planning Inspectorate.
- 4.3.55 For the Proposed Development the draft route alignment was further refined following consultation feedback. Suggested design amendments were considered with regard to the potential for different or new environmental effects, their technical feasibility, and estimated build cost. The amendments made have resulted in the design of the Proposed Development that is now subject to an application for a DCO under Section 37 of the Planning Act 2008 as described in ES Chapter 3, Description of the Proposed Development (**Document 5.3**).

Stage 06 Consideration and Examination

- 4.3.56 During this stage National Grid will follow the process set out for applications under the Planning Act 2008.
- 4.3.57 Consultation and stakeholder engagement has been a major contributing factor in the evolution of the Proposed Development; this enabled consultees and stakeholders to influence the Project and the design.
- 4.3.58 The consultation process for the North Wales Connection Project has to date consisted of three main stages, including two stages of non-statutory consultations. Consultation feedback alongside environmental, socioeconomic, technical and cost appraisals has been used to inform the Proposed Development as summarised in this chapter.

Stage 1 Consultation – Strategic Options and Potential Route Corridors

4.3.59 The Stage 1 Consultation ran from the 3 October 2012 to the 21 December 2012 and consulted on strategic options (Stage 01), the preliminary preferred strategic connection option and route corridor options (Stage 02).

Stage 2 Consultation – Route Options

4.3.60 The Stage 2 Consultation ran from the 21 October 2015 to 16 December 2015 and consulted on route options within the preferred (orange) route corridor (Stage 03). Consultation also focused upon search areas for the sealing end compounds required for the underground crossing at the Menai Strait and Area of Outstanding Natural Beauty (AONB).

Stage 3 Consultation – Proposed Project

- 4.3.61 The statutory Stage 3 Consultation was held from the 5 October 2016 to the 16 December 2016 and consulted on the detailed proposals (Stage 04) and evolution of the Proposed Development. The consultation included information on the detailed route and the location of pylons, pylon design, the proposed tunnel under the Menai Strait and extensions to the existing substations at Wylfa and Pentir. It also included temporary works such as construction compounds, road access points and lay-down areas, transport routes for the delivery of materials and removal of waste, and screening and other mitigation measures. Information was also provided on all options considered throughout the development of the Project, so that people were able to comment on any aspect of the Project's development..
- 4.3.62 During and after Stage 3 Consultation, National Grid received and considered a number of requests to amend the design of the Proposed Development. Such requests were received from a variety of stakeholders

including prescribed consultees, statutory undertakers, local authorities, persons with an interest in land (PIL), and the local communities who have been consulted on National Grid's proposals during the life of the project.

- 4.3.63 All requests to amend the design of the Proposed Development were considered, taking account of the potential for different or new environmental effects, their technical feasibility, and estimated cost.
- 4.3.64 A detailed description of the nature of responses received during and after Stage 3 Consultation has been provided in the Consultation Report (Document 6.1) and a summary of the main amendments has is contained within the Design Report (Document 7.17).

Ongoing Engagement

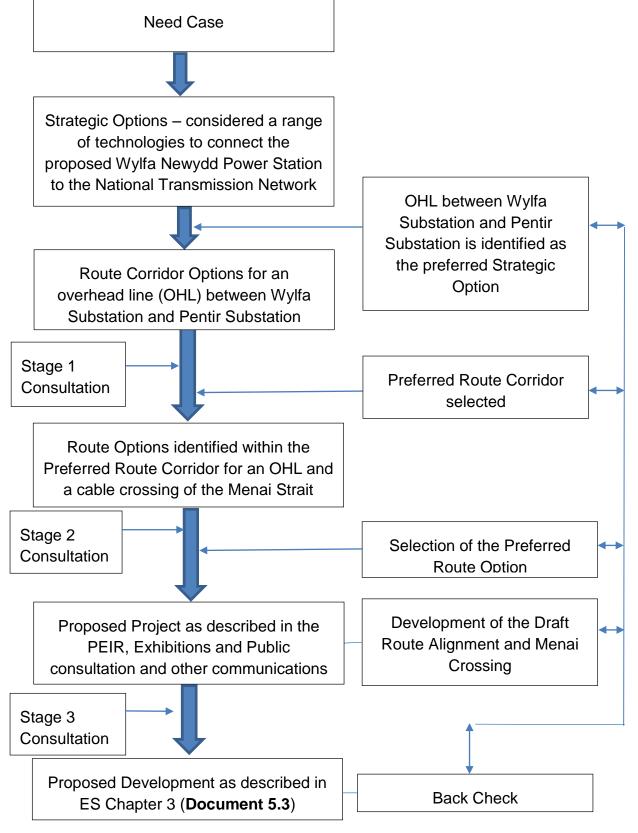
4.3.65 In addition to the statutory and non-statutory consultation periods, National Grid has had ongoing engagement with the statutory stakeholders such as Welsh Government, Isle of Anglesey County Council (IACC), Gwynedd Council, Natural Resources Wales (NRW) and Cadw, as well as non-statutory stakeholders as appropriate. There has also been additional focussed non-statutory consultation since the Stage 3 Consultation. Engagement specific to the Environmental Impact Assessment is set out in Chapter 5 EIA Consultation (Document 5.5) and other engagement is set out in the Consultation Report (Document 6.1).

4.4 SUMMARY

4.4.1 This section of the Planning Statement has described the process through which the Proposed Development has been developed and the design principles applied to each stage of the development process.

In summary, the Proposed Development has been guided by the following steps outlined in image 3 below.





4.4.3 Throughout the evolution of the Proposed Development a number of documents have been prepared to provide the basis for consultation and to demonstrate that National Grid have taken into account the consideration of various alternatives to achieve the connection, and deciding upon the Proposed Development. These documents are summarised in Table 3 below.

Table 3: Supporting Documents			
Document	Description		
Need Case (Document 7.1). The original Need Case was published in October 2012 (Document 9.7.1) it was then updated and republished in January 2015 (Document 9.7.2) and in 2016 (Document 9.7.3).	Explains why the Proposed Development is needed.		
Strategic Options Report (Document 7.2). The original Strategic Options Report was published in October 2012 (Document 9.8.1) it was then updated and (– republished in January 2015 (Document 9.8.2) and in 2016 (Document 9.8.3).	Explains about the connection options.		
Wylfa to Pentir Initial Route Corridor Identification Report, October 2012 (Document 9.1)	Examines and identifies the preliminary potential overhead line (OHL) route corridors between Wylfa and Pentir.		
Summary of Important Project Changes and Updates, January 2015 (Ref 24)	Explains the important changes that occurred since October 2012 which required a review of the selection of the preferred strategic option which was reflected in the January 2015 version of the Strategic Options Report.		
Wylfa to Pentir Preferred Route Corridor Selection Report, October 2015 (Document 9.2)	Provides information about how the preferred route corridor was selected.		

Table 3: Supporting Documents		
Document	Description	
Wylfa to Pentir Route Options Report, October 2015 (Document 9.3)	Explains how the route options within the preferred route corridor were identified.	
Preferred Route Option Selection Report Wylfa to the Menai Crossing Area, September 2016 (Document 9.4)	Explains how the preferred route for the new electricity transmission line was identified.	
Draft Route Alignment Report Wylfa to the Menai Crossing Area September 2016 (Document 9.5)	Explains the design rationale for a substantive part of the new electricity transmission connection.	
Menai Strait Crossing Report September 2016 (Document 9.6)	Identifies the preferred option for crossing the Menai Strait with a new 400 kilovolt (kV) connection.	

- 4.4.4 Throughout all of these steps, National Grid has applied the policy considerations in NPS EN-1 and EN-5, including the Holford Rules, as well as following their adopted approach to the design and routeing of new electricity transmission lines and the siting and design of permanent facilities which have provided a transparent design development process.
- 4.4.5 The Proposed Development which is the subject of the application for development consent is considered to offer a solution that meets both national policy and National Grid's obligations under the Electricity Act.

5 National Policy Statements EN-1 and EN-5

5.1 INTRODUCTION

- 5.1.1 The Planning Act 2008 (as amended) (the Act) introduced a new regime bringing multiple consenting processes for a variety of types of nationally significant infrastructure projects (NSIPs) under one consenting regime. These included certain types of energy, transport, water, wastewater and waste projects.
- 5.1.2 OHLs over 2 km in length, installed above ground with a nominal voltage greater than, or equal to 132 kV are NSIPs, to be determined by the SoS in accordance with the requirements of the Act.
- 5.1.3 The Act requires that an application for development consent should be decided in accordance with the relevant NPS, except where certain legal tests would be infringed (which is not the case for this development), or the 'adverse impacts of the project would outweigh its benefits.'

5.2 NATIONAL POLICY STATEMENTS

- 5.2.1 National Policy Statements (NPSs) set out Government policy for the delivery of major infrastructure and are of primary importance to the decision making process for NSIPs. NPSs for Energy were issued by the SoS Department for Energy and Climate Change (DECC) (now Business, Energy and Industrial Strategy) and set out the Government's policy for delivery of major energy infrastructure under the Planning Act 2008.
- 5.2.2 The SoS is required, under Section 104 of the Act, to "have regard to … any [NPS] which has effect in relation to development of the description to which the application relates"².
- 5.2.3 Six NPSs for energy infrastructure were designated by the SoS in July 2011. The relevant NPSs for electricity transmission infrastructure are the Overarching NPS for Energy (EN-1) (Ref.3) and the NPS for Electricity Networks Infrastructure (EN5-5) (Ref.4) (which must be read in conjunction

² Section 104(2)(a)

with EN-1). Together they provide the primary basis for decision making on an application for development consent.

- 5.2.4 Section 104 (2) of the Act states that in deciding an application for development consent the SoS must have regard to matters including:
 - any NPS which has effect in relation to development to which the application relates;
 - any local impact report (LIR)³; and
 - any other matters which the SoS considers to be 'both important and relevant to the ... decision'.
- 5.2.5 Section 104 (3) of the Act further states that applications must be decided in accordance with any relevant NPS, except to the extent that to do so would:
 - lead to the UK being in breach of its international obligations;
 - be in breach of any statutory duty that applies to the decision maker;
 - be unlawful;
 - result in adverse impacts from the development outweighing the benefits; or
 - be contrary to regulations in relation to how such decisions are to be taken.
- 5.2.6 Section 38(6) of the Planning and Compulsory Purchase Act 2004 provides the principal basis in law for the determination of planning applications, namely that they must be determined in accordance with the development plan unless material considerations indicate otherwise. This provision is not incorporated in to the Act; instead for NSIP development the duties are as above, including the duty to have regard to any LIR submitted by a relevant local authority.
- 5.2.7 The Joint Local Development Plan for IACC and Gwynedd is not therefore the starting point for the consideration of the DCO application, but rather the policy framework set out in EN-1 and EN-5, as emphasised by Section 104 of the Act. However, given that paragraph 4.1.5 of EN-1 states that such Local Development Plan Documents may be considered potentially 'important' and

³ As part of the 2008 Act process, the relevant local authorities will be invited to submit a local impact report (LIR) giving details of the likely impact of the proposed development on the authority's area.

'relevant' by the SoS in the decision making process the relevant local policies are considered in Section 7 of this Planning Statement.

Overarching National Policy Statement for Energy (EN-1) July 2011

- 5.2.8 The Overarching NPS for Energy (EN-1) notes that it is critical that the UK continues to have secure and reliable supplies of electricity as it makes the transition to a low carbon economy. This means ensuring that:
 - there is sufficient capacity (including a greater proportion of low carbon generation) to meet demand at all times, including a safety margin of spare capacity to accommodate fluctuations in supply or demand;
 - this capacity is reliable enough to meet demand as it arises;
 - there is a diverse mix of technologies and fuels (including primary fuels imported from a wide range of countries); and
 - there are effective price signals, so that the market can react in a timely way to minimise imbalances between supply and demand.
- 5.2.9 The Government's objectives for energy and climate change will require further diversification of the UK's energy sources and much greater use of renewable and other low carbon forms of generation. It is estimated that there will be a need for approximately 59 GW (Gigawatt) net of new capacity by 2025, of which 22 GW would need to come from renewable sources to meet renewable energy commitments (Para 3.3.22). The NPS notes that 'existing transmission and distribution networks will have to evolve and adapt in various ways to handle increases in demand' and the fact that generation is now occurring in a greater diversity of locations.
- 5.2.10 Section 3.7 specifically refers to the need for new electricity network infrastructure, noting that:

'Lack of sufficiently robust electricity networks can cause, or contribute to, large scale interruptions. Existing transmission and distribution networks will have to evolve and adapt in various ways to handle increases in demand, but construction of new lines of 132 kV and above will also be needed to meet the significant national need for expansion and reinforcement of the UK's transmission and distribution networks' (Para 3.7.2).

5.2.11 And:

'it is important to note that new electricity network infrastructure projects, which will add to the reliability of the national energy supply, provide crucial national benefits, which are shared by all users of the system' (para 3.7.7).

- 5.2.12 Part 4 of EN-1 sets out certain assessment principles, against which applications relating to energy infrastructure are to be decided, that 'do not relate only to the need for new energy infrastructure' (covered in Part 3 of EN-1) or 'to particular physical impacts of its construction or operation' (covered in Part 5 of EN-1 and the technology-specific NPSs; in this case EN-5)⁴. The following assessment principles are identified in EN-1:
 - Environmental Statement;
 - habitats and species assessment;
 - consideration of alternatives;
 - good design for energy infrastructure;
 - climate change adaptation;
 - pollution control and other regulatory regimes;
 - safety; and
 - health;
- 5.2.13 National Grid has provided information in accordance with these assessment principles which '*take into account environmental, social and economic benefits and adverse impacts, at national, regional and local levels.*⁷⁵ This enables the Examining Authority and SoS to examine and determine the application against these assessment principles set out in EN-1 and EN-5.
- 5.2.14 Paragraph 3.7.10 confirms that

...'there is an urgent need for new electricity transmission and distribution infrastructure (and in particular for new lines of 132 kV and above) to be provided'.

- 5.2.15 Paragraph 3.7.10 goes on to recognise that there will be more than one technological approach to make a connection (e.g. by OHL or underground cable) and that 'the costs and benefits of these alternatives should be properly considered as set out in EN-5', before any OHL is consented.
- 5.2.16 The need for a new connection should demonstrate:

⁵ Paragraph 4.1.4 of EN-1

⁴ Paragraph 4.1.1 of EN-1

...'if it represents an efficient and economical means of connecting a new generating station to the transmission or distribution network...and has sufficient capacity...to supply current or anticipated future levels of demand.'6

5.2.17 Parts 4 and 5 of EN-1 identify the 'Assessment Principles' and 'Generic Impacts'. Part 4 'Assessment Principles', sets out generic policies with which applications relating to energy infrastructure are to be decided. Part 5 'Generic Impacts' provides Government policy relating to the generic impacts of energy infrastructure that are anticipated to arise most frequently, noting that it is not intended to provide a list of all possible effects or ways to mitigate such effects.

National Policy Statement for Electricity Networks Infrastructure (EN-5) July 2011

- 5.2.18 EN-5 came into force in July 2011. It highlights in the UK the generation of electricity should aim towards the use of a low carbon economy, while maintaining security of supply and will be heavily dependent on the availability of an electricity network which is fit for purpose and robust. That network will need to be able to support a more complex system of supply and demand and cope with generation occurring in locations of greater diversity. It indicates that the Examining Authority should start its assessment of applications for infrastructure covered by EN-5 on the basis that need has been demonstrated⁷.
- 5.2.19 EN-5 provides specific guidance relevant to '*electricity networks infrastructure*' NSIPs. It notes that:

'This National Policy Statement (NPS) taken together with the Overarching National Policy Statement for Energy (EN-1), provides the primary basis for decisions taken by the Infrastructure Planning Commission (IPC) on applications it receives for electricity networks infrastructure' (Para 1.2.1).'

⁶ Paragraph 3.7.10 of EN-1

Paragraph 2.1.2 of EN-5. N.B. Section 128 of the Localism Act 2011 abolished the IPC, with the National Infrastructure Directorate of PINS taking its place. All decisions on NSIPs are taken, following an Examining Authority recommendation, by the SoS. Any reference to the IPC has been directly quoted from the NPS and should be read as the SoS (being the decision maker, supported by the recommendation of the Examining Authority).

- 5.2.20 EN-5 notes that 'the general location of electricity network projects is often determined by the location, or anticipated location, of a particular generating station' in relation to the existing network (Para 2.2.2).
- 5.2.21 Part 2 'Assessment and Technology-Specific Information' provides guidance, under a number of headings, as to what should be considered. It advises for a variety of topic areas (including many of those normally covered in an Environmental Impact Assessment (EIA), and which are covered in the accompanying ES (**Volume 5**)) what the applicant's own assessments should address and what principles should be adopted in decision making. It also advises on the weight to be given to certain issues and on the treatment of mitigation measures, particularly how these may be enforced through requirements or obligations. Any assessment should also cover those issues raised in EN-1.
- 5.2.22 Paragraph 2.6.1 sets out additional technology specific considerations on the following generic impacts considered in EN-1. These are:
 - biodiversity and geological conservation;
 - landscape and visual; and
 - noise and vibration.
- 5.2.23 Paragraph 2.6.2 notes that the NPS 'also sets out technology-specific considerations for the impact of electric and magnetic fields (EMFs), which is not an impact considered in EN-1.
- 5.2.24 EN-5 adds further detail to the general advice set out in EN-1. *Paragraph* 2.8.2 states:

'Government does not believe that development of an OHL is generally incompatible in principle with developers' statutory duty under Section 9 of the Electricity Act to have regard to amenity and to mitigate impacts. In practice new above ground electricity lines, whether supported by lattice steel towers/pylons or wooden poles, can give rise to adverse landscape and visual impacts, dependent upon their scale, siting, degree of screening and the nature of the landscape and local environment through which they are routed. For the most part these impacts can be mitigated, however at particularly sensitive locations the potential adverse landscape and visual impacts of an OHL proposal may make it unacceptable in planning terms, taking account of the specific local environment and context. New substations, sealing end compounds and other above ground installations that form connection, switching and voltage transformation points on the electricity networks can also give rise to landscape and visual impacts.'

- 5.2.25 EN-5 notes that the Planning Inspectorate should expect applicants to demonstrate good design in respect of landscape and visual amenity and in the design of proposed development to mitigate impacts such as noise and EMF.
- 5.2.26 Resilience to climate change is highlighted as a main issue (Section 2.4) and EN-5 advises that applicants should in particular set out how the proposal would be resilient to:
 - flooding, particularly for sub-stations that are vital for the electricity transmission and distribution network;
 - effects of wind and storms on OHL;
 - higher average temperatures leading to increased transmission losses; and
 - earth movement or subsidence caused by flooding and drought for underground cables.
- 5.2.27 EN-5 supports the application of the Holford Rules (see section 4.3.3 of this report and paragraph 2.8.5 of EN-5) to guide the selection of routes for the OHL, which is referenced within Paragraph 4.4 of this report.
- 5.2.28 EN5 paragraph 2.8.5 states that the Examining Authority should ' take them into account in any consideration of alternatives and in considering the need for any additional mitigation measures'⁸.
- 5.2.29 In respect of noise from OHL, EN-5 notes in Paragraph 2.9.11 that this is 'unlikely to lead the SoS refusing an application but it may need to consider the use of appropriate requirements to ensure noise is minimised as far as possible'.
- 5.2.30 EN-5 notes in Paragraph 2.10.6 that 'the balance of scientific evidence over several decades of research has not proven a causal link between electric and magnetic fields (EMFs) and cancer or any other disease'. Furthermore, 'the Department of Health's Medicines and Healthcare Products Regulatory Agency does not consider that transmission line EMFs constitute a significant hazard to the operation of pacemakers' (EN-5 Paragraph 2.10.7).
- 5.2.31 EN-5 also states in Paragraph 2.10.9 that the International Commission on Non-Ionising Radiation Protection (ICNIRP) has developed health protection guidelines for both public and occupational exposure (Ref.14), and that Government has developed, with the electricity industry, a code of practice as

⁸ Paragraph 2.8.7 of EN-5

it states 'Before granting consent the SoS should satisfy itself that the proposal is in accordance with the guidelines...'.

5.3 COMPLIANCE WITH NATIONAL POLICY STATEMENT EN-1 AND EN-5

- 5.3.1 Table 4 illustrates how the Proposed Development complies with the policy requirements contained in EN-1. The following should be noted:
 - references to the IPC should be read as the successor body, the Planning Inspectorate (PINS)
 - where sections of the NPS are not mentioned in the table, this is because they are not relevant to the Proposed Development, for example 4.6 Consideration of Combined Heat and Power (CHP).
- 5.3.2 Table 5 illustrates how the Proposed Development complies with the policy requirements contained in EN-5. This table presents policies commencing in Section 2 of the NPS EN-5, as Section 1 consists of introductory text.

Table 4: Co	ompliance with NPS EN-1		
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
Part 4 Asse	ssment Principles		
General Poi	nts		
4.1.2	The IPC should start with a presumption in favour of granting consent to applications for energy NSIPs. That presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused	Volume 5 (Documents 5.1 - 5.30). Document 7.14.	Tables 4 and 5 of this document demonstrate how the Proposed Development complies with relevant policies set out in the relevant NPSs. The ES (Volume 5) largely provides the evidence for how the Proposed Development complies with relevant polices as set out in Tables 4 and 5.
4.1.3	The IPC should take into account the potential benefits of the proposal including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits. The IPC should also consider its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as	Volume 5 (Documents 5.1 - 5.30). Documents 7.1 and 7.4.	The Proposed Development's contribution in meeting the need for energy infrastructure has been provided in the Project Need Case (Document 7.1) and summarised in ES Chapter 1, Introduction (Document 5.1). Job creation has been detailed in ES Chapter 17, Socio-Economics (Document 5.17). The ES details potential beneficial and adverse residual and cumulative impacts associated with the Proposed Development. Where adverse effects

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	any measures to avoid, reduce or compensate for any adverse impacts.		have been identified, mitigation measures have been proposed to avoid, reduce or compensate for the effects. Mitigation measures are specifically detailed within section 9 of each of the ES technical assessment Chapters and inter-project cumulative effects in section 10 (Documents 5.7 to 5.18).	
			The CEMP (Document 7.4) outlines control mitigation measures that would be adhered to during the construction phase to reduce potential adverse impacts.	
4.1.4	The IPC should take into account environmental, social and economic benefits and adverse impacts, at national, regional and local levels	Volume 5 (Documents 5.1 - 5.30).	The ES (Volume 5) demonstrates how the Proposed Development has taken into account environmental, social and economic benefits and adverse impacts at national, regional and local levels.	
4.1.6	The IPC must have regard to the Marine Policy Statement and applicable marine plans in taking a decision which relates to the exercise of any function capable of	Document 5.9.	Undergrounding of the transmission lines would occur beneath the Menai Strait, at a depth of at least ten metres below the top of the bedrock. Potential mitigation and residual effects on the	

Table 4: Co	mpliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	affecting the whole or any part of the UK marine area.		Menai Strait marine environment are outlined in ES Chapter 9, Ecology and Nature Conservation (Document 5.9). Potential effects include direct habitat loss and water quality contamination in the unlikely event of blowout of drilling slurry during construction using a TBM. This would lead to the potential injury/mortality to mammals and fish. Potential generation of electromagnetic fields when the transmission cables are energised during operation. No potential effects were assessed as being significant as a result of the mitigation measures identified.	
Environmen	Environmental Statement			
4.2.1	All proposals for projects that are subject to the European Environmental Impact Assessment Directive must be accompanied by an Environmental Statement (ES) describing the aspects of	Volume 5 (Documents 5.1 - 5.30).	National Grid has produced an Environmental Statement (ES) for the Proposed Development (Volume 5); the scope of which was agreed with stakeholders and the SoS. Appendix 5.1, Schedule of Responses to the Scoping Report (Document	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	the environment likely to be significantly affected by the project.		5.5.2.1) of the ES details comments received on the Scoping Report.	
			ES Chapter 6, EIA Methodology and Basis of Assessment (Document 5.6) provides a description of the approach and methodology for the ES and each topic chapter also includes a specific methodology. The topic chapters are in the following documents:	
			Document 5.7 - Chapter 7, Landscape Assessment;	
			Document 5.8 - Chapter 8, Visual Assessment;	
			Document 5.9 - Chapter 9, Ecology and Nature Conservation;	
			Document 5.10 - Chapter 10, Historic Environment;	
			Document 5.11 - Chapter 11, Geology, Hydrogeology and Ground Conditions;	
			Document 5.12 - Chapter 12, Water Quality, Resources and Flood Risk;	

Table 4: Co	mpliance with NPS EN-1		
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
			Document 5.13 - Chapter 13, Traffic and Transport;
			Document 5.14 - Chapter 14, Air Quality;
			Document 5.15 - Chapter 15, Construction Noise and Vibration;
			Document 5.16 - Chapter 16, Operational Noise and Vibration;
			Document 5.17 - Chapter 17, Socio-Economics;
			Document 5.18 - Chapter 18, Agriculture;
			Document 5.19 - Chapter 19, Intra-Project Cumulative Effects;
			Document 5.20 - Chapter 20, Inter-Project Cumulative Effects;
			Document 5.21 - Chapter 21, Statement of the Combined Effects with the Wider Works; and
			Document 5.22 - Summary of Residual Effects.
			In accordance with EN-1 the ES assesses the potential significant effects arising for all stages of

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			the Proposed Development and the inter- relationship between the effects.	
4.2.2	The IPC will find it helpful if the applicant sets out information on the likely significant social and economic effects of the development, and shows how any likely significant negative effects would be	Documents 5.17, 5.18, 5.26 and 5.27.	ES Chapter 17 Socio-Economics (Document 5.17) describes the assessment and potential socio- economic effects, both beneficial and adverse, and reports any committed mitigation measures in section 9, as well the resulting residual effects.	
	avoided or mitigated. This information could include matters such as employment, equality, community cohesion and well-being.		The full list of receptors considered in the amenity assessment is presented in Appendix 17.1 (Document 5.17.2.1). The receptor lists is summarised as follows:	
			 Community settlements - Of the 50 communities assessed, 13 would have minor effects and the other 37 would have negligible effects; 	
			• Tourist attractions and recreational resources - There is not likely to be significant disruption to the amenity of tourist attractions and recreational resources located within 10 km of the Proposed Development; of the 37 attractions considered,	

Table 4: Co	Table 4: Compliance with NPS EN-1		
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
			seven would have a minor effect and the rest would be negligible;
			 PRoW, including footpaths, bridleways and cycling routes - following the implementation of the Public Rights of Way Management Plan (Document 7.6), effects on public rights of ways and cycle routes, would not be significant; and
			Commercial receptors (tourism and non-tourism businesses) - Of the 55 tourism related businesses within the study area only two would be affected significantly; 11 would have a minor effect and 42 would have a negligible effect. Of the non-tourism related businesses the majority considered would have either a negligible effect on them, or no effect at all; only three were found to have a minor effect. The Socio-Economic assessment concluded there would no significant social and economic effects, as the assessment concluded the following potential effects are not significant:

Table 4: Co	mpliance with NPS EN-1		
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
			amenity;
			 land-take and access (non-agricultural land);
			• pressure on supply of tourism accommodation;
			 pressure on supply of private rented accommodation;
			change in visitor numbers or visitor behaviour;
			 adverse and beneficial employment effects;
			adverse and beneficial expenditure effects; and
			 adverse and beneficial effects on the tourism sector.
			The overall effect on the tourism sector in Anglesey and Gwynedd are considered to be not significant.
			A separate Wellbeing report (WBR) (Document 5.27) has been prepared. The WBR does not present any primary assessment; rather, it draws on the findings and conclusions of the ES and other DCO documents where these relate to wellbeing. In this context, the different aspects of wellbeing are

Table 4: Co	ompliance with NPS EN-1		
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
			defined by using the potential effects identified by stakeholders at a workshop and the Welsh Wellbeing Goals ⁹ , these goals are detailed further in the WBR. An overall summary of the potential effect of the Proposed Development against the Wellbeing goals is also provided. The assessment concluded there would be no significant adverse effects on wellbeing during the construction and operational phases of the Proposed Development.
			The Welsh language is a key element of community cohesion, and a Welsh Language Impact Assessment has been prepared (Document 5.26). This has concluded that there would be no significant effects on the Welsh Language.

⁹ Wellbeing Goals are set out in the Well-being of Future Generations (Wales) Act 2015. Available at https://gov.wales/topics/people-and-communities/people/future-generations-act/?lang=en [Last Accessed: 02/08/2018].

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			All assessments have considered the potential effects arising from construction, operation (including maintenance) and decommissioning.	
4.2.3	The ES should cover the environmental, social and economic effects arising from pre-construction, construction, operation and decommissioning of the project.	Volume 5 (Documents 5.1 - 5.30).	All technical chapters within the ES (Volume 5) have addressed the likely significant effects during the construction, operation (including maintenance) and decommissioning stages of the Proposed	
4.2.4	When considering a proposal the IPC should satisfy itself 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. In doing so the IPC should also examine whether the assessment distinguishes between the project stages and identifies any mitigation measures at those stages.		Development, including any significant residual effects taking into account mitigation measures which would be committed too. Mitigation measures are specifically addressed within section 9 of each of the ES Chapters. Where necessary, mitigation measures are specific to the stage of the Proposed Development when the effect occurs.	

Table 4: Compliance with NPS EN-1					
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
4.2.5	When considering cumulative effects, the ES should provide information on how the effects of the applicant's proposal would combine and interact with the effects of other development (including projects for which consent has been sought or granted, as well as those already in existence).	Volume 5 (Documents 5.1 - 5.18), Documents 5.20 and 5.21.	Cumulative effects with other developments are addressed in section 10 of each of the ES technical chapters (Volume 5). ES Chapter 20, Inter-Project Effects (Document 5.20) has considered how the effects from the Proposed Development would combine and interact with the effects of other developments (proposed and granted). There would be cumulative effects on local landscape character in the north of Anglesey due to effects of the Proposed Development with Wylfa Newydd Power Station, Wylfa Nuclear Power Station Decommissioning, Rhyd-y-Groes Re-power and Llanbadrig Solar Farm. Localised cumulative effects would impact Anglesey AONB as a result of the effects the Proposed Development with Wylfa Newydd Power Station, Wylfa Nuclear Power Station Decommissioning and Rhyd-y-Groes Re- Power. There would also be cumulative effects in relation to landscape character in Gwynedd due to the Proposed Development together with the A487		

Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Caernarfon to Bontnewydd Bypass during construction and the Green Wire development.	
			Significant cumulative visual effects were identified. In the north of Anglesey, the developments of Wylfa Newydd Power Station, Rhyd-y-Groes Re-power in additional to Llanbadrig Solar Farm and the Proposed Development would be a large change, both for receptors viewing the developments sequentially along the A5025 and users of the Wales Coast Path. Around Pentir, the developments of Green Wire, Dinorwig Cables, Underground Grid Connection between Glyn Rhonwy Pumped Storage Development and Pentir Substation in addition to the Proposed Development could have a greater cumulative visual effect on the community of Pentir.	
			There could be a significant cumulative effect on Standing Stones Scheduled Monument (AN 030), due to a combination of the Wylfa Newydd Power Station and the new overhead line which would	

Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			increase the visibility of modern energy infrastructure in views from the north to the south- east.	
			In all other instances, although there could be some cumulative effect in some instances, the significance of the effect would be no greater than the effects of the developments considered separately	
			ES Chapter 21, Statement of the Combined Effects with the Wider Works (Document 5.21) presents an assessment of the combined effects of the DCO application with the wider works related to the application. The assessment has concluded that there would be no combined effects that would increase the significance of the effects of the Proposed Development considered alone. This is largely due to the distance between the Proposed Development and elements on the Wider Works, which for the most part are separated by many	
			•	

Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Where other developments are already in existence, these have been considered as part of the baseline, as set out in section 7 of each of the technical chapters (Documents 5.7 to 5.18).	
4.2.6	The IPC should consider how the accumulation of, and interrelationship between, effects might affect the environment, economy or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place.	Document 5.17.	Information on potential intra-project cumulative effects on residential properties is included in Chapter 19 Intra-Project Cumulative effects (Document 5.19). 760 residential properties were initially considered and of these 149 were considered to have some potential for cumulative effects, during construction or operation. Of these there were 13 residential properties that were considered likely to experience a cumulative effect of greater significance than the individual effects during construction of the Proposed Development. During operation of the proposed development 17 properties were considered likely to experience a cumulative effect of greater significance than the individual effects. Information on how different	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			effects of the Proposed Development interact upon the economy and communities as a whole have been assessed in ES Chapter 17, Socio-Economics (Document 5.17). The full list of receptors considered in the amenity assessment is presented in Appendix 17.1 (Document 5.17.2.1). The receptor list is summarised as follows:	
			 Community settlements - Of the 50 communities assessed, 13 would have minor effects and the other 37 would have negligible effects; 	
			 Tourist attractions and recreational resources - There is not likely to be significant disruption to the amenity of tourist attractions and recreational resources located within 10 km of the Proposed Development; of the 37 attractions considered, seven would have a minor effect and the rest would be negligible; 	
			 PRoW, including footpaths, bridleways and cycling routes - following the implementation of the Public Rights of Way Management Plan 	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			(Document 7.6), effects on public rights of ways and cycle routes, would not be significant; and	
			 Commercial receptors (tourism and non-tourism businesses) - Of the 55 tourism related businesses within the study area only two would be affected significantly; 11 would have a minor effect and 42 would have a negligible effect. Of the non-tourism related businesses the majority considered would have either a negligible effect on them, or no effect at all; only three were found to have a minor effect 	
4.2.7	In some instances it may not be possible at the time of the application for development consent for all aspects of the proposal to have been settled in precise detail. Where this is the case, the applicant should explain in its application which elements of the proposal have yet to be finalised, and the reasons why this is the case.	Figure 3 (Document 7.14.1.3).	The ES has detailed and assessed the maximum extent of the Proposed Development in terms of site and plant specifications and access.	
		Documents 4.13, 5.3, and 5.6.	Two options are being applied for in relation to the 400 kV OHL. Option A would oversail a residential property at Talwrn (R4/01483) and remove proposed pylon 4AP065. Option B would go around the residential property which would be oversailed	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
4.2.8	Where some details are still to be finalised the ES should set out, to the best of the applicant's knowledge, what the maximum extent of the proposed development may be in terms of site and plant specifications, and assess, on that basis, the effects which the project could have to ensure that the impacts of the project as it may be constructed have been properly assessed.		under Option A. Proposed pylons 4AP064 and 4AP066 are in different locations for Option A and Option B; all other proposed pylons are broadly contiguous for both options. In Section C however there are very slight variations in the locations of pylons 4AP057 to 4AP062 (approximately 1 m) and as a result there are also slight variations in both the LOD and Order Limits from south-east of Maen Eryr to the end of this section where Section D commences. The differences between the two options in this section are shown on Figure 3.2 Sheet 3 of 6 Options A and B (Document 5.3.1.2).		
			Section 3.5 of ES Chapter 3, Description of the Proposed Development (Document 5.3) describes the above ground LOD and section 4.3 describes the below ground LOD. The flexibility introduced by the LOD and parameters have been assessed as part of the EIA; this approach has been explained in ES Chapter 6, EIA Methodology and Basis of Assessment (Document 5.6), where the need for		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			this flexibility is also explained; in summary the LOD are mostly required to allow for the avoidance of unsuitable ground conditions or high value archaeological finds.	
			The Design Drawings (Document 4.13) show the maximum parameters within which permanent infrastructure, such as the THHs, would be developed.	
4.3 Habitats	and Species Regulations			
4.3.1	Prior to granting a development consent order, the IPC must, under the Habitats and Species Regulations, (which implement the relevant parts of the Habitats Directive and the Birds Directive in England and Wales) 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	Document 5.23.	The Habitat Regulations Assessment Report (Document 5.23) supports the application for a DCO. The potential for significant effects either alone or in combination with other relevant plans or projects on any European site of nature conservation importance has been assessed. It is considered that the Proposed Development would not have any significant adverse effects on	

Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
	of policy, either alone or in combination with other plans or projects.		any European Site of nature conservation importance.
	The applicant should seek the advice of Natural England and/or the Countryside Council for Wales [now Natural Resources Wales], and provide the IPC with such information as it may reasonably require determining whether an Appropriate Assessment is required. In the event that an Appropriate Assessment is required, the applicant must provide the IPC with such information as may reasonably be required to enable it to conduct the Appropriate Assessment. This should include information on any mitigation measures that are proposed to minimise or avoid likely effects.		Consultation on the HRA Report has been undertaken with Natural Resources Wales (NRW) and Isle of Anglesey County Council. A presentation of the initial findings of the HRA was given to NRW and a draft version of the report was shared with both parties. Consultation ensured mitigation measures set were adequate to address potential impacts upon the Menai Strait and Conwy Bay SAC and hydrological impacts on the Anglesey Fens SAC.

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
4.4.2	Applicants are obliged to include in their ES, as a matter of fact, 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 IPC to consider alternatives. These should also be identified in the ES by the applicant	Documents 5.2, 5.23 and 7.17.	The Proposed Development has been in development since 2012. Routeing and siting studies were undertaken in accordance with the Holford Rules (line routeing) and National Grid's Guidelines on the Design and Siting of Substations. ES Chapter 2, Alternatives, Project History and Non-Statutory Consultation (Document 5.2) summarises this process and discusses the main alternatives considered at each stage and the reasons for the key decisions; further details are provided within the Design Report (Document 7.17). The routeing and siting process considered technical, financial, environmental and socio- economic factors as well as consultation feedback. These alternatives are also outlined in the Habitat Regulations Assessment Report (Document 5.23).		
4.5 Criteria f	or "Good Design" for Energy Infrastructure Pr	ojects.			
4.5.1	Applying 'good design' to energy projects should produce sustainable infrastructure	Documents 5.2, 5.12.2.1 -	ES Chapter 2, Alternatives, Project History and Non-Statutory Consultation (Document 5.2)		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	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.	4, 7.2, 7.4, 7.16, 7.17 and 7.19.	summarises the main alternatives considered at each stage and the reasons for the key decisions. Whilst the nature of the Proposed Development provides limited choice in its physical appearance, National Grid has used opportunities to demonstrate		
4.5.3	The IPC needs to be satisfied that energy infrastructure developments are sustainable and, having regard to regulatory and other constraints, are as attractive, durable and adaptable (including taking account of natural hazards such as flooding) as they can be. In so doing, the IPC should satisfy itself that the applicant has taken into account both functionality (including fitness for purpose and sustainability) and aesthetics (including its contribution to the quality of the area in which it would be located) as far as possible. Whilst the applicant may not have any or very limited choice in the		good design in terms of siting relative to existing landscape character and landform. Routeing and siting studies were undertaken in accordance with the Holford Rules (line routeing) and National Grid's Guidelines on the Design and Siting of Substations. For example, in accordance with the Holford Rules 4 and 5 which refer to woodlands, National Grid sought wherever possible to avoid woodlands when routeing the new connection. Where avoidance was not practical, National Grid worked closely with the local authorities and other statutory organisations to reduce woodland loss.		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	 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. 		As part of this process the decision was made to use an underground connection through the Anglesey AONB and across the Menai Strait, avoiding the development of an OHL within this sensitive area. It was considered that the additional cost associated with this mitigation was justified to reduce effects upon the landscape of the AONB and to protect iconic views along the Menai Strait. The detailed design work undertaken to identify the OHL design of the Proposed Development has set out to develop a synchronised design as described in the Design Report (Document 7.17). Localised	
4.5.4	For the IPC to consider the proposal for a project, applicants should be able to demonstrate in their application documents how the design process was conducted and how the proposed design evolved. Where a number of different designs were considered, applicants should set out the		constraints to siting of individual pylons have precluded this where an unpaired or less synchronised design would be locally preferable based upon the nature of the receptors local to a given pylon. The Design Report (Document 7.17) provides an explanation as to how the evolution of the design reached the Proposed Development for which the DCO is sought.	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	reasons why the favoured choice has been selected.		The Design and Access Statement (Document 7.16) sets out how the Proposed Development has incorporated good design into the non-linear elements of the Proposed Development. The Design Guide (Document 7.19) consists of principles that the whole development should adhere to.	
			Any land temporarily used for the construction of the Project would be fully reinstated, in agreement with the relevant landowner. Where trees, tree groups or hedges were removed from working areas, construction compounds or temporary access routes, they would be replaced by new planting in situ during reinstatement following completion of construction, and in agreement with landowners.	
			Due to the evolution of pylon design over time the existing pylons are no longer in production. Producing the existing pylons would be uneconomical and present technical difficulties. National Grid selected a similar steel lattice pylon	

Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
			(as the existing OHL) for the proposed OHL. This was considered the best option to reduce visual effects as far as possible as it would not introduce contrasting shapes into the environment. Whilst similar in appearance to the existing pylons, the new pylons have an overall lighter weight and thinner appearance.
			Construction mitigation measures to reduce landscape and visual effects through reducing light pollution has been described in the CEMP (Document 7.4).
			Flood Consequences Assessments (FCA) prepared for the Proposed Development have addressed the adaptability of the Proposed Development, and is provided in Appendix 12.1 - 4, of the ES (Documents 5.12.2.1 - 4).

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
4.8.5	The ES should set out how the proposal will take account of the projected impacts of climate change. While not required by the EIA Directive, this information will be needed by the IPC.	Documents 5.14, 5.12 and 5.12.2.1 - 4.	National Grid has produced its own 'Flood Mitigation Policy PS(T)_095' (2011) which defines their declared target standards of protection (SoP) for flood defence/resilience. These standards are applied to all new build electricity transmission substations and at legacy substations subjected to an expansion or a major refurbishment programme.		
4.8.6	The IPC 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		This document effectively sets out that the minimum SoP for climate change as provided in the relative national guidance statements. During the construction stage, the outline drainage strategies demonstrate that site discharges would not exceed the Greenfield runoff rate		
	identified appropriate mitigation or adaptation measures. This should cover the estimated lifetime of the new infrastructure.		National Grid has planned and designed the operation of the Proposed Development over its lifespan (approximately 80 years), and has taken into account the impacts of climate change over this		
4.8.7	Applicants should apply as a minimum, the emissions scenario that the Independent		period as part of the design process.		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	Committee on Climate Change suggests the world is currently most closely following – and the 10%, 50% and 90% estimate ranges. These results should be considered alongside relevant research which is based on the climate change projections.		It has been estimated a total of 320 m ³ storage volume would need to be provided for both the Braint and Tŷ Fodol THH/CSEC sites in order to safely control discharges from the sites to the Greenfield runoff rate during a 1% AEP rainfall event (see Annex 5.12.2.3B) plus 20% allowance for climate change (see FCA Volume 1, section 2.5 (Document 5.12.2.1) for climate change		
4.8.8	The IPC should be satisfied that there are not features of the design of new energy infrastructure critical to its operation which may be seriously affected by more radical changes to the climate beyond that projected in the latest set of UK climate projections, taking account of the latest credible scientific evidence on, for example, sea level rise (for example by referring to additional maximum credible scenarios – i.e. from the Intergovernmental Panel on Climate Change or EA) and that necessary action can be taken to ensure		allowances). On the basis that 320 m ³ of water would need storing, as an example a 50 x 20 m, 1 m deep trapezoidal pond (1:4 side slopes), with 0.3 m of freeboard and dead storage below 0.7 m would provide more than the requisite 320 m ³ of storage. It can be seen that a pond of such dimensions could be accommodated in the water management zone (see Drawing DCO_DE/PS/12 Sheet 2 of 3), leaving ample space for treatment facilities that could also include settlement ponds. Moreover, there is flexibility regarding the depth of the ponds if,		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	the operation of the infrastructure over its estimated lifetime.		during detailed design and hydraulic modelling post grant of a DCO, it transpired that additional volume		
4.8.9	Where energy infrastructure has safety critical elements (for example parts of new fossil fuel power stations or some electricity substations), the applicant should apply the high emissions scenario (high impact, low likelihood) to those		 was required. For a full description of how the Proposed Development has been designed to include safety critical elements, please read the FCA, provided in Appendix 12.1 - 4, of the ES (Documents 5.12.2.1 - 4). 		
4.8.11	elements. Any adaptation measures should be based on the latest set of UK Climate Projections, the Government's latest UK Climate		Current projections around the impact of climate change in the UK forecast extremes of heavy rain and drought weather and more occurrences of high wind. In recognition of this OHL design has been informed by wind, ice and wind-on-ice loadings.		
	Change Risk Assessment, when available and in consultation with the EA.		Impacts of climate change on the water environment, and in particular on flood risk, are considered in the FCAs prepared for the Proposed Development which are available in ES Chapter 12, Water Quality, Resources and Flood Risk		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			(Document 5.12) and Appendix 12.1 - 12.4, (Documents 5.12.2.1 - 4).	
			The FCAs take account of the climate change allowances defined via the latest UK Climate Change projections and supplementary guidance documents. The FCAs include climate change scenarios in modelling potential flood risk and mitigation proposed.	
			Three time periods are applicable to the Proposed Development: (i) the construction period, (ii) the operational period, and (iii) the decommissioning period. It has been assumed that the 2020s scenario is applicable to construction and the 2080s to operation and decommissioning. A FCA has been prepared for the 400 kV OHL and underground cable.	
			In summary, for the construction period, watercourse crossing designs would be based on river flows being increased by 15% which represents the change factor for up to the 2020s.	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			During the operational/decommissioning periods it has been assumed that peak river flows could increase by 30% along the route, and by 75% at the Braint and Ty Fodol THH/CSEC locations in Anglesey and Gwynedd.	
			National Grid has sought to avoid, as far as possible, areas at risk of flooding. Pentir and Wylfa substations are located outside flood risk areas. Essential energy infrastructure which has to be located in flood risk areas are designed to remain operational when floods occur.	
			Any works in a floodplain would incorporate measures to reduce possible obstruction or deviation of floodwater. In addressing flood risk, section 9 of ES Chapter 12, Water Quality, Resources and Flood Risk (Document 5.12) details mitigation measures which would be in place. As an outline this includes effective drainage design, use of SuDS, discharge permit compliance and	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			minimising the number of watercourse crossings by temporary access tracks.	
			Following the adoption of design principles and environmental measures no significant hydrology and flood risk effects are anticipated . Adequate flood resilience measures would also be adopted to ensure that the design has fully taken into account changes to flood risk associated with climate change.	
			An assessment of the potential effects the Proposed Development has on Air Quality is provided in ES Chapter 14, Air Quality (Document 5.14). A review of baseline conditions has identified that existing air quality within the study area is generally of a good standard. The impact and associated effect of the Proposed Development on local air quality is considered to be not significant. As impacts are temporary, lasting for the duration of the construction phase only, policy 4.8.7 is not applicable to the Proposed Development, as	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			undertaking an assessment to determine future emission scenarios such as 10%, 50% and 90% estimate ranges are not relevant. This is because air quality would return to future baseline conditions and would remain well below the relevant air quality objective values. Decommissioning would have less of an effect than construction but the same approach to mitigation would apply.		
4.10 Pollutio	on control and other environmental regulatory	regimes			
4.10.7	Working in close cooperation with EA and/or the pollution control authority, and other relevant bodies, such as the MMO, Natural England, IDBs, the IPC should be satisfied before consenting any potentially polluting developments that: the relevant pollution control authority is satisfied that potential releases can be adequately regulated under the pollution control framework; and the effects of existing	Volume 6, Documents, 5.5, 5.12 and 7.4.	National Grid has been in correspondence with the relevant pollution control authorities, including Public Health Wales and The Health and Safety Executive, as detailed in the Consultation Report (Document 6.1) and ES Chapter 5 EIA Consultation (Document 5.5), to determine the likely requirement for environmental permits and other consents. The Health Protection Agency were not contacted as the Project would not involve chemicals, poisons or radiation which could cause harm to people.		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	sources of pollution in and around the site are not such that the cumulative effects of		The following consents, licences, permits etc. would be required:		
	pollution when the proposed development is added would make that development unacceptable, particularly in relation to statutory environmental quality limits.		 Discharge of water consent from Natural Resources Wales under Part VII, Water Resources Act 1991 and the Environmental Permitting Regulations 2010; 		
			 Noise and Vibration Consent from the relevant planning authority under Section 61 of the Control of Pollution Act 1974; 		
			 Permits from Natural Resources Wales pursuant to the Environmental Permitting (England and Wales) Regulations 2010; 		
			 Consent from the relevant sewerage undertaker for connections or discharges into a main sewer, as required under Sections 110A and 118 of the Water Industry Act 1991;Registration(s) by Natural Resources Wales under Regulation 21 of the Hazardous Waste (England and Wales) Regulations 2005. 		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			ES Chapter 12 Water Quality, Resources and Flood Risk (Document 5.12) deals with the need for Environmental Permit for water discharge activity. The Proposed Development will need to be in compliance with the Environmental Permitting Regulations. As such permit applications will be submitted for approval by NRW as required. For example, during the operational phase there would also be a requirement to carry out dewatering to remove leakages and excess water accumulation within the tunnel and the controlled discharge activity would require an Environmental Permit from NRW.	
			Flood Risk Activities Permits (FRAPs) are required for any works within 8 m of a non-tidal 'Main River', and within 16 m of a tidal 'Main River' to ensure that works do not increase flood risk, damage flood defences, or harm the water environment.	
			During the operational phase there would be a requirement to carry out dewatering to remove	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			leakages and excess water accumulation within the tunnel and the controlled discharge activity would require an Environmental Permit from NRW.	
			Control and Management Measures (CMM) include the use of hydrocarbon interceptors, packaged water treatment works for dewatering arising's and provision for water treatment measures for treating suspended solids (should particle sizes be too small for gravity settlement to be effective). Guidance for Pollution Prevention (GPPs) would be used, as would the SuDS Manual (Ref.16) to inform pollution prevention elements of detailed drainage strategies.	
			The proposed THH/CSECs are situated 0.9 km and 1.3 km from the Y Fenai a Bae Conwy/Menai Strait and Conwy Bay SAC within the Afon Braint (upper) and Nant y Garth catchments respectively. During the operational phase there would also be a requirement to carry out dewatering to remove	
			leakages and excess water accumulation within the tunnel and the controlled discharge activity would	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			require an Environmental Permit from NRW, as highlighted in ES Chapter 12 Water Quality, Resources and Flood Risk (Document 5.12).	
			Following the implementation of management techniques and mitigation measures the Proposed Development would not cause any unacceptable effects in relation to exceeding environmental quality limits. There is predicted to be no significant effects on the aquatic environment, air and ground conditions.	
4.11 Safety				
4.11.1	HSE is responsible for enforcing a range of occupational health and safety legislation some of which is relevant to the	Document 5.25	National Grid takes its responsibilities relating to health and safety for the construction and operation of its infrastructure very seriously.	
	construction, operation and decommissioning of energy infrastructure. Applicants should consult with the Health and Safety Executive (HSE) on matters relating to safety.		Consultation has been undertaken with the HSE. Despite passing over Major Accidental Hazard Pipeline(s) the project in its current form does not meet HSE Land Use Planning criteria that would lead to an Advise Against response. However, if	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			prior to granting of a DCO for the Proposed Development, Hazardous Substances Consent is granted for a Major Hazard Installation within or in the vicinity of the development, the HSE reserves the right to revise its advice.	
			In accordance with the Electricity Safety, Quality and Continuity Regulations 2002, each transmission pylon has property signs, individual number plates and a safety warning. In order to discourage access by unauthorised persons, steel lattice transmission pylons are also provided with anti-climbing devices. Once an OHL has been constructed National Grid writes annually to all whose land is crossed by OHLs, reminding them of the need for care in the use of ladders, tall machinery and other equipment.	
			The Electric and Magnetic Fields (EMFs) Report (Document 5.25), produced for the Proposed Development concluded that there would be no significant adverse risk on receptors.	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
4.13 Health					
4.13.2	Where the proposed project has an effect on human beings, the ES should assess these effects 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 IPC should consider the cumulative impact on health.	Documents 5.11, 5.13 - 5.17, 5.19, 5.20, 5.25, 5.27, 7.4 and 7.11.	 National Grid has carried out an assessment of those aspects of the Proposed Development which may have the potential for adverse impacts on health. Those assessments are presented in the following documents: Chapter 11, Geology, Hydrogeology and Ground Conditions (Document 5.11); Chapter 13, Traffic and Transport (Document 5.13); Chapter 14, Air Quality (Document 5.14); 		
4.13.3	The direct impacts on health may include increased traffic, air or water pollution, dust, odour, hazardous waste and substances, noise, exposure to radiation, and increases in pests.		 Chapter 15, Construction Noise and Vibration (Document 5.15); Chapter 16, Operational Noise and Vibration (Document 5.16); 		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
4.13.4	New energy infrastructure may also affect the composition, size and proximity of the local population, and in doing so have indirect health impacts, for example if it in		 Chapter 17, Socio-Economics (Document 5.17); and The Outline Waste Management Plan (OWMP) (Document 7.11). 		
	some way affects access to key public services, transport or the use of open space for recreation and physical activity.		Chapter 17, Socio-Economics (Document 5.17) concludes the Proposed Development would have no direct and indirect significant effects on key		
4.13.5			public services, including transport or the use of open space for recreation and physical activity.		
			ES Chapter 19, Intra-Project Effects (Document 5.19) has identified no human receptor would be exposed to more than one source of health effect arising from different aspects of the Proposed Development.		
			Chapter 20, Inter-Project Effects (Document 5.20) provides the assessment of the cumulative effects from the Proposed Development, with other proposed major developments with the potential to affect shared receptors.		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			A separate Wellbeing report (WBR) (Document 5.27) has been undertaken. The WBR does not present any primary assessment; rather, it presents the findings and conclusions from the ES and other DCO documents in relation to wellbeing. In this context, the different aspects of wellbeing are defined by using the potential effects identified by stakeholders at a workshop and the Welsh Wellbeing Goals, these goals are detailed further in the WBR. An overall summary of the potential effect of the Proposed Development against the wellbeing goals is also provided. The following adverse effects have been identified in the well- being report: significant noise effects at two properties during construction; significant landscape effects at a small minority of Landscape Character Areas and one Special Landscape Area; and potential significant severance effects on the Pont Rhonwy Link (Anglesey). Overall, however, given the scale of the Proposed Development and the numbers of properties, highway links and landscape		

Table 4: Co	able 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			areas assessed, it is considered that there would be no significant adverse effects in respect of issues identified in the workshop related to the well-being goals. The Proposed Development complies with EMF exposure guidelines as detailed in the Electric and Magnetic Fields Report (Document 5.25).	
4.14 Comm	on Law Nuisacne and Statutory Nuisance			
4.14.2	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 by the IPC so that appropriate requirements can be included in any subsequent order granting development consent. (See section 5.6 on	Documents 5.24 and 7.4 .	The Statement of Statutory Nuisance (Document 5.24) identifies the matters set out in Section 79(1) of the Environmental Protection Act 1990 in respect of statutory nuisance and considers whether the Proposed Development would cause nuisance and identifies the measures that have been incorporated into the Proposed Development to mitigate any such potential nuisances.	
	Dust, odour, artificial light etc. and section 5.11 on Noise and vibration.)		The CEMP (Document 7.4) includes measures that would reduce any potential to cause nuisance.	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Construction activities that have the potential to create a nuisance would be controlled through strict compliance with National Grid's Contract Requirements which would require that the contractor implement the measures outlined in the CEMP.	
5.2 Air Qual	ity and Emissions			
5.2.2	CO2 emissions are a significant adverse impact from some types of energy infrastructure which cannot be totally avoided (even with full deployment of CCS technology). Any ES on air emissions will include an assessment of CO2 emissions, but the policies set out in section 2, including the EU ETS, apply to these emissions.	Documents 5.14 and 7.4.	Section 5.2.2 of the NPS relates primarily to energy generation. ES Chapter 14, Air Quality (Document 5.14) has considered the potentially significant effects resulting from the construction, operational (including maintenance) and decommissioning phases of the Proposed Development on air quality sensitive receptors. Greenhouse gases would be emitted during the construction phase, through the consumption of	
5.2.7	The ES should describe:		materials and energy, and through vehicular	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	 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 		emissions; however there would be very little opportunity to substantially reduce these emissions. The potential for greenhouse gas emissions during the operation of the Proposed Development would be limited vehicle emissions and any materials used during maintenance visits etc. As such there has been no assessment undertaken of CO2 emissions. The Project Need Case (Document 7.1) confirms that the Proposed Development is necessary to connect Wylfa Newydd Power Station. NPS EN-1 identifies nuclear power generation as a key part of the low carbon energy mix.	
	 any potential eutrophication impacts. 		During the construction phase, although there would be an increase in dust, particulate matter (PM ₁₀ and	
5.2.11	The IPC 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. A construction		$PM_{2.5}$) and nitrogen dioxide (NO ₂), these levels are predicted to be not significant in ES Chapter 14 Air Quality (Document 5.14). These effects would be limited due to the temporary nature of the works.	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
5.2.13	management plan may help codify mitigation at this stage. The mitigations identified in section 5.13		During the operational phase emissions would be limited to those from maintenance vehicles. The assessment concluded emissions would return to baseline conditions during the operational phase and would remain well below the relevant air quality	
	on traffic and transport impacts will help mitigate the effects of air emissions from transport.		objective values. A description of predicted absolute emission levels (after mitigation), for each identified impact including emissions from construction plant, equipment and vehicles are described in ES Chapter 14, Air Quality (Document 5.14). The operation of elements of the Proposed Development would have a limited impact on local air quality, which are considered unlikely to cause an effect of significance. The assessment of residual effects across the study area has identified that construction phase road traffic emissions would have an imperceptible to low impact at the majority of sensitive human receptors and a medium impact at a limited number of properties in Llanerchymedd. Total pollutant concentrations are predicted to be	

Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
			such that the effect of these impacts would not be significant.
			The CEMP (Document 7.4) provides mitigation measures which would be implemented to reduce as far as practicable air pollutants emissions from plant and construction activities.
			Following the implementation of mitigation measures, it is anticipated that effects on human and ecological receptors during the construction and operational stages of the Proposed Development from air quality would be mostly negligible, with just one receptor experiencing a minor effect.
			Road traffic and energy generation plant emissions are sources of NO _X that could increase nutrient nitrogen deposition. The impact of nitrogen emissions are reported in section 9 of ES Chapter 14, Air Quality (Document 5.14) and in all instances the effects are considered to be not significant.

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
5.3.3	The applicant should ensure that the ES clearly sets 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. The applicant should show how the project has taken advantage of opportunities to		A search for areas of geological conservation importance has been undertaken as described in section 7 of ES Chapter 11, Geology, Hydrogeology and Ground Conditions (Document 5.11). No Geological Sites of Special Scientific Interest (GSSSI) or Regionally Important Geodiversity Sites (RIGS) are present within 1 km of the Order Limits of the Proposed Development. No effects on designated sites of geological conservation importance have been identified. ES Chapter 9, Ecology and Nature Conservation		
5.3.7	conserve and enhance biodiversity and geological conservation interests. 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.		(Document 5.9) presents information about the ecological effects (terrestrial and marine) that could result from the construction, operation, maintenance and decommissioning of the Proposed Development. Protected species, statutory designated sites and non-statutory nature conservation designations located within the study		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
5.3.9	For the purposes of considering development proposals affecting them, as a matter of policy the Government wishes pSPAs to be considered in the same way as if they had already been classified. Listed Ramsar sites should, also as a matter of policy, receive the same protection.		area have been identified and assessed for potential effects. The majority of potential significant effects have been avoided through careful design and routeing of the Proposed Development, or have been addressed through the implementation of standard mitigation measures. These standard measures include working hours, light control, waste	
5.3.18	 The applicant should include appropriate mitigation measures as an integral part of the proposed development. In particular, the applicant should demonstrate that: during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works; during construction and operation best practice will be followed to ensure that risk of disturbance or damage to 		management and pollution prevention and control. Measures specific to potential ecology effects include careful timing of work, vegetation management in the appropriate season, vegetation protection zones and an ecological watching brief where required. All of these standard and ecology specific measures would be applied through the implementation of the CEMP (Document 7.4). Standard biosecurity measures are also included, with further restrictions potentially being required in specific locations due to presence of a particularly valued species or habitats. More specific mitigation	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	 species or habitats is minimised, including as a consequence of transport access arrangements; habitats will, where practicable, be restored after construction works have finished; and opportunities will be taken to enhance existing habitats and, where practicable, to create new habitats of value within the site landscaping proposals. 		 measures are reported in the Biodiversity Mitigation Strategy (Document 7.7). Adherence to mitigation measures means that there would be no significant effects as a result of the Proposed Development on statutory designated sites. The only significant effect on the reported in Chapter 9 Ecology and Nature Conservation is on the Gylched Covert County Wildlife Site, which would experience a moderate (significant) effect due to a loss of habitat. Almost all the effects identified are temporary and the majority are negligible. The majority of habitats would be fully re-instated on completion of the works so there would be limited long term effects. Enhancement of biodiversity interests are reported in in Enhancement Strategy (Document 7.13). For some designated sites and habitats it is 	
			anticipated that there would be a net enhancement as a result of mitigation measures implemented in combination with the implementation	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			of the new habitats. It has been considered that the embedded mitigation measures and proposals create an acceptable proposal when balanced against the need for the Proposed Development.	
			There would be no significant effect on any protected or notable species as a result of the Proposed Development. Individuals or small numbers of some species would though be temporarily affected during construction, maintenance and decommissioning. The habitats supporting these species would be replaced, or improved ecologically where possible.	
			The Habitat Regulations Assessment Report (Document 5.23) assesses the potential for significant effects on the integrity of Natura 2000 sites, either alone or in combination with other relevant plans or projects on any European site of nature conservation importance.	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			The assessment concludes that the Proposed Development would not result in a likely significant effect on a Natura 2000 site alone or in combination with other plans and projects.		
5.4 Civil and	Military Aviation and Defence Interests				
5.4.10	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 (see Section 4.2).	Document 6.1	The Defence Infrastructure Organisation (part of the Ministry of Defence), Civil Aviation Authority and NATS En-Route Safeguarding were consulted as prescribed consultees at the start of the statutory Stage Three Consultation, as detailed in the		
5.4.11	5.4.11 The applicant should consult the MoD, CAA, NATS and any aerodrome – licensed or otherwise – likely to be affected by the proposed development in preparing an assessment of the proposal on aviation or other defence interests.		Consultation Report (Document 6.1). NATS En- Route Safeguarding responded to confirm that they did not have any comment to make, no response was received from the CAA.		
			The Defence Infrastructure Organisation (part of the Ministry of Defence) responded to the Stage Three Consultation stating their concerns expressed in the Stage Two Consultation on route options still stand. During the Stage Two Consultation the Ministry of		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			Defence set out their concerns regarding route option 3a. National Grid has confirmed that route option 3a was discounted in the design process and are currently progressing a statement of common ground with the Ministry of Defence through further correspondence now that this point has been addressed.		
5.5 Coastal	Change				
5.5.6	Where relevant, applicants should undertake coastal geomorphological and sediment transfer modelling to predict and understand impacts and help identify relevant mitigating or compensatory measures.	Document 5.2 and 7.17	The decision to cross the Menai Strait in a cable tunnel rather than options on the seabed meant that any impacts related to coastal change would be avoided.		
5.6 Dust, o	5.6 Dust, odour, artificial light, smoke, steam and insect infestation				
5.6.4	The applicant should assess the potential for insect infestation and emissions of odour, dust, steam, smoke and artificial	Documents 5.24 and 7.4.	Statement of Statutory Nuisance is provided as Document 5.24 . Matters that have the potential to constitute 'statutory nuisances' that are not		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	light to have a detrimental impact on amenity, as part of the Environmental Statement.		applicable to the Proposed Development have been screened out of the assessment, this includes insect infestation, smoke and steam.		
5.6.5	 The assessment provided by the applicant should describe: the type, quantity and timing of emissions; aspects of the development which may give rise to emissions; premises or locations that may be affected by the emissions; 		Lighting would only be used when required during core working hours, unless otherwise stated and would comprise of lighting of work areas and access and egress with low level directional lighting. Lights installed would be of the minimum brightness and/or power rating capable of performing the desired function. The direction of lights would seek to avoid spillage onto neighbouring properties or ecological receptors.		
	 effects of the emission on identified premises or locations; and measures to be employed in preventing or mitigating the emissions. 		The CEMP (Document 7.4) provides multiple mitigation measures required in Paragraph 5.6.11. For example, the development of a dust management plan (DuMP) and planning the site layout will allow for machinery and dust causing		
5.6.11	Mitigation measures may include one or more of the following:		activities to be located away from receptors as far as would be possible. Following the implementation of mitigation there would be no significant effects to		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	engineering: prevention of a specific emission at the point of generation;		air quality and emissions during all stages of the Proposed Development.		
	 control, containment and abatement of emissions if generated; 				
	 lay-out: adequate distance between source and sensitive receptors; 				
	 reduced transport or handling of material; and 				
	 administrative: limiting operating times; restricting activities allowed on the site; implementing management plans. 				
5.7 Flood Ri	sk				
5.7.4	Applications for energy projects of 1 hectare or greater in Flood Zone 1 in England or Zone A in Wales113 and all proposals for energy projects located in Flood Zones 2 and 3 in England or Zones B and C in Wales should be accompanied	Documents 5.12, 5.12.2.1 - 4 and 7.4.	Discussions have been held with NRW and Lead Local Flood Authorities (LLFAs) at the Scoping, Preliminary Environment Information Report (PEIR), and ES stages.		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	by a FRA. An FRA will also be required where an energy project less than 1 hectare may be subject to sources of flooding other than rivers and the sea (for example surface water), or where the EA, Internal Drainage Board or other body have indicated that there may be drainage problems. This should identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate change into account.		Appendix 12.1 - 12.4 of the ES, contain the FCAs (Document 5.12.2.1 - 4) which have been undertaken for the Proposed Development (the 400 kV OHL, underground cable and THH/CSECs). Details of the approach to identifying flood hazards are provided in FCA Volume 1, section 4.3, where the methods, data and other sources of information are also described. For the purposes of assessing flood risk the FCA has used the most up to date UK guidance and data for rainfall. The FCA demonstrates how the sequential and exception tests have been passed.		
5.7.5	 The minimum requirements for FRAs are that they should: be proportionate to the risk and appropriate to the scale, nature and location of the project; 		Flood risk arising from groundwater, reservoirs, sewer and fluvial/surface water has been assessed. As discussed in the FCA in Appendix 12.1 (Document 5.12.2.1) coastal flood risk was scoped out of the assessment, as discussed with NRW in		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	 consider the risk of flooding arising from the project in addition to the risk of flooding to the project; take the impacts of climate change into 		January 2017. The assessment has not taken into account the risk of flooding from the Llyn Alaw and Cefni reservoirs, as the risks from these sources were discounted.	
	 account, clearly stating the development lifetime over which the assessment has been made; be undertaken by competent people, as 		The FCAs have assessed both upstream and downstream receptors, further to flood risk areas and flood risk receptors in relation to the Proposed Development.	
	 be undertaken by competent people, as early as possible in the process of preparing the proposal; consider both the potential adverse and beneficial effects of flood risk management infrastructure, including raised defences, flow channels, flood storage areas and other artificial features, together with the consequences of their failure; 		The FCAs take account of the climate change allowances defined via the latest UK Climate Change projections and set out in supplementary guidance as discussed in more detail in Appendix 12.1 - 4 of the ES, (Document 5.12.2.1 - 4). The FCAs address the issue of resilience to flooding. The FCAs include climate change scenarios in modelling potential flood risk and mitigation proposed. In addition, the resilience of pylon design	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	 consider the vulnerability of those using the site, including arrangements for safe access; consider and quantify the different types 		to other aspects of climate change, such as wind and storms and higher temperatures, has been addressed in National Grid's published Climate Adaptation Report (Ref.17).		
	 of flooding (whether from natural and human sources and including joint and cumulative effects) and identify flood risk reduction measures, so that assessments are fit for the purpose of the decisions being made; consider the effects of a range of flooding events including extreme 		Climatic allowances used for the FCA in assessing river flow include:		
			 Operational: 75% total potential change anticipated for 2080s; and 		
			 Construction: 25% total potential change anticipated for 2020s. 		
			 Climatic allowances used for the FCA in assessing rainfall include: 		
	events on people, property, the natural and historic environment and river and coastal processes;		 Operational: 40% total potential change anticipated for 2080s; and 		
	 include the assessment of the remaining (known as 'residual') risk after risk reduction measures have been taken into account and 		Construction: 5% total potential change anticipated for 2020s.		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	 demonstrate that this is acceptable for the particular project; consider how the ability of water to soak into the ground may change with development, along with how the proposed layout of the project may affect drainage systems; consider if there is a need to be safe and remain operational during a worst case flood event over the development's lifetime; and be supported by appropriate data and information, including historical information on previous events. 		During the evolution of the Proposed Development, flood risk effects have been considered in order to avoid significant effects. The design has sought to minimise the areas of temporary and permanent OHL infrastructure within areas of flood risk. Pentir and Wylfa Substations are located outside flood risk areas. In addressing flood risk, residual effects and mitigation measures which would be implemented are outlined in section 9 of ES Chapter 12, Water Quality, Resources and Flood Risk (Document 5.12), as an outline this includes: • new vulnerable infrastructure is to be located in areas of low flood risk;		
5.7.7	Applicants for projects which may be affected by, or may add to, flood risk should arrange pre-application discussions with the EA, and, where relevant, other bodies such as Internal Drainage Boards,		 minimising the number of watercourse crossing by temporary access tracks; appropriate water crossing design; effective drainage design; 		

Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
	sewerage undertakers, navigation authorities, highways authorities and reservoir owners and operators. Such discussions should identify the likelihood and possible extent and nature of the flood risk, help scope the FRA, and identify the information that will be required by the IPC to reach a decision on the application when it is submitted.		 raising flood sensitive infrastructure; and discharge Permit Compliance The potential effects associated with access tracks and crossings associated with third party assets have been considered within the assessment of residual effects. Construction compounds would be surfaced with material that would be at least as permeable as the
5.7.8	If the EA has concerns about the proposal on flood risk grounds, the applicant should discuss these concerns with the EA and take all reasonable steps to agree ways in which the proposal might be amended, or additional information provided, which would satisfy the Environment Agency's concerns.		topsoil to be removed, where practicable. For any areas where it would not be practicable or where there are areas of reduced permeability, sustainable drainage systems (SuDS) would be implemented, either through the use of soakaways, infiltration trenches or attenuation storage. The type of measure would be commensurate with local conditions, and the scale/duration of the construction compound.

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
5.7.9	 In determining an application for development consent, the IPC should be satisfied that where relevant: the application is supported by an appropriate FRA; 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 strategy114; priority has been given to the use of sustainable drainage systems (SuDs) (as required in the next paragraph on National Standards); and 		Appropriate measures would be set out in a site specific Drainage Management Plan (DMP), which would be agreed with NRW prior to the commencement of construction activities. The assessment has employed the SuDS hierarchy in the drainage strategies within the FCA. Detailed drainage strategies would be prepared for Construction Compounds at Penmynydd Road and Pentir, for transient works along the route corridor and for the construction and operation of the Braint and Ty Fodol sites. Drainage schemes would utilise SuDS principles for any areas requiring new drainage systems. The CEMP (Document 7.4) includes measures to ensure that access track drainage impacts are managed. For instance the CEMP outlines typical drainage strategies that would ensure that runoff does not contribute towards track deterioration. The need for quantification of drainage impacts in		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	 in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that 		relation to access tracks was discussed with relevant consultees, such as Natural Resources Wales, Isle of Anglesey County Council and Gwynedd Council.		
5740	any residual risk can be safely managed over the lifetime of the development.		The FCAs have shown that in all instances where flood risk receptors may be impacted by an associated flood hazard, it has been necessary to specify mitigation.		
5.7.10	The IPC will therefore need to be satisfied that the proposed drainage system complies with any National Standards published by Ministers under Paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010.		In summary, the FCA has demonstrated that the OHLs, THH/CSECs and associated construction activities of the Proposed Development are safe from flooding. The Proposed Development has been designed to remain operational when floods		
5.7.12	The IPC 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		occur. As detailed in the ES Chapter 2, Alternatives of the Proposed Development (Document 5.2) the proposed route is the shortest route and will run parallel to the existing OHL, diverting in Section E past Garnedd fawr and Tyddyn-isaf to the end of		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	satisfied that the Sequential and Exception Test requirements have been met.		this section where the 400 kV OHL crosses the Afon Braint.		
5.7.18	To satisfactorily manage flood risk, arrangements are required to manage surface water and the impact of the natural water cycle on people and property.				
5.7.20	Site layout and surface water drainage systems should cope with events that exceed the design capacity of the system, so that excess water can be safely stored on or conveyed from the site without adverse impacts.				
5.7.21	The surface water drainage arrangements for any project should be such that the volumes and peak flow rates of surface water leaving the site are no greater than the rates prior to the proposed project,				

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	unless specific off-site arrangements are made and result in the same net effect.				
5.7.23	The sequential approach should be applied to the layout and design of the project. More vulnerable uses should be located on parts of the site at lower probability and residual risk of flooding. Applicants should seek opportunities to use open space for multiple purposes such as amenity, wildlife habitat and flood storage uses. Opportunities should be taken to lower flood risk by reducing the built footprint of previously developed sites and using SuDS.				
5.7.24	Essential energy infrastructure which has to be located in flood risk areas should be designed to remain operational when floods occur. In addition, any energy projects proposed in Flood Zone 3b the				

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	Functional Floodplain (where water has to flow or be stored in times of flood), or Zone C2 in Wales, should only be permitted if the development will not result in a net loss of floodplain storage, and will not impede water flows.				
5.7.25	Flood Warning and evacuation plans should be in place for those areas at an identified risk of flooding. The applicant should take advice from the emergency services when producing an evacuation plan for a manned energy project as part of the FRA. Any emergency planning documents, flood warning and evacuation procedures that are required should be identified in the FRA.				
5.8 Historic	5.8 Historic Environment				
5.8.8	As part of the ES the applicant should provide a description of the significance of	Documents 5.10, 5.10.2.1,	An assessment of potential effects of the Proposed Development on historic assets and their settings		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	the heritage assets affected by the proposed development and the contribution of their setting to that significance. As a minimum the applicant should have consulted the relevant Historic Environment Record and assessed the	5.10.2.2, 7.4 and 7.8.	are provided in ES Chapter 10, Historic Environment (Document 5.10). The assessment details the baseline conditions within the study area, methodology, potential effects, mitigation measures and residual effects.		
	heritage assets themselves using expertise where necessary according to the proposed development's impact.		Appendix 10.1, Desk Study of the ES (Document 5.10.2.1) presents the baseline data collection, which has reviewed the following data sources:		
5.8.9	Where a development site includes, or the available evidence suggests it has the potential to include, heritage assets with an archaeological interest, the applicant should carry out appropriate desk-based assessment and, where such desk-based research is insufficient to properly assess the interest, a field evaluation. Where proposed development will affect the setting of a heritage asset, representative		 Historic Environment Record data; databases of designated assets; available excavation reports and other reports on archaeological investigations within the study area; all extant aerial photographic evidence held at the Royal Commission on Ancient and Historical Monuments in Wales (RCAHMW), Aberystwyth; 		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
5.0.40	visualisations may be necessary to explain the impact.	-	 archive records held at Anglesey Archives, Llangefni, and as appropriate, RCAHMW and University College Bangor; and 		
5.8.10	The applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and		 LiDAR data downloaded from the Lle.wales.gov.uk website and processed to hill shade images. Additional Lidar data held by National Grid was also used. 		
5.8.14	supporting documents. There should be a presumption (by the IPC) in favour of the conservation of designated heritage assets and the more		Following a desk-based assessment, a geographical survey has been completed which is reported in Appendix 10.2 Geophysical Survey Report (Document 5.10.2.2).		
significant the designated heritage asset, the greater the presumption in favour of its conservation should be.		A phased programme of archaeological data collection has identified a number of areas of archaeological interest within the Order Limits. Where possible, the layout of the Proposed Development has been designed to avoid loss of or			
	Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II* listed		disturbance to these. The area around the Menai Strait is sensitive for its historic interest, particularly for the presence of the		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	buildings; grade I and II* registered parks and gardens; and World Heritage Sites, should be wholly exceptional.		Grade I registered parks and gardens of Plas Newydd and Vaynol on the shores of the Strait. The use of a tunnel underneath the Menai Strait and		
5.8.15 Where the application will lead to ensured that th	extending it to avoid effects on these parks has ensured that there would not be a significant effect to either of them.				
	the IPC 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.	The development would involve the short section of OHL into the Pentir would involve ground disturbance in loss of archaeological remains and of the 18th and 19th century fields would therefore be localised impact landscape on the register but over meaning and coherence would rem understandable and legible. The P Development would not lead to a si environmental effect in the context assessment of the Historic Environ The primary mitigation for the Propert	The development would involve the introduction of a short section of OHL into the Pentir Substation,, this would involve ground disturbance involving some loss of archaeological remains and some alteration of the 18th and 19th century fieldscape. There would therefore be localised impact within the		
5.8.19	A documentary record of our past is not as valuable as retaining the heritage asset and therefore the ability to record evidence of the asset should not be a factor in deciding whether consent should be given.		landscape on the register but overall, its historic meaning and coherence would remain understandable and legible. The Proposed Development would not lead to a significant environmental effect in the context of the ES		
5.8.20	Where the loss of the whole or a material part of a heritage asset's significance is justified, the IPC should require the		assessment of the Historic Environment. The primary mitigation for the Proposed Development has been in the overall design and		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	developer to record and advance understanding of the significance of the heritage asset before it is lost. The extent of the requirement should be proportionate to the nature and level of the asset's significance. Developers should be required to publish this evidence and deposit copies of the reports with the relevant Historic Environment Record. They should also be required to deposit the archive generated in a local museum or other public depository willing to receive it.	heritage assets has been considered the design. However, where approp mitigation measures have been idem specific mitigation measures are outh 9 of ES Chapter 10, Historic Environ (Document 5.10). Provision would be made for the idem recording of archaeological remains during the construction programme. include a programme of Strip, Map a within areas of identified archaeologi watching briefs elsewhere. This has the Archaeological Strategy (Docum creation of an archaeological record mitigate the loss of the archaeological However, it is appropriate compensal	Provision would be made for the identification and recording of archaeological remains before and during the construction programme. This would include a programme of Strip, Map and Sample within areas of identified archaeological interest and	
5.8.21	Where appropriate, the IPC should impose requirements on a consent that such work is carried out in a timely manner in accordance with a written scheme of investigation that meets the requirements of this section and has been agreed in writing with the relevant Local Authority		the Archaeological Strategy (Document 7.8). The creation of an archaeological record does not fully mitigate the loss of the archaeological remains. However, it is appropriate compensation for the loss of such remains where such loss is unavoidable and	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	and that the completion of the exercise is properly secured.		Following a programme of post excavation assessment, all the archaeological fieldwork would be written up in a formal report for submission to the local Historic Environment Record and provision for publication and dissemination in an appropriate journal or standalone monograph would be agreed.	
			There is also a potential for the discovery of previously unidentified archaeological remains during construction. Where considered appropriate, these may be preserved through an adjustment in the scheme layout, such as by the re-routeing of an access track. The flexibility in the scheme through the LOD (discussed in section 5.3 of this report) means the routeing of the proposed OHL could be adjusted within the LOD to avoid archaeological remains.	
			Where this would not be possible or appropriate then the remains would be recorded in advance of their loss. As set out in the CEMP (Document 7.4), sufficient time would be allowed in the construction	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			programme to accommodate the need for archaeological recording.		
5.9 Landsca	ape and Visual				
5.9.5	The applicant should carry out a landscape and visual assessment and report it in the ES. 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 LDP in Wales.	Documents 5.2, 5.7, 5.8, 7.1, 7.2, 7.4, 7.13 and 7.17.	A landscape character and visual assessment has been undertaken and are reported in ES Chapter 7, Landscape Assessment (Document 5.7) and ES Chapter 8, Visual Assessment (Document 5.8). The assessments have taken into account relevant policies based on these assessments in local development documents. ES Chapter 7, Landscape Assessment (Document 5.7) includes an assessment of effects during construction, operation, maintenance and decommissioning of the Proposed Development on landscape components, and landscape character.		
5.9.6	The applicant's assessment should include the effects during construction of the project and the effects of the completed development and its operation on		During construction there would be significant effects on tree cover, however, by operation year 15 there would be no significant effects on tree cover		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	landscape components and landscape character.		due to the maturation of replacement/mitigation planting.		
5.9.7	The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include light pollution effects, including on local amenity, and		The assessment on landscape receptors has identified some significant effects on landscape receptors during construction and operation; these are summarised in Section 11 of ES Chapter 7 Landscape (Document 5.7). The assessment on visual receptors has identified during construction and operation some significant		
5.9.8	nature conservation. Landscape effects depend on the existing	-	effects on receptors, these are summarised in Section 11 of ES Chapter 8 Visual (Document 5.8). It is anticipated that maintenance and		
	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. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to		decommissioning activities would result in effects no greater, and typically substantially less, than those anticipated during construction. It is considered that these activities would take place over a much shorter timescale and would be less intrusive than those required for construction.		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.	set out in the Project Need Case (Docum Alternatives considered for the Proposed Development are summarised in ES Cha Alternatives, Project History and Non-Sta Consultation (Document 5.2) and the D Report (Document 7.17). Routeing and studies were undertaken in accordance Holford Rules. The Design and Access (Document 7.16) sets out how the Prop Development has incorporated good des permanent elements of the Proposed Development. LANDMAP has been used throughout the of the Proposed Development. Special Areas were used as an indicator of lands in the Landscape Sensitivity Appraisal. The detailed design work undertaken to OHL design of the Proposed Development	The need for the Proposed Development has been set out in the Project Need Case (Document 7.1). Alternatives considered for the Proposed Development are summarised in ES Chapter 2, Alternatives, Project History and Non-Statutory	
5.9.9	National Parks, the Broads and AONBs have been confirmed by the Government as having the highest status of protection in relation to landscape and scenic beauty.		Consultation (Document 5.2) and the Design Report (Document 7.17). Routeing and siting studies were undertaken in accordance with the Holford Rules. The Design and Access Statement (Document 7.16) sets out how the Proposed	
5.9.10	Nevertheless, the IPC may grant development consent in these areas in exceptional circumstances. Consideration of such applications should include an assessment of: • the need for the development, including		permanent elements of the Propos LANDMAP has been used through of the Proposed Development. Sp Areas were used as an indicator o	Development has incorporated good design into the permanent elements of the Proposed Development. LANDMAP has been used throughout the lifecycle of the Proposed Development. Special Landscape Areas were used as an indicator of landscape value
	in terms of national considerations, and the impact of consenting or not consenting upon the local economy;		The detailed design work undertaken to identify the OHL design of the Proposed Development has set out to develop a synchronised design, as described	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	 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; and any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated. 		in the Design Report (Document 7.17). Localised constraints to siting of individual pylons have precluded this where an unpaired or less synchronised design would be locally preferable based upon the nature of the receptors local to a given pylon. Of additional importance was the need to ensure that the design of the Proposed Development responded to the design of the existing 400 kV OHL to reduce additional landscape effects where possible.		
5.9.14	Where a local development document in England or a local development plan in Wales has policies based on landscape character assessment, these should be paid particular attention.		As part of the routeing and siting process the decision was made to underground cables through the Anglesey AONB and across the Menai Strait avoiding the development of an OHL within this sensitive area. It was considered that the additional cost associated with this mitigation was justified to		
5.9.16	In reaching a judgment, the IPC should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the		reduce effects upon the landscape of the Anglesey AONB and to protect iconic views along the Menai Strait.		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	landscape will be capable of being reversed in a timescale that the IPC considers reasonable.		Direct effects on nationally designated landscape areas and their setting have been avoided by undergrounding through the Anglesey AONB.		
5.9.19	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. This may assist the IPC in judging the weight it should give to the assessed visual impacts of the proposed development.		 Potential for artificial light pollution impacting upon human and ecological receptors has been addressed, and proposed mitigated is contained within the CEMP (Document 7.4). For example, lighting would only be used when required during core working hours, unless otherwise stated and would comprise of lighting of work areas and access and egress with low level directional lighting. A voluntary off site planting scheme has been 		
5.9.22	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. Materials and designs of		proposed in the Enhancement Strategy (Document 7.13). For properties assessed as having a significant effect from the Proposed Development, i.e. those identified as having a moderate or major effect, it was considered that decisions on whether those effects should be mitigated should lie with the residents. Including planting as mitigation as part of		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	buildings should always be given careful consideration.		the EIA would require National Grid to undertake that planting to reduce effect whether the resident	
5.9.23	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.		wanted the planting or not. In some cases residents may not want planting, for example where it could screen a long distance view. It is considered that those judgements should be an individual basis by the residents and not by National Grid. The properties identified and eligible will therefore be offered the opportunity to have planting if they so wished via a Voluntary Residential Planting Scheme (VRPS).	
			A number of locations have been identified, that would benefit from enhancement planting (both within the Order Limits or off-site (i.e. beyond the Order Limits)). This planting would not mitigate a significant landscape or visual effect and the rights to undertake these works have not been sought in the DCO. Works would be subject to landowner agreement. National Grid would develop a scheme for planting proposals through consultation with	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			 landowners and would report on progress to the relevant planning authority. Each individual scheme for planting would be carried out in a manner that: contributes to local biodiversity; 		
			 was consistent with local landscape character; and 		
			• did not conflict with or cause potential damage to known or potential archaeology or the settings of heritage assets.		
			The applicant commits to reinstate all boundaries including cloddiau, crawiau, stone walls or fencing which would substantially reduce the potential residual effects on these features.		
5.10 Land u	se including open space, green infrastructure	& Green Belt			
5.10.5	The ES should identify existing and proposed land uses near the project, any effects of replacing an existing development or use of the site with the	Documents 5.17, 5.18 and 5.20.	The majority of temporary and permanent land-take required for the Proposed Development is agricultural land. Potential effects are detailed in ES Chapter 18, Agriculture (Document 5.18). Effects		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	proposed project or preventing a development or use on a neighbouring site from continuing. Applicants should also assess any effects of precluding a new		on land uses other than agriculture are assessed in ES Chapter 17, Socio-Economics (Document 5.17), including direct and indirect effects on the viability of development land.	
	development or use proposed in the development plan.		In the socio-economic assessment only one commercial operation (a caravan park in Llandyfrydog) is identified as being affected by temporary land-take and access. A small number of additional commercial operations are expected to be affected by temporary scaffolding on their premises (three to four months approximately), including a GP surgery and a property management company in Star, and a poultry operation in Llanddaniel. There are no land use effects that would result in a temporary or permanent restriction or change to the current use of land, and there is no severance of access. In conclusion, no effects on existing or future non-agricultural land use proposed in the development plan are anticipated.	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
5.10.6	Applicants will need to consult the local community on their proposals to build on open space, sports or recreational buildings and land. Taking account of the consultations, applicants should consider providing new or additional open space including green infrastructure, sport or recreation facilities, to substitute for any losses as a result of their proposal. Applicants should use any up-to-date local authority assessment or, if there is none, provide an independent assessment to show whether the existing open space, sports and recreational buildings and land is surplus to requirements.	Document 5.17	There will be no loss of open space, sports or recreational buildings as a result of the Proposed Development. There are no land use effects that would result in a temporary or permanent restriction or change to the current use of land, and there is no severance of access.		
5.10.8	Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in	Document 5.18.	In agreement with the Welsh Government, the assessments of effects on Agriculture for the proposed OHL and associated temporary access tracks are based on large scale (1:250 000) data, including the Provisional 1:250,000 Agricultural		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	areas of poorer quality (grades 3b, 4 and 5) except where this would be inconsistent with other sustainability considerations.		Land Classification (ALC) Map for Wales and are detailed within ES Chapter 18, Agriculture (Document 5.18).		
	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.		The ALC survey data show that all agricultural land within the Pentir Substation Extension, Braint THH/CSEC and associated permanent access track would not be best and most versatile (BMV) quality; it would be Subgrade 3b and 4 (moderate to poor quality). The assessment found the majority of the land use change and soil disturbance associated with the OHL and associated temporary access tracks would be temporary, restricted to the construction period.		
			The permanent loss of BMV agricultural land as a result of the Proposed Development would not exceed 20 ha and would therefore not be considered to be potentially significant, regardless of the BMV status of the land.		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			To minimise soil degradation, implementation of standard best practice working methods and mitigation measures such as those set out in Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites would be embedded into the programme. To prevent soil damage and loss, control and management measures will be implemented, where necessary, as detailed in the CEMP (Document 7.4) and Outline Soil Management Plan (Document 7.10).		
5.10.9	Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place.	Documents 5.11, 7.4 and 7.12.	Both the Joint Local Development Plan (JLDP) Proposals Map and the online interactive mapping portal, which forms part of the JLDP, have been reviewed to identify areas subject to minerals safeguarding policies. There are no crushed rock or sand and gravel Preferred Areas within the Order Limits. The Parys Mountain Metalliferous Safeguarding Area is also not within the Order Limits. There is a Category 1 Limestone Bedrock safeguarding area in the Order Limits between the		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			B5110 and the B5420. Another two Category 1 Limestone Bedrock safeguarding areas are also located within the Order Limits on the northern and southern banks of the Menai Strait, though these only coincide with the below ground tunnel LoD. According to the BGS Geoindex Mapping Service, the minerals within the safeguarding areas described above are classified as Carboniferous Limestone in the vicinity of the B5110 and on the Anglesey side of the Menai with the Gwynedd side of the Menai being classified as high purity Carboniferous Limestone. Temporary works are not considered to be a risk, as they would not involve any activity that could adversely affect the underlying mineral deposits. During construction of the tunnel, if any category 1 limestone were encountered this would be recycled where possible. During operation, sterilisation would be restricted to a small number of working stand-offs around pylons; the TTH/CSECs and substation extensions are outside of these safeguarding areas. Upon	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			decommissioning, any mineral resources sterilised by the working stand-offs around pylons would be available again.		
			The CEMP (Document 7.4) and Outline Materials Management Plan (Document 7.12) identify measures which would be in place during the construction stage to safeguard land from the loss of soil resources.		
5.10.23	Where a project has a sterilising effect on land use (for example in some cases under transmission lines) there may be scope for this to be mitigated through, for example, using or incorporating the land for nature conservation or wildlife corridors or for parking and storage in employment areas.	Document 5.18	The Proposed Development would not sterilise land use under transmission lines, as the land would continue to be used for agricultural purposes. National Grid would ensure that agricultural liaison officers (ALO) maintain communication with farmers/landowners to ensure their needs are understood before, during and after construction. The implementation of standard best practice working methods and mitigation measures such as those set out in Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Ref.20), means that the effect of		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			the Proposed Development in terms of disturbance or damage to soil properties would be not significant.	
			Following the implementation of mitigation measures detailed in section 9 of ES Chapter 18, Agriculture (Document 5.18) , land would be restored to a standard where it is eligible for the same level of AES as before construction.	
			The permanent loss of Best and Most Versatile (BMV) agricultural land as a result of the Proposed Development (largely as a result of the pylon footprints) does not exceed 20 ha and is therefore considered to be not significant.	
			There are no other land uses proposed in development plan that would be restricted as a result for the OHL.	
5.10.24	Rights of way, National Trails and other rights of access to land are important recreational facilities for example for	Documents 4.5, 5.13 and 7.6.	Public Rights of Way (PRoW), cycling routes and coastal paths considered in the assessment, as detailed in ES Chapter 13 Traffic and Transport	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	walkers, cyclists and horse riders. The IPC should expect applicants to take appropriate mitigation measures to		(Document 5.13), are those located within the Order Limits, or those which connect to a proposed traffic route.		
	address adverse effects on coastal access, National Trails and other rights of way.		The PRoW Management Plan (Document 7.6) identifies measures to reduce the extent to which usage of PRoW/recreational routes would be disrupted. In these locations, management measures would be in place to limit any adverse effects on users of the PRoWs. Where diversions are required these would be kept to a minimum and would not result in any increase in journey time in excess of 5 minutes for PRoW users.		
			Access and Rights of Way Plans (Document 4.5) illustrate the diversions and the intent to divert PRoW immediately around working areas with only minor increases in length.		
			There are predicted to be no significant effects on the Wales Coast Path. However, minor (not significant) effects have been predicted in association with the construction traffic on Link 16.		

Table 4: Co	ompliance with NPS EN-1		
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
			Minor effects would arise during the diversion of the Wales Coastal Path as proposed in the PRoW Management Plan (Document 7.6), as this would not increase journey length in excess of 5 minutes.
			There are predicted to be no significant effects on the three National Cycle Routes (NCR) considered i.e. National Cycle Routes 5, 8 and 566.
5.11 Noise	and Vibration		
5.11.4	 The applicant should include the following in the noise assessment: a description of the noise generating aspects of the development proposal leading to noise impacts, including the identification of any distinctive tonal, impulsive or low frequency characteristics of the noise; 	Documents 5.9, 5.15, 5.16. 7.4 and 7.5.	Potential construction and operational noise sources are described and the effects associated with the Proposed Development are explained in ES Chapter 15, Construction Noise (Document 5.15) and Chapter 16, Operational Noise and Vibration (Document 5.16). The guidance used for construction noise and vibration assessments,

sensitive areas; and

Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
	 identification of noise sensitive premises and noise sensitive areas that 	Documenta	including criteria adopted and calculation methodology undertaken include:
	 may be affected; the characteristics of the existing noise environment; 		 British Standard (BS) 5228-1:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites – Part 1: Noise';
	 a prediction of how the noise environment will change with the proposed development; 		 and BS 5228-2:2009+A1:2014 'Code of practice for noise and vibration control on construction and
	 in the shorter term such as during the construction period; in the langer term during the exercise 		open sites – Part 2: Vibration'. The relevant guidance BS 4142:2014 was followed in assessing human receptors to operational noise.
	 in the longer term during the operating life of the infrastructure; 		National Grid has actively engaged with the
	 at particular times of the day, evening and night as appropriate; 		Councils and NRW on the determination of baseline for the operational and construction noise assessments and the results of baseline surveys
	 an assessment of the effect of predicted changes in the noise environment on any noise sensitive premises and noise 		conducted March and April 2017. ES Chapter 15, Construction Noise (Document

5.15) presents the assessment of construction noise

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	measures to be employed in mitigating noise.		and the assessment has concluded that the following activities have the potential to give rise to		
5.11.5	The noise impact of ancillary activities associated with the development, such as increased road and rail traffic movements, or other forms of transportation, should also be considered.		 a noise and/or vibration impact at noise and vibration sensitive receptors (i.e. residential properties, schools, hospitals, places of worship, etc.): piling activities; 		
5.11.6	Operational noise, with respect to human receptors, should be assessed using the principles of the relevant British Standards and other guidance. For the prediction, assessment and management of construction noise, reference should be made to any relevant British Standards and other guidance which also give examples of mitigation strategies.		 construction of access tracks; tunnelling activities; and construction traffic on public highways. The assessment demonstrates that the use of good design principles through selection of the quietest cost-effective plant available; containment of noise within enclosures where possible; optimisation of plant layout to reduce noise emissions; and the use of noise barriers to reduce noise transmission would 		
5.11.7	The applicant should consult EA and Natural England (NE), or the Countryside Council for Wales (CCW), as necessary		avoid significant adverse impacts on health and mitigate and reduce other adverse impacts on health and quality of life from noise.		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	and in particular with regard to assessment of noise on protected species or other wildlife. The results of any noise surveys and predictions may inform the ecological assessment. The seasonality of potentially affected species in nearby sites may also need to be taken into account.		Noise associated with construction works would be mitigated through the implementation of measures as described in the CEMP (Document 7.4) and the Noise and Vibration Management Plan (Document 7.9), such as the implementation of Best Practicable Means identified in liaison with local Environmental Health Officers (EHOs).	
5.11.9	 The IPC 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; 		There would be increased heavy goods traffic generation during the construction of the Proposed Development, which would cause increases in noise levels on the highway and on the temporary haul roads within the Order Limits. Traffic would follow the approved routeings in the Outline Construction	
	 mitigate and minimise other adverse impacts on health and quality of life from noise; and where possible, contribute to 		Traffic Management Plan (OCTMP) (Document 7.5) and Heavy Goods Vehicle (HGV) movements would only take place during the standard construction hours.	
	improvements to health and quality of life through the effective management and control of noise.		ES Chapter 16, Operational Noise and Vibration (Document 5.16) describes the noise generating aspects of the development during the operational	

Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
5.11.12	 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. 		 phase. An assessment of noise change from the baseline has been provided. For 18 receptors there was calculated to be a potentially significant effect as a result of operational noise resulting from the overhead line. However, as this noise would only occur infrequently, and taking into account very low background levels, it was considered that in each case effects would not be significant. NRW has been consulted as the relevant statutory nature conservation body. The assessment of noise and vibration impacts on ecological receptors has been included in section 9 of ES Chapter 9, Ecology and Nature Conservation (Document 5.9).

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
5.12.2	Where the project is likely to have socio- economic impacts at local or regional levels, the applicant should undertake and include in their application an assessment of these impacts as part of the ES.	Documents 5.17, 5.17.2.2 and 5.20.	 The socio-economic assessment, provided in ES Chapter 17 Socio-Economics (Document 5.17) considers these effects as follows: an assessment of employment effects. See also Appendix 17.2 - Workforce Analysis Assumptions 		
5.12.3	 This assessment should consider all relevant socio-economic impacts, which may include: the creation of jobs and training opportunities; the provision of additional local services 		 Log (Document 5.17.2.2); additional local services or improvements to local educational and visitor facilities do not form part of the development, nor are they required to address any socio-economic effects; an assessment of the overall effects; and 		
	 and improvements to local infrastructure, including the provision of educational and visitor facilities; effects on tourism; the impact of a changing influx of workers during the different construction, operation and decommissioning phases of the energy 		 given the number and profile of construction workers expected to be present on site, and the duration of peak workforce numbers, workers are not expected to permanently relocate to the local area and therefore no effects on demand for public services are anticipated; the construction of the Proposed Development would seek workers from the local community, 		

Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
	 infrastructure. This could change the local population dynamics and could alter the demand for services and facilities in the settlements nearest to the construction work (including community facilities and physical infrastructure such as energy, water, transport and waste). There could also be effects on social cohesion depending on how populations and service provision change as a result of the development; and cumulative effects – if development consent were to be granted to for a number of projects within a region and these were developed in a similar 		 estimated between 10% to 20% of jobs would be taken by the local workers; effects on tourism, including tourism businesses and accommodation have been assessed in Section 9 of Document 5.17, and found to be not significant; Section 10 of Document 5.17 and Chapter 20, Inter-Project Effects (Document 5.20) reports on inter-project cumulative effects, including the proposed Wylfa Newydd Power Station.

timeframe, there could be some shortterm negative effects, for example a potential shortage of construction workers to meet the needs of other

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	industries and major projects within the region.			
5.12.4	Applicants should describe the existing socio-economic conditions in the areas surrounding the proposed development and should also refer to how the development's socio-economic impacts correlate with local planning policies.	Document 5.17	Section 7 of ES Chapter 17 Socio-Economics (Document 5.17) describes baseline conditions and also includes details of how local planning policies have been taken into account.	
5.12.5	Socio-economic impacts may be linked to other impacts, for example the visual impact of a development is considered in Section 5.9 but may also have an impact on tourism and local businesses.	Document 5.8, 5.17 and 5.19	ES Chapter 17 Socio-Economics (Document 5.17) includes an assessment of amenity effects (visual, noise, air quality and traffic) on communities, businesses, and tourism/recreational resources. It includes consideration of the secondary effects that visual impacts alone could have on tourism related businesses. Reference to the relevant topic chapters from which information has been drawn is made throughout, which includes the Chapter 8 Visual Assessment (Document 5.8). Intra-project	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			effects are also considered in Chapter 19 Intra- Project Effects (Document 5.19).		
5.13 Traffic	and Transport				
5.13.3	If a project is likely to have significant transport implications, the applicant's ES should include a transport assessment, using the NATA/WebTAG139 methodology stipulated in Department for Transport guidance, or any successor to such methodology. Applicants should consult the Highways Agency and Highways Authorities as appropriate on the assessment and mitigation.	Documents 5.13.2.1 and 5.5.	The Proposed Development has been subject to a Transport Assessment (TA) (Document 5.13.2.1). The TA methodology is in accordance with both NATA/WebTAG and WeITAG (as the Proposed Development is in Wales) stipulated in the Department for Transport guidance. The appropriate local and national highways authorities have been consulted throughout the ES process, and further information is provided in Chapter 5 Environmental Impact Assessment (EIA) Consultation (Document 5.5).		
5.13.4	Where appropriate, the applicant should prepare a travel plan including demand management measures to mitigate transport impacts. The applicant should	Documents 5.13.2.1 and 7.4	The Proposed Development has been subject to a TA (Document 5.13.2.1). The TA methodology is in accordance with both NATA/WebTAG and WeITAG (as the Proposed Development is in Wales). The		

Table 4: Co	able 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	also provide details of proposed measures to improve access by public transport, walking and cycling, to reduce the need for parking associated with the proposal and to mitigate transport impacts.		TA report includes within it a Framework Travel Plan in accordance with this section of EN-1. This is also included within the CEMP (Document 7.4) and the Outline Construction Traffic Management Plan (OCTMP) (Document 7.5), as secured by Requirement.		
5.13.6	A new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure and the IPC should therefore ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development. Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the IPC should consider requirements to mitigate adverse impacts on transport networks arising from the development, as set out	Document 5.13, 5.13.2.1, 7.4, 7.5 and 7.6	The mitigation measures required in order to address potential effects of the Proposed Development are reported in Section 9 of ES Chapter 13 Traffic and Transport (Document 5.13). Mitigation is also covered in the following supporting documents: Outline Construction Traffic Management Plan (OCTMP) (Document 7.5), CEMP (Document 7.4) and PRoW Management Plan (Document 7.6). These documents are secured through Requirements.		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	below. Applicants may also be willing to enter into planning obligations for funding infrastructure and otherwise mitigating adverse impacts.				
5.13.10	Water-borne or rail transport is preferred over road transport at all stages of the project, where cost-effective.	Documents 5.13, and 6.1	Rail and water-borne transport has been discussed during consultation with Network Rail, as discussed in the Consultation Report (Document 6.1). The Proposed Development is not seeking to transport materials via rail or water-borne transport, as discussed in ES Chapter 13, Traffic and Transport (Document 5.13)		
5.13.11	 The IPC may attach requirements to a consent where there is likely to be substantial HGV traffic that: control numbers of HGV movements to and from the site in a specified period during its construction and possibly on the routeing of such movements; 		ES Chapter 13, Traffic and Transport (Document 5.13) has considered the weekly movement of HGVs and HGV movement during peak week development trips. Section 9 of ES Chapter 13, Traffic and Transport (Document 5.13) details mitigation measures which would be implemented to reduce traffic and transport effects.		

Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
	 make sufficient provision for HGV parking, either on the site or at dedicated facilities elsewhere, to avoid 'overspill' parking on public roads, prolonged queuing on approach roads and uncontrolled on-street HGV parking in normal operating conditions; and ensure satisfactory arrangements for reasonably foreseeable abnormal disruption, in consultation with network providers and the responsible police force. 		Proposed Abnormal Indivisible Load (AIL) construction routes have been identified within Figure 13.5 of ES appendix Abnormal Indivisible Loads (AIL) Routes (Document 5.13.1.5). AILs on the basis of size and weight are anticipated to be required for elements of the Proposed Development, including shunt reactor delivery to Pentir Substation, Cable Drum delivery, Tunnel Boring Machine and Crane for the tunnel and cable installation and low loaders, crawler cranes, gantry crane, piling rigs or similar to the Braint and Tŷ Fodel shafts, Full details of the AILs are documented in the Abnormal Load Report (Document 7.5 Annexes) and summarised in the Transport Assessment ((Document 5.13.2.1).
5.14 Waste	Management		
5.14.6	The applicant should set out the arrangements that are proposed for	Document 7.11 and 7.12	The Outline Waste Management Plan (OWMP) (Document 7.11) describes principles and

procedures for managing waste from the Proposed

managing any waste produced and

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	prepare a Site Waste Management Plan. The arrangements described and Management Plan should include information on the proposed waste recovery and disposal system for all waste generated by the development, and an assessment of the impact of the waste arising from development on the capacity of waste management facilities to deal with other waste arising in the area for at least five years of operation. The applicant should seek to minimise the volume of waste produced and the volume of waste sent for disposal unless it can be demonstrated that this is the best overall environmental outcome.		Development and identifies the requirement for the production and contents of the Site Waste Management Plan (SWMP) and site based Materials Management Plan (MMP), to be prepared during the detailed design phase, prior to commencement of construction. These documents are secured through Requirements. The SWMPs and MMPs will set out in detail the arrangements for managing any waste produced for each of the main work streams. Details on proposed recovery and disposal systems will be developed further in the SWMP and MMP by the contractors; this will include an assessment of the impact of the waste arising from the Proposed Development on the capacity of waste management facilities to deal with other waste arising in the area for at least five years of operation. Sustainable waste management through the implementation of the waste hierarchy principles is described throughout the OWMP, with a		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			commitment to move up the hierarchy, beginning with a reduction in the resources used and subsequent reduction in the waste produced; followed by reuse, recycling and only when all other options have been discounted, disposal to a licensed waste facility.		
5.14.7	 The IPC should consider the extent to which the applicant has proposed an effective system for managing hazardous and non-hazardous waste arising from the construction, operation and decommissioning of the proposed development. It should be satisfied that: any such waste will be properly managed, both on-site and off-site;the waste from the proposed facility can be dealt with appropriately by the waste infrastructure which is, or is likely to be, available. Such waste arisings should not have an adverse effect on the 	Document 7.11	The OWMP (Document 7.11) describes procedures for managing hazardous and non-hazardous waste on the construction sites, which include National Grid corporate procedures for waste management. The SWMPs and MMPs would ensure that waste arisings would be reduced and would not have an adverse effect on the capacity of existing waste management facilities to deal with other waste arisings in the area.		

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	 capacity of existing waste management facilities to deal with other waste arisings in the area; and adequate steps have been taken to minimize the volume of waste arisings 			
	minimise the volume of waste arisings, and of the volume of waste arisings sent to disposal, except where that is the best overall environmental outcome.			
5.15 Water	Quality and Resources			
5.15.2	Where the 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 or equivalent. (See Section 4.2.)	Document 5.12	ES Chapter 12, Water Quality, Resources and Flood Risk (Document 5.12) provides an assessment of the effects of the Proposed Development on the aquatic environment (which includes water quality, water resources and flood risk receptors) mitigation measures and the resulting residual effects are also presented, none of which are considered to be significant.	
			The future baseline, accounting for climate change, is presented in Section 7 of ES Chapter 12, Water	

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			Quality Resources and Flood Risk (Document 5.12).		
5.15.3	 The ES should in particular describe: the existing quality of waters affected by the proposed project and the impacts of the proposed project on water quality, noting any relevant existing discharges, proposed new discharges and proposed changes to discharges; existing water resources affected by the 	Document 5.12	The baseline characteristics of the aquatic environment (which includes water quality, water resources and flood risk) are provided in section 7 of ES Chapter 12, Water Quality Resources and Flood Risk (Document 5.12). The water resources baseline includes licensed discharges and licensed and private abstractions in section 7. An assessment of the effects of the Proposed		
	proposed project and the impacts of the proposed project on water resources,		Development on the aquatic environment (which includes water quality, water resources and flood		

Table 4: Co	Table 4: Compliance with NPS EN-1				
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	noting any relevant existing abstraction rates, proposed new abstraction rates and proposed changes to abstraction rates (including any impact on or use of mains supplies and reference to Catchment Abstraction Management Strategies); andexisting physical characteristics of the water environment (including quantity and dynamics of flow) affected by the proposed project and any impact of physical modifications to these characteristics; and any impacts of the proposed project on water bodies or protected areas under the Water Framework Directive and source protection zones (SPZs) around potable groundwater abstractions.		risk receptors) is presented in section 9 which deals with mitigation and residual effects. The assessment considers only those water bodies relating to inland rivers, standing water bodies and coastal water bodies. An overview of the status of groundwater bodies has been provided in ES Chapter 11, Geology, Hydrogeology and Ground Conditions (Document 5.11). Water Framework Directive (WFD) classifications and objectives are taken into account, as the WFD water bodies themselves are receptors in the assessment. The assessment of potential effects on WFD water bodies has been based on the findings of the WFD Assessment which has been provided in ES Appendix 12.5 (Document 5.12.2.5).		
5.15.6	The IPC should satisfy itself that a proposal has regard to the River Basin		Water Framework Directive (WFD) classifications and objectives are taken into account, as the WFD		

Table 4: Co	ompliance with NPS EN-1		
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
	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. The specific objectives for particular river basins are set out in River Basin Management Plans. The IPC should also consider the interactions of the proposed project with other plans such as Water Resources Management Plans and Shoreline/Estuary Management Plans.		water bodies themselves are receptors in the assessment. The assessment of potential effects on WFD water bodies is based on the findings of the WFD Assessment which is provided in Appendix 12.5 (Document 5.12.2.5).
5.15.8	The IPC should consider whether mitigation measures are needed over and above any which may form part of the project application. A construction management plan may help codify mitigation at that stage.	Documents 5.12 and 7.4	Mitigation measures are outlined in section 9 of ES Chapter 12, Water Quality, Resources and Flood Risk (Document 5.12) and are provided in the CEMP (Document 7.4), which is secured by Requirement. The CEMP (Document 7.4) includes measures to ensure that access track drainage impacts are managed. In particular measures WE51 - 53 outline

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			typical drainage management measures that would ensure that runoff does not contribute towards track deterioration. The need for quantification of drainage impacts in relation to access tracks was discussed with relevant consultees and no changes to the proposed approach have been necessary.	
			Pollution prevention measures would be employed such as hydrocarbon interceptors, packaged water treatment works for dewatering arisings, provision for water treatment measures for treating suspended solids (should particle sizes be too small for gravity settlement to be effective). Guidance for Pollution Prevention (GPPs) would be used, as would the SuDS Manual to inform pollution prevention elements of detailed drainage strategies.	
5.15.9	The risk of impacts on the water environment can be reduced through	Documents 5.12, 5.12.2.3,	There are measures incorporated into the design of the Proposed Development that are intended to	

Table 4: Co	Table 4: Compliance with NPS EN-1			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
5.15.10	careful design to facilitate adherence to good pollution control practice. For example, designated areas for storage and unloading, with appropriate drainage facilities, should be clearly marked. The impact on local water resources can be minimised through planning and design for the efficient use of water, including water recycling.	5.12.2.4 and 7.4	reduce or prevent potential impacts, such as the siting of infrastructure in order to avoid significant effects on the water environment. Careful design facilitates adherence to good pollution practice. For example, stockpiles would be located at least 8 m from all watercourses and with the exception of stockpiles with a lifetime of less than 3 months; all stockpiles would be seeded to reduce sediment laden runoff. Outline drainage strategies have been provided for the Construction and Operational Compounds at Braint and Tŷ Fodol sites in Appendix 12.3 (Document 5.12.2.3) of ES Chapter 12 Water Quality, Resources and Flood Risk (Document 5.12). Outline drainage information is also referenced in Appendix 12.4 (Document 5.12.2.4) for the Construction Compounds at Penmynydd Road and Pentir. Drainage schemes would utilise SuDS principles for any areas requiring new drainage systems.	

Table 5: Co	able 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
2.2 Factors	influencing site selection by applicants			
2.2.6	Developers will be influenced by Schedule 9 to the Electricity Act 1989, which places a duty on all transmission and distribution licence holders, in formulating proposals for new electricity networks infrastructure, to 'have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting any sites, buildings and objects of architectural, historic or archaeological interest; and do what [they] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside'	Documents 5.7, 6.1, 7.14, 7.16 and 7.17.	The design of the Proposed Development has had regard to the preservation of such features during the design evolution of the Proposed Development. How the Proposed Development demonstrates good design has been set out in the Design Report, (Document 7.17) and the Design and Access Statement (Document 7.16). A search for areas of geological interest has been undertaken as described in the section 7 of ES Chapter 11, Geology, Hydrogeology and Ground Conditions (Document 5.11). No Geological Sites of Special Scientific Interest (GSSSI) or Regionally Important Geodiversity Sites (RIGS) are present within 1 km of the Order Limits of the Proposed Development. No effects on designated sites of geological conservation importance have been identified. ES Chapter 9, Ecology and Nature	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Conservation (Document 5.9) presents information of ecological designations, habitats and protected species.	
			Ecological surveys have been undertaken to assess the likely effect the Proposed Development would have on ecological receptors. Approaches to obtaining ecological data included desk studies, phase 1 habitat surveys, intertidal biotope survey, subtidal habitat surveys and surveys for hedgerows, great crested newts, badgers, otters, water voles, reptiles, bats surveys, red squirrels, bird, breeding birds, invertebrate, other mammal surveys and other aquatic fauna surveys. A detailed description of all surveys are detailed in ES Chapter 9, Ecology and Nature Conservation (Document 5.9).	
			Consultation with stakeholders, including the general public has been ongoing throughout the design evolution of the Proposed Development, please see the Consultation Report (Document	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			6.1). On selection of alternative route corridors, this route corridor was the shortest route and offered the opportunity to develop within an area already affected by OHLs. The proposed route is the only strategic option chosen to avoid views being obstructed towards Snowdonia National Park. The Design Report (Document 7.17) describes the evolution of the Proposed Development.	
			The majority of ecological potential effects have been avoided through careful design or would be addressed through the implementation of standard mitigation techniques such as careful timing of work, vegetation management in the appropriate season, vegetation protection, and an ecological watching brief on works in sensitive areas. Some of this would be applied as standard through the CEMP (Document 7.4) as it would apply throughout the construction of the Proposed	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Development, with further restrictions being more specific and localised.	
			Pylon and other structure locations have been situated away from ecological features where possible. Where this has not been possible, and pylons are within close proximity to important ecological features, where practicable, these structures have been micro-sited (re-positioned) to avoid or reduce impacts to important features. Although there is some flexibility in terms of final design, commitments have been made in the Schedule of Environmental Commitments (Document 7.4.2.1) to avoid areas where to locate temporary or permanent works would be likely to have more significant effects.	
			The CEMP (Document 7.4) ensures best practice during construction, ensuring disturbance to species or habitats are reduces, and would seek to ensure activities would be confined to the minimum areas required for the works.	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Habitats are to be fully restored following construction works. Where habitats are to be permanently lost, for example in the location of the pylon structures, new habitat areas are to be developed to compensate for ecological loss.	
			The assessment of flora, fauna, geological and physiographical ecological features has been undertaken with habitat and species specific mitigation being detailed in section 9 of ES Chapter 9, Ecology and Nature Conservation (Document 5.9). Ecological impacts have been effectively mitigated and compensated for.	
			The only significant effect on nature conservation interests is on Gylched Covert CWS which would experience a moderate (significant) effect.	
			An assessment of potential effects on heritage assets and their settings has been provided within ES Chapter 10 Historic Environment (Document 5.10). The location of known and potential archaeological remains has been identified through	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			both desk study, and field investigations, including trial trenching. The assessment concludes that there would be no direct effects on Scheduled Monuments or listed buildings, though there would be some significant effects on the settings of a small number of such assets.	
			The Archaeological Strategy (Document 7.8) details mitigation measures to reduce effects on any archaeological remains discovered. Provision would be made for the identification and recording of archaeological remains before and during the construction programme. This would include a programme of Strip, Map and Sample within areas of identified archaeological interest and watching briefs elsewhere.	
			ES Chapter 7, Landscape Assessment (Document 5.7) includes an assessment of effects during construction, operation, maintenance and decommissioning of the Proposed Development on landscape components, and landscape character.	

Table 5: Co	mpliance with NPS EN-5		
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
			All reasonable efforts have been made to avoid impacts on areas of Natural beauty; this includes the proposal to tunnel under the particularly sensitive area of the Anglesey AONB and Menai Strait, protecting iconic views.
			The assessment on landscape receptors has identified some significant effects on a small number of landscape character areas during construction and operation and these are summarised in Section 11 of ES Chapter 7 Landscape (Document 5.7).
2.4 Climate	Change Adaptation		
2.4.1	 Applicants should set out to what extent the proposed development is expected to be vulnerable, and, as appropriate, how it would be resilient to: flooding, particularly for substations that are vital for the electricity transmission and distribution network; 	Documents 5.12.2.1 - 4.	The FCAs, provided in Appendices $12.1 - 4$ (Documents 5.12.2.1 – 4), address the issue of resilience to flooding. This takes into account the resilience of pylon design to other aspects of climate change; current projections around the impact of climate change in the UK forecast extremes of heavy rain and drought weather and

Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
	 effects of wind and storms on OHLs; higher average temperatures leading to increased transmission losses; and earth movement or subsidence caused by flooding or drought (for underground cables). 		more occurrences of high wind. In recognition of this the OHL design has been informed by wind, ice and wind-on-ice loadings. National Grid is required to plan the design and operation of the Proposed Development over its lifespan (approximately 80 years), and to
2.4.2	Section 4.8 of EN-1 advises that the resilience of the project to climate change should be assessed in the Environmental Statement (ES) accompanying an application. For example, future increased risk of flooding would be covered in any FRA (see section 5.7 in EN-1).		take the impacts of climate change over this period into account as part of the design process. The full range of future climate scenarios has been taken into account in the future baseline section of the FCA assessments, (Documents 5.12.2.1 – 4). National Grid has produced its own 'Flood Mitigation Policy $PS(T)_095'$ (2011) which defines their declared target standards of protection (SoP) for flood defence/resilience that should be applied to all new build electricity transmission substations and at legacy substations subjected to an expansion or a major refurbishment programme.

2.5 Consideration of Good Design

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
2.5.2	Proposals for electricity networks infrastructure should demonstrate good design in their approach to mitigating the potential adverse impacts which can be associated with OHLs, particularly those set out in Sections 2.7 to 2.10.	Documents 7.16, 7.17 and 7.19.	The Proposed Development accords with good design principles as demonstrated in the Design and Access Statement (Document 7.16), the Design Guide (Document 7.19) and Design Report (Document 7.17). The Proposed Development has adopted an approach to routeing the proposed electricity transmission lines which is considered to provide a transparent design development process. National Grid's approach to mitigation is outlined within the CEMP (Document 7.4) and the Schedule of Mitigation (Document 5.28).	
2.7 Biodiver	sity and Geological Conservation	1		
2.7.1 & 2.7.2	Large birds such as swans and geese may collide with OHLs associated with power infrastructure, particularly in poor visibility. Large birds in particular may also be electrocuted when landing or taking off by completing an electric circuit between live	Documents 5.9, 5.9.2.15, 7.4 and 7.7.	Information about the feeding, hunting, migration corridors, flight paths and breeding grounds of large bird species has been derived from extensive survey work undertaken over the past few years and is included in section 7 baseline conditions of ES Chapter 9, Ecology and Nature Conservation	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	and ground wires. Even perching birds can be killed as soon as their wings touch energised parts.		(Document 5.9). Full details can be found within Appendix 9.15 Ornithological Assessment Report of the ES (Document 5.9.2.15).	
	The applicant will need to consider whether the proposed line will cause such problems at any point along its length and take this into consideration in the preparation of the Environmental Impact Assessment (EIA) and ES (see Section 4.2 of EN-1). Particular consideration should be given to feeding and hunting grounds, migration		The likely collision risk effects on these bird species are assessed and detailed in section 9 mitigation and residual effects of ES Chapter 9, Ecology and Nature Conservation (Document 5.9). The assessment has concluded that collision risk has been reduced for all species through the design of the Proposed Development which would	
2.7.4	corridors and breeding grounds. Careful siting of a line away from, or parallel to, but not across, known flight paths can reduce the numbers of birds colliding with OHLs considerably.	maximise visibility and take advantage habituation of those species at higher collision to the existing line. There are operational effects on breeding or with species that would be significant. Some breeding birds would be tempor displaced during construction, mainter decommissioning but mitigation plant	 maximise visibility and take advantage of the habituation of those species at highest risk of collision to the existing line. There are no operational effects on breeding or wintering species that would be significant. Some breeding birds would be temporarily displaced during construction, maintenance and decommissioning but mitigation planting would provide additional habitat for the majority of 	

Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
			breeding species recorded across the Proposed Development including those priority species and species of conservation concern. In addition, further details on the mitigation to be implemented can be found within the CEMP (Document 7.4) and the Biodiversity Mitigation Strategy (Document 7.7).
2.7.5	Making lines more visible by methods such as the fitting of bird flappers and diverters to the earth wire, which swivel in the wind, glow in the dark and use fluorescent colours designed specifically for bird vision can also reduce the number of deaths. The design and colour of the diverters will be specific to the conditions – the line and pylon/transmission tower specifications and the species at risk.	Document 5.9	Bird diverters would not be required as the assessment of potential effects on bird species arising from the collision risks with the OHL are deemed to be Minor at most, see ES Chapter 9, Ecology and Nature Conservation (Document 5.9).

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
2.8.2	In practice new above ground electricity lines, whether supported by steel lattice towers/pylons or wooden poles can give rise to adverse landscape and visual impacts dependent upon their scale, siting, degree of screening and the nature of the landscape and local environment through which they are routed. For the most part these impacts can be mitigated, however at particularly sensitive locations the potential adverse landscape and visual impacts of an overhead line proposal may make it unacceptable in planning terms, taking account of the specific local environment and context. Cumulative landscape and visual impacts can arise where new overhead lines are required along with other related developments such as substations, wind	Document 7.17	The Design Report (Document 7.17) describes the evolution of the Proposed Development and demonstrates that reducing harm to the landscape through sensitive routeing and design was a major consideration during its development. The main approach to mitigating tall vertical infrastructure such as pylons, is through careful design and routeing. For the Proposed Development this also includes the proposal to tunnel under the particularly sensitive area of the Anglesey AONB and Menai Strait. ES Chapter 7, Landscape Assessment (Document 5.7) includes an assessment of effects during construction, operation, maintenance and decommissioning of the Proposed Development on landscape components, and landscape character. The assessment on landscape receptors has identified some significant effects on landscape receptors during construction and operation; these	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	farms and/or other new sources of power generation.		are summarised in Section 11 of ES Chapter 7 Landscape (Document 5.7).	
			ES Chapter 8, Visual Assessment (Document 5.8) includes an assessment of effects during construction, operation, maintenance and decommissioning of the Proposed Development on views and visual amenity.	
			The assessment on visual receptors has identified some significant effects on visual receptors during construction and operation; these are summarised in Section 11 of ES Chapter 8 Visual (Document 5.8). It is anticipated that maintenance and decommissioning activities would result in effects no greater than those anticipated during construction, and likely substantially less. It is considered that these activities would take place over a much shorter timescale and would be less intrusive than those required for construction.	
			Cumulative landscape and visual effects with other developments, including Wylfa Newydd Power	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Station, are presented in ES Chapter 20 Inter- Project Cumulative Effects Assessment (Document 5.20).	
2.8.4	The ES should set out details of how consideration has been given to undergrounding or sub-sea cables as a way of mitigating such impacts, including, where these have not been adopted on grounds of additional cost, how the costs of mitigation have been calculated.	Documents 5.2, 7.1, 7.2 and 7.17	ES Chapter 2, Alternatives, Project History and Non-Statutory Consultation (Document 5.2) sets out the project history and alternatives considered. The Design Report (Document 7.17) also describes the evolution of the Proposed Development and the consideration of alternatives to reduce potential effects. The need for the Proposed Development has been reported in the Need Case (Document 7.1) and the Strategic Options Report (Document 7.2).	
2.8.5	Guidelines for the routeing of new overhead lines, the Holford Rules, were originally set out in 1959 by Lord Holford, and are intended as a common sense approach to the routeing of new overhead lines. These guidelines were reviewed and	Documents 5.2 and 7.17	National Grid recognises that the Holford Rules and their accompanying notes form the basis for the approach to routeing new 400 kV OHLs. The Holford Rules have been used when considering alternatives and in considering the need for any additional mitigation measures. The iterative	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	updated by the industry in the 1990s and should be followed by developers when designing their proposals.		design and assessment of the Proposed Development has applied the Holford Rules. ES Chapter 2, Alternatives, Project History and Non-Statutory Consultation (Document 5.2) summarises the design process and discusses the main alternatives considered at each stage and the reasons for the key decisions. Full details are within the Design Report (Document 7.17).	
2.8.8 and 2.8.9	Where there are serious concerns about the potential adverse effects of a proposed overhead line, the IPC will have to balance these against the relevant factors, including the need for the proposed infrastructure, the availability and cost of alternative sites and routes and methods of installation (including undergrounding). The IPC should, however only refuse consent for overhead line proposals in favour of an underground or sub-sea line if	Documents 5.2, 5.7, 7.1, 7.2 and 7.17	The need for the Proposed Development has been reported in the Need Case (Document 7.1) and the Strategic Options Report (Document 7.2). ES Chapter 2, Alternatives, Project History and Non-Statutory Consultation (Document 5.2) sets out the project history and alternatives considered. The Design Report (Document 7.17) also describes the evolution of the Proposed Development and the consideration of alternatives to reduce potential effects.	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	it is satisfied that the benefits from the non- overhead line alternative will clearly outweigh any extra economic, social and environmental impacts and the technical difficulties are surmountable. In this context it should consider: The landscape in which the proposed line will be set, (in particular, the impact on residential areas, and those of natural beauty or historic importance such as National Parks, AONBs and the Broads);		The approach to assessing likely significant landscape effects has been explained in section 4 of ES Chapter 7, Landscape Assessment (Document 5.7), with the conclusions of the assessment reported in section 9 and summerised in section 11. The assessment has identified that the Proposed Development would have some significant effects on landscape receptors. The assessment on landscape receptors has identified some significant effects on landscape receptors during construction and operation; these are summarised in Section 11 of ES Chapter 7 Landscape (Document 5.7).	
			Direct effects on nationally designated areas and their setting have been avoided by undergrounding through the Anglesey AONB.	
			ES Chapter 10, Historic Environment (Document 5.10) includes an assessment of effects during construction, operation, maintenance and	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			decommissioning of the Proposed Development on historic assets and their setting.	
			Provision would be made for the identification and recording of archaeological remains before and during the construction programme. This would include a programme of Strip, Map and Sample within areas of identified archaeological interest and watching briefs elsewhere. The arrangements for these measures are described in ES Chapter 10 Historic Environment (Document 5.10).	
			The assessment on the historic environment has identified some significant effects on archaeological receptors during construction and operation; these are summarised in Section 11 of ES Chapter 10 Historic Environment (Document 5.10).Part of the Proposed Development would be located within the Dinorwig Landscape of Outstanding Historic Interest (LOHI) and an assessment of the effect of this has been undertaken through the completion of an	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			assessment of the significance of the impact of the Proposed Development on historic landscape areas (ASIDOHL) (Appendix 10.3, Document 5.10.2.3). The conclusion of the ASIDOHL was that the Proposed Development would not result in a significant effect.	
2.8.11 ou un mi vis inf	 In addition to following the principles set out in the Holford Rules and considering undergrounding, the main opportunities for mitigating potential adverse landscape and visual impacts of electricity networks infrastructure are: consideration of network reinforcement options (where alternatives exist) which 	Documents 5.2, 5.7, 7.1, 7.13, 7.16, 7.17 and 9.4.	The Proposed Development being brought forward by National Grid is to develop a new 400 kV connection between the existing 400 kV Wylfa Substation on Anglesey and the Pentir Substation in Gwynedd. This is required in order to export power from the proposed Wylfa Newydd Power Station, as set out in the Project Need Case (Document 7.1).	
	 may allow improvements to an existing line rather than the building of an entirely new line; selection of the most suitable type and design of support structure (i.e. different 		Strategic options are presented in ES Chapter 2 Alternatives and Proposed Development History (Document 5.2) and the Strategic Options Report (Document 7.2). National Grid identified and consulted on a range of options for locations where the generation from the proposed Wylfa Newydd	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	 lattice tower types, use of wooden poles etc.) in order to minimise the overall visual impact on the landscape; There are some more specific measures that might be taken, and which the IPC could require through requirements if appropriate, as follows: landscape schemes, comprising off-site tree and hedgerow planting are sometimes used for larger new OHL projects to mitigate potential landscape and visual impacts, softening the effect of a new above ground line whilst providing some screening from important visual receptors. These can only be implemented with the agreement of the relevant landowner(s) and advice from the relevant statutory advisor may also be needed; and 		Power Station could be connected to the main interconnected transmission system, and how that generation might be transmitted there. In total six strategic options were identified for the reinforcement of the electricity transmission system in North Wales. Following this four route corridor options were identified and selected for further assessment. Following review and consultation the proposed route was taken forward. National Grid has sought to reduce landscape and visual amenity effects in routeing of the proposed OHL by following the Holford Rules. The Holford Rules have been applied to the selection and assessment of the potential route corridor options and route options for the Proposed Development, summarised in the Design Report (Document 7.17) and ES Chapter 2 Alternatives and Proposed Development History and Non- Statutory Consultation (Document 5.2)	

Table 5: Compliance with NPS EN-5			
Requirement	Location in Application Documents	Assessment of the Proposed Development	
 screening, comprising localised planting in the immediate vicinity of residential properties and principal viewpoints can also help to screen or soften the effect of the line, reducing the visual impact from a particular receptor. 		National Grid has used opportunities to demonstrate good design in terms of siting relative to existing landscape character and landform. A number of different designs were considered in regards to pylon design as reported in ES Chapter 2, Alternatives, Project History and Non-Statutory Consultation (Document 5.2).	
		National Grid has selected a steel lattice pylon that is similar to the existing OHL pylons for the proposed OHL. This was considered the best option to reduce visual effects as it would not introduce contrasting shapes into the environment. Whilst similar in height and shape to the existing pylons, the new pylons have an overall lighter weight and thinner appearance. Mitigation by design includes sensitive routeing and siting of infrastructure. The objective is for pylons to run parallel with the existing 400 kV OHL. The presence of the existing 400 kV OHL means the	
	 Requirement screening, comprising localised planting in the immediate vicinity of residential properties and principal viewpoints can also help to screen or soften the effect of the line, reducing the visual impact 	Requirement Location in Application Documents • screening, comprising localised planting in the immediate vicinity of residential properties and principal viewpoints can also help to screen or soften the effect of the line, reducing the visual impact	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			visual element within the landscape. National Grid has selected a similar steel lattice pylon (to the existing OHL) for the proposed OHL. The steel lattice is considered the best option to reduce visual effects as far as possible as it would not introduce conflicting shapes into the environment.	
			The detailed design work undertaken to identify the OHL design of the Proposed Development has set out to develop a synchronised design as described in the Design Report (Document 7.17). Localised constraints to siting of individual pylons have precluded this where an unpaired or less synchronised design would be locally preferable based upon the nature of the receptors local to a given pylon.	
			The approach to landscape mitigation has been discussed in section 9 of ES Chapter 7, Landscape Assessment (Document 5.7).	
			The approach to more specific measures such as landscape enhancement are presented in the	

Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
			Enhancement Strategy (Document 7.13) for example, a voluntary planting scheme. For properties assessed as having a significant effect from the Proposed Development, i.e. those identified as having a moderate or major effects, it was considered that decisions on whether those effects should be mitigated should lie with the residents. Including planting as mitigation as part of the EIA would require National Grid to undertak that planting to reduce the effect whether the resident wanted the planting or not. In some case residents may not want planting, for example where it could screen a long distance view. It is considered that those judgements should be an individual basis by the residents and not by National Grid. The properties identified and eligible will therefore be offered the opportunity to have planting if they so wished via a Voluntary Residential Planting Scheme (VRPS).

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
2.9.8 & 2.9.9	While standard methods of assessment and interpretation using the principles of the relevant British Standards are satisfactory for dry weather conditions, they are not appropriate for assessing noise during rain, which is when OHL noise mostly occurs, and when the background noise itself will vary according to the intensity of the rain. Therefore an alternative noise assessment method to deal with rain-induced noise is needed, such as the one developed by National Grid as described in report TR(T)94,1993.	Documents 5.4, 5.15 and 5.16	 An assessment of noise has been undertaken for both dry and wet weather conditions, as detailed in ES Chapter 16, Operational Noise and Vibration (Document 5.16). The guidance below has been used with the assessment methodology in the determination of the significance of operational noise effects: BS 4142:2014 – Methods for rating and assessing industrial and commercial sound TR(T)94 – National Grid report, referenced in EN-5, describing a method to assess the likely effects of dry and rain induced ('wet') noise from 	
2.9.12 and 2.9.13	 Applicants should have considered the following measures: the positioning of lines (see Section 2.8 (landscape/visual impact)) to help mitigate noise; 		 new OHLs. BS 8233:2014 – Guidance on Sound Insulation and Noise Reduction for Buildings Institute of Environmental Management and Assessments Guidelines for Noise Impact Assessments – Classification method with 	

Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development
	 ensuring that the appropriately sized conductor arrangement is used to minimise potential noise; quality assurance through manufacturing and transportation to avoid damage to OHL conductors which can increase potential noise effects; ensuring that conductors are kept clean and free of surface contaminants during stringing/installation. The ES should include information on planned maintenance arrangements 		regards to defining the generic relationship between impact magnitude and noise effect. • World Health Organisation Guidelines – Guidelines for exposure to noise during sleep entitles 'Night Noise Guidelines for Europe'. Section 9 in ES Chapter 16, Operational Noise (Document 5.16) provides mitigation measures to reduce noise effects during the operational and maintenance stage of the Proposed Development. Mitigation measures include the routeing of the OHL to reduce audible noise effects at receiving receptors, use of an appropriately sized conductor arrangement, quality assurance through manufacturing and transportation, and ensuring conductors are kept clean and free of surface contaminants during installation. These measures would reduce noise effects at receptors. Descriptions of the proposed mitigation measures to reduce noise effects during the construction

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			phase are presented in ES Chapter 15, Construction Noise (Document 5.15).	
			The operation and maintenance of the Proposed Development has been detailed in section 3 of ES Chapter 4, Construction, Operation, Maintenance and Decommissioning (Document 5.4).	
2.10 Electric	2.10 Electric and Magetic Fields (EMFs)			
2.10.10	Before granting consent to an OHL application, the IPC should satisfy itself that the proposal is in accordance with the ICNIRP (1998) guidelines.	Document 5.25.	The EMFs Report (Document 5.25), produced for the Proposed Development has concluded that the Proposed Development complies with EMF exposure guidelines and that there would be no	
2.10.11	The Government has developed with industry a voluntary Code of Practice, 'Optimum Phasing of high voltage double- circuit Power Lines – A Voluntary Code of Practice'26, published in February 2011 that defines the circumstances where industry can and will optimally phase lines		significant adverse effect on receptors.	

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	with a voltage of 132 kV and above. Where the applicant cannot demonstrate that the line will be compliant with the Electricity Safety, Quality and Continuity Regulations 2002, with the exposure guidelines as specified in the Code of Practice on compliance, and with the policy on phasing as specified in the Code of Practice on optimal phasing then the IPC should not grant consent.			
2.10.15	 The applicant should have considered the following factors: Height, position, insulation and protection (electrical or mechanical as appropriate) measures subject to ensuring compliance with the Electricity Safety, Quality and Continuity Regulations 2002. 			

Table 5: Co	Table 5: Compliance with NPS EN-5			
Paragraph Number	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	• That optimal phasing of high voltage overhead power lines is introduced wherever possible and practicable in accordance with the Code of Practice to minimise effects of EMFs.			
	 Any new advice emerging from the Department of Health relating to Government policy for EMF exposure guidelines. 			
	• Where it can be shown that the line will comply with the current public exposure guidelines and the policy on phasing, no further mitigation should be necessary.			

5.4 SUMMARY

- 5.4.1 As the Proposed Development is an NSIP, under The Planning Act 2008, the application for development consent should be decided in accordance with the relevant NPS.
- 5.4.2 NPSs are of primary importance to the decision making process for NSIPs. The NPSs for energy set out the Government's policy for delivery of major energy infrastructure under the Planning Act 2008.
- 5.4.3 The Proposed Development has been subject to a comprehensive assessment against NPS EN-1 and EN-5. The assessment demonstrates that National Grid has developed its proposals in accordance with the requirements of NPS EN-1 and EN-5 and is able to demonstrate compliance with these National Policy Statements.

6 Welsh National Planning Policy

6.1 INTRODUCTION

- 6.1.1 Whilst the above NPSs contain the primary policy against which the Proposed Development is to be considered, regard has also been had to national policy issued by Welsh Government.
- 6.1.2 Welsh Government policy includes:
 - Wales Spatial Plan (WSP); and
 - Planning Policy Wales (PPW).
- 6.1.3 The Welsh Government has a statutory duty in relation to sustainable development. Welsh Government policies recognise the potential threats that uncontained climate change poses to local communities. It acknowledges the urgent need to reduce greenhouse gas emissions. There are commitments to maximise energy generation from renewable and low carbon sources. New distribution lines are also recognised as necessary to provide additional capacity to the grid.

6.2 INTRODUCTION TO WELSH NATIONAL PLANNING POLICY

National Development Framework – Planning (Wales) Act 2015

6.2.1 The Planning (Wales) Act 2015 ('the 2015 Act') sets out a series of legislative changes to deliver reform of the planning system in Wales. The Explanatory Memorandum to the 2015 Act states that it:

'..is a set of provisions derived from an extensive evidence base and stakeholder engagement that will provide a modern legislative framework for the operation of the planning system. It puts in place delivery structures, processes and procedures, to make the planning system fit for the 21st Century. Taken together the provisions will allow the planning system to support the delivery of national, local and community aspirations by creating sustainable places where citizens have improved access to quality homes, jobs and built and natural environments and supports the use of the Welsh language.

6.2.2 The 2015 Act provides a statutory requirement for the Welsh Ministers to produce and keep up-to-date a National Development Framework, which will

replace the current Wales Spatial Plan. The Welsh Government has begun work on the production of a National Development Framework (NDF). The NDF will set out a 20 year land use framework for Wales. The NDF will have '*Development Plan*' status and provide the context for Local Development Plans (LDPs), and should be read alongside PPW. It will also identify key locations for development, in addition to land uses of national significance which the planning system is able to influence and deliver.

6.2.3 As the NDF is still in production and not predicted for publication until March 2020, this Planning Statement considers the WSP which is the active policy at the time of submission.

Wales Spatial Plan

- 6.2.4 Section 60 of the Planning and Compulsory Purchase Act 2004 placed a duty on Welsh Ministers to prepare a spatial plan and for that plan to be approved by a resolution of, the National Assembly for Wales. Section 62 states that local planning authorities, in preparing a local development plan, must have regard to the WSP, amongst other matters.
- 6.2.5 The 2008 WSP provides a Wales-wide spatial strategy which outlines a 'broad 20 year agenda' to guide further development and policy interventions.
- 6.2.6 WSP Para 1.5 advises that the purpose of the WSP is to ensure that what is done in the public, private and third sectors in Wales is integrated and sustainable, and that actions within an area support each other and jointly move towards a shared vision for Wales and for the different parts of Wales.
- 6.2.7 The WSP notes at Para 16.56 that 'a significant challenge' is the ability to have a local and a national role in responding and adapting to the impact of climate change.

Planning Policy Wales

- 6.2.8 PPW (Edition 9, November 2016) sets out the land use planning policies of the Welsh Government and should be taken into account by local planning authorities in the preparation of development plans. It is supplemented by a series of Technical Advise Notes (TANs), which, with PPW, circulars, and policy clarification letters, comprise national planning policy and Government planning advice in Wales.
- 6.2.9 PPW Section 12.8.6 notes that Welsh Government's aim is to secure an appropriate mix of energy provision for Wales, whilst minimising potential environmental and social impacts. PPW states:

'An integrated approach should be adopted towards planning renewable and low carbon energy developments and additional electricity grid network infrastructure.'

- 6.2.10 A description of the TANs relevant to the Proposed Development is provided in Table 8 of this document.
- 6.2.11 When the Planning (Wales) Act 2015, the Well-Being of Future Generations (Wales) Act and the Environment (Wales) Act were being developed, a commitment was given to restructure PPW.
- 6.2.12 A consultation document for Edition 10 of PPW, was published on 12 February 2018. This seeks the views of the public on the Welsh Government's proposed revision of PPW in light of these pieces of legislation.
- 6.2.13 The revisions in PPW 10 that are relevant to the Proposed Development are outlined in Table 6 below.

Table 6: Proposed revisions to PPW relevant to the Proposed

Development outlined in the Consultation Report			
Revision	Relevance to the Proposed Development		
The need for all developments, as far as possible, to make or contribute towards the creation of Sustainable Places	The ES (Volume 5) demonstrates economic, social and environmental matters have been considered throughout the evolution of the Proposed Development, with mitigation measures proposed to reduce adverse environmental, social and economic effects.		
All options to re-use previously developed land are considered before greenfield sites are to be utilised	When routing linear infrastructure such as the OHL, it would not be possible, to commit to only using previously developed land. The OHL is designed to avoid urban areas where possible, further limiting the potential to use previously developed land. The vast majority of construction would take place on greenfield, running parallel to the existing OHL,		
New developments should be located and designed in accordance with the transport hierarchy (prioritises	This measure is largely aimed at new housing developments and places of work, to ensure sustainable transport is a consideration. A PRoW Management Plan (Document 7.6) has been developed, which identifies measures to		

Development outlined in the Consultation Report			
Revision	Relevance to the Proposed Development		
walking and cycling, then public transport, and finally provide motor vehicles).	reduce the extent to which usage of PRoW/recreational routes are disrupted. Where PRoW routes must be temporarily closed National Grid would provide diversion routes, clear signage and advanced warning of the closure would be put in place.		
The Welsh Government's preferred position on new power lines is that they should be laid underground where possible. However, it is recognised that a balanced view must be taken against costs, which could render otherwise acceptable projects unviable. Where undergrounding of lines is not possible, proactive engagement with energy companies to mitigate the visual impact of any potential new transmission line is	Consideration of route options, including the undergrounding of the electricity transmission cable, is detailed in the Strategic Options Report (Document 7.2). Following the strategic option appraisal it was concluded that Strategic Option 3 consisting of new OHL circuits connecting Wylfa and Pentir Substations was the best option to achieve an appropriate balance between National Grid's technical, economic, amenity and environmental obligations and was therefore identified as the preferred Strategic Option. Visual impacts arising from the OHL have been reduced through the sensitive routeing and siting of infrastructure. The OHL would be parallel to the existing 400 kV OHL for much of its route, and synchronised except where an unpaired or less synchronised design would be locally preferable. The presence of the existing 400 kV OHL means the proposed 400 kV OHL		

Table 6: Proposed revisions to PPW relevant to the ProposedDevelopment outlined in the Consultation Report

6.2.14 The Proposed Development accords with the proposed revisions.

6.3 WELSH NATIONAL PLANNING POLICY

6.3.1 Welsh National Planning Policy is discussed in Table 7.

6.4 TECHNICAL ADVICE NOTES

6.4.1 Matters relating to TAN' are considered in Table 8 below.

Table 7: Co	Table 7: Compliance with Welsh National Planning Policy			
National Policy	Requirement	Assessment of the Proposed Development		
Planning PolicyWelsh Government's aim is to secure an appropriate mix of energy provisions. The lack of grid network capacity in North Wales is 	appropriate mix of energy provisions. The lack of grid network capacity in North Wales is particularly identified in the PPW. The Welsh Government encourages low energy developments and additional electricity grid	The Proposed Development seeks powers to construct, operate and maintain a new 400 kV connection between Wylfa Substation and Pentir Substation, together with various associated development and other works. Electricity would be generated from the Wylfa Newydd Power Station. The UK is facing a major challenge to meet projected energy needs over the coming decades, whilst at the same time tackling climate change. Wylfa Newydd Power Station contributes to meeting		
	system will play in tackling climate change and	change. Wylfa Newydd Power Station contributes to meeting this energy need, with the Proposed Development supplying the needed infrastructure to transmit the electricity.		
	sustainability objectives. The seventh	The Proposed Development would have no direct impact on generation of the energy mix aspiration in Welsh Government energy policy. However, it is crucial to enabling a key element of that energy mix to be provided.		
	The ES (Volume 5) recognises that there is a balance to be made between environmental protection and delivery of key pieces of infrastructure necessary to deliver the objectives of national policy. The Proposed Development has been subjected to comprehensive and iterative assessment throughout its development. The Proposed Development has been designed to avoid adverse effects wherever appropriate			

Table 7: Co	Table 7: Compliance with Welsh National Planning Policy			
National Policy	Requirement	Assessment of the Proposed Development		
	The Welsh Government commits to achieving at least a 40% reduction in all greenhouse gas emissions in Wales by 2020 against a 1990 baseline.	and to incorporate mitigation to reduce residual effects, leading to an acceptable form of development. The ES acknowledges, however, that there would be some residual adverse impacts, and these impacts must be balanced against the need and benefits of the Proposed Development.		
	'an integrated approach should be adopted towards planning renewable and low carbon energy developments and additional electricity grid network infrastructure. Additional grid network infrastructure will be needed to support the SSAs and local planning authorities should facilitate grid developments when appropriate proposals come forward'.	The Strategic Options Report (Document 7.2) provides a detailed description on National Grid's strategic options for the routeing of the Proposed Development. Each potential Strategic Option was initially assessed by National Grid, to ensure that the option would meet the reinforcement need and that the resultant transmission system would comply with the minimum standards defined in the National Electricity Transmission System Security and Quality of Supply Standards (NETS SQSS). Those Strategic Options which did meet the reinforcement and standards set out in the NETS SQSS were further refined and appraised in light of further assessment and consultation feedback, and a single proposed route 'the Preferred Route Option' was selected. The Design Report (Document 7.17) provides an explanation as to the evolution of the design of the Proposed Development for which a DCO is being sought.		

Table 7: Cor	Table 7: Compliance with Welsh National Planning Policy			
National Policy	Requirement	Assessment of the Proposed Development		
		ES Chapter 2, Alternatives, Project History and Non-Statutory Consultation (Document 5.2) summarises the routeing and siting process and demonstrates that the route and design of the Proposed Development is appropriate. The design of the Proposed Development enables the connection to be made in an efficient and economical manner that is in compliance with National Grid's statutory environmental duties.		
		Greenhouse gases would be emitted during the construction phase, through the consumption of materials and energy, and through vehicular emissions; however there would be very little opportunity to substantially reduce these emissions. The potential for greenhouse gas emissions during the operation of the Proposed Development would be limited vehicle emissions and any materials used during maintenance visits etc. As such there has been no assessment undertaken of CO2 emissions.		
		The Project Need Case (Document 7.1) confirms that the Proposed Development is necessary to connect Wylfa Newydd Power Station. NPS EN-1 identifies nuclear power generation as a key part of the low carbon energy mix.		

Table 7: Co	Table 7: Compliance with Welsh National Planning Policy		
National Policy	Requirement	Assessment of the Proposed Development	
WSP	A strong sense of place is evident throughout North West Wales, both in terms of its landscape and its high composition of Welsh speaking communities. However, this cultural identity faces the challenge of global cultural pressures and demographic change, particularly as its sense of place is one of the key factors of the Area's attractiveness to both visitors and permanent settlers. In-migration is however necessary both to support tourism and to bridge some of the labour market shortages. The challenge is therefore to retain and enhance a sense of place, while embracing necessary change to sustain employment and services.	 A comprehensive assessment has been undertaken of the potential effects on tourism. The following assessments have been completed: ES Chapter 7, Landscape Assessment (Document 5.7) ES Chapter 8, Visual Assessment (Document 5.8); ES Chapter 13, Traffic and Transport (Document 5.13) ES Chapter 17, Socio-Economics (Document 5.17); WLIA (Document 5.26); and Wellbeing Assessment (Document 5.27); In addition, meetings have been held with local people to discuss their concerns and three stages of Public Consultation have been undertaken, as detailed in the Consultation Report (Volume 6). 	
	The Welsh language has a significant role to play in our communities and should be promoted as a positive attribute to the area. A key priority will be to develop the Spatial Plan Area in accordance	The assessments have concluded that following the implementation of mitigation measures, the Proposed Development would have no significant adverse effects on the tourism trade. A Welsh Language Impact Assessment (WLIA) (Document 5.26) has been undertaken to consider matters related to the	

Table 7: Co	Table 7: Compliance with Welsh National Planning Policy		
National Policy	Requirement	Assessment of the Proposed Development	
	with laith Pawb's vision of creating a modern bilingual society.	Welsh language. The assessment concludes that the effect on the Welsh Language would be negligible, other than for the temporary effects of in-migration of workers, which is considered would have a minor effect. Mitigation measures have been identified for this temporary minor effect, as detailed in the Welsh Language Impact Assessment (Document 5.26)	
	'Climate change is an urgent and compelling issue which will have a fundamental impact on our communities and working environments, our way of life, and our health and wellbeing. We must act now to protect our communities from the unavoidable consequences.'	Greenhouse gases would be emitted during the construction phase, through the consumption of materials and energy, and through vehicular emissions; however there would be very little opportunity to substantially reduce these emissions. The potential for greenhouse gas emissions during the operation of the Proposed Development would be limited vehicle emissions and any materials used during maintenance visits etc. As such there has been no assessment undertaken of CO2 emissions.	
		The Project Need Case (Document 7.1) confirms that the Proposed Development is necessary to connect Wylfa Newydd Power Station. NPS EN-1 identifies nuclear power generation as a key part of the low carbon energy mix	

Table 7: Co	Table 7: Compliance with Welsh National Planning Policy		
National Policy	Requirement	Assessment of the Proposed Development	
	Protecting and enhancing sensitive areas of natural, built and historic importance.	Direct effects on the Anglesey AONB and the iconic views of the Menai Strait would be avoided through the use of an underground cable tunnel.	
	The overall aim is to protect the natural and built environment which includes areas designated as Sites of Special Scientific Interest (SSSI), and to realise the environmental opportunities that these assets provide. This will help reconnect communities with the environment, attract visitors, and promote on-going economic and social investment and development through a high quality natural and built environment.	Part of the Proposed Development would be located within the Dinorwig Landscape of Outstanding Historic Interest (LOHI) and an assessment of the effect of this has been undertaken through the completion of an assessment of the significance of the impact of development on historic landscape areas (ASIDOHL) (Appendix 10.3, Document 5.10.2.3). The conclusion of the ASIDOHL is that the Proposed Development would not result in a significant effect.	
		The Habitat Regulations Assessment Report (Document 5.23) considers the potential for effects on the integrity of Natura 2000 sites, either alone or in combination with other relevant plans or projects. It is concluded that the Proposed Development would not have any significant adverse effects on any Natura 2000 site.	
		ES Chapter 9 Ecology and Nature Conservation (Document 5.9) confirms that there would be no significant effects on any SSSI as a result of the Proposed Development.	

Table 7: Cor	Table 7: Compliance with Welsh National Planning Policy	
National Policy	Requirement	Assessment of the Proposed Development
		There would be no direct impacts on any Scheduled Monuments or listed buildings. There would be some significant effects on the setting of a small number of Scheduled Monuments and listed buildings, however there would be no direct effects.

Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development
TAN 5: Nature Conservation and Planning (2009)	TAN 5 provides advice and supplementary planning guidance on how the planning system can be used to minimise any adverse impacts on flora, fauna, geological and physiographical (also called geomorphological) features. Although its main purpose relates to nature conservation through natural systems and processes that continues to change the land form, rivers and coasts of Wales, TAN 5 also provides general advice with respect to matters to be taken into account in determining planning applications. Paragraph 2.4 provides guidance for local planning authorities when considering policies and proposals in local development plans and when deciding planning applications that may affect nature conservation, as it states: • 'pay particular attention to the principles of	A search for areas of geological interest has been undertaken as described in the section 7 of ES Chapter 11, Geology, Hydrogeology and Ground Conditions (Document 5.11). No Geological Sites of Special Scientific Interest (GSSSI) or Regionally Important Geodiversity Sites (RIGS) are present within 1 km of the Order Limits of the Proposed Development. No effects on designated sites of geological conservation importance have been identified. ES Chapter 9, Ecology and Nature Conservation (Document 5.9) presents information about the ecological effects (terrestrial and marine) that could result from the construction, operation, maintenance and decommissioning of the Proposed Development. Protected species, statutory designated sites and non-statutory nature conservation designations located within the study area have been identified and assessed for potential effects. The majority of potential significant effects on nature conservation have been avoided through careful design and
	sustainable development, including respect for environmental limits, applying the precautionary principle, using scientific	routeing of the Proposed Development, or have been addressed through the implementation of standard mitigation techniques.

Table 8: Con	Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development	
	 knowledge to aid decision making and taking account of the full range of costs and benefits in a long term perspective (PPW 2.2.1); contribute to the protection and improvement of the environment, so as to improve the quality of life and protect local and global ecosystems, seeking to avoid irreversible harmful effects on the natural environment (PPW 2.3.2); promote the conservation and enhancement of statutorily designated areas and undeveloped coast (PPW 2.3.2); ensure that appropriate weight is attached to designated sites of international, national and local importance (PPW 5.3.2); protect wildlife and natural features in the wider environment, with appropriate weight attached to priority habitats and species in Biodiversity Action Plans (PPW 5.2); 	Pylon and other structure locations have been situated away from ecological features where possible. Where this has not been possible, and pylons are within close proximity to important ecological features, where practicable, these structures have been micro-sited (re-positioned) to avoid or reduce impacts to important features. Although there is some flexibility in terms of final design, due to the Order Limits, LOD and parameters, commitments have been made in the Schedule of Environmental Commitments (Document 7.4.2.1) (to avoid areas where to locate temporary or permanent works would be likely to have more significant effects). Standard mitigation measures include working hours, light control, waste management and pollution prevention and control. Measures specific to potential ecology effects include careful timing of work, vegetation management in the appropriate season, vegetation protection zones and an ecological watching brief where required. All of these standard and ecology specific measures would be applied through the implementation of the CEMP (Document 7.4) and Biodiversity Mitigation Strategy (BMS) (Document 7.7). Standard biosecurity measures are also included in the BMS.	

Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development
	 ensure that all material considerations are taken into account and decisions are informed by adequate information about the potential effects of development on nature conservation (PPW paragraphs 5.5.1 and 5.5.2); ensure that the range and population of protected species is sustained (PPW 5.2.3, 5.5.11 and 5.5.12); and adopt a step-wise approach to avoid harm to nature conservation, minimise unavoidable harm by mitigation measures, offset residual harm by compensation measures and look for new opportunities to enhance nature conservation; where there may be significant harmful effects local planning authorities will need to be satisfied that any reasonable alternative sites that would result in less or no harm have been fully considered (PPW 5.2.2, 5.2.7 and 5.5.2).' 	Adherence to mitigation measures means that there would be no significant effects as a result of the Proposed Development on statutory designated sites. The only significant effect on the natural environment and non-statutory sites is on Gylched Covert CWS which would experience a moderate (significant). The decision to cross the Menai Strait, including the AONB, using a tunnel has avoided any potential impacts on the AONB and the coast. The majority of habitats would be re-instated to their former habitats on completion of the works so there would be limited long term effects. Enhancement opportunities for are reported in the Enhancement Strategy (Document 7.13). For some designated sites and habitats it is expected that there would be a net enhancement as a result of mitigation measures implemented in combination with the implementation of the new habitats. There would be no significant effect on any protected or notable species as a result of the Proposed Development. Individuals or small numbers of some species would, though, be temporarily affected during construction, maintenance and

Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development
		decommissioning. The habitats supporting these species would be replaced, or improved where possible.
		The only significant effect on the natural environment is on Gylched Covert CWS, which would experience a moderate effect.
		The Habitat Regulations Assessment Report (Document 5.23) assesses the potential for significant effects either alone or in combination with other relevant plans or projects on any Natura 2000 site.
		The assessment concludes that the Proposed Development would not result in a likely significant effect on a Natura 2000 site alone or in combination with other plans and projects.
TAN 11: Noise (1997)	TAN 11 provides advice on how the planning system can be used to minimise any adverse	The assessment of construction noise effects has been undertaken following recognised guidance, as follows:
	impacts of noise generation without placing onerous restrictions on development. Although its main purpose it to determine the suitability of land for residential development, especially where land is affected by noise from transportation or industrial sources TAN 11 also provides general guidance with respect to	 BS 5228-1: 2009+A1:2014 Calculation Method;
its mair land for where l transpo		 ISO 9613-2:1996 Calculation Method;
		• BS 4142:2014; and
		 Road traffic on the public highway has been modelled using a computer generated model in SoundPLAN v7.4

Table 8: C	Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development	
	matters to be taken into account in determining planning applications both for noise-sensitive developments and for those activities that will	implementing the methodology in the 'Calculation of Road Traffic Noise' (Ref.24). The guidance below has been used in developing the with the	
	generate noise. Para 7 of TAN 11 provides guidance for four	 assessment methodology for operational noise effects: BS 4142:2014 – Methods for rating and assessing industrial 	
	Noise Exposure Categories (NEC) rated A-D	and commercial sound;	
	and states: <i>Noise Exposure Categories (NECs) (see Annex</i> <i>A) have been derived to assist local planning</i> <i>authorities in their consideration of planning</i> <i>applications for residential development near</i>	 TR(T)94 – National Grid report, referenced in EN-5, describing a method to assess the likely effects of dry and rain induced ('wet') noise from new OHLs; 	
		 BS 8233:2014 – Guidance on Sound Insulation and Noise Reduction for Buildings; 	
	transport related noise sources.'	 Institute of Environmental Management and Assessment Guidelines for Noise Impact Assessments – Classification method with regards to defining the generic relationship between impact magnitude and noise effect; and 	
	Section A7 of TAN 11 explains that different noise indices are used to describe noise from		
	different sources. To avoid confusion, the ambient or average noise level, Laeq,T, as advocated in BS 7445: 1991, is used to	 World Health Organisation Guidelines – Guidelines for exposure to noise during sleep entitled 'Night Noise Guidelines for Europe'. 	
	describe noise from different sources, and the recommended time periods are 0700-2300h and 2300-0700h. Section A7 also notes that		

Table 8: Co	Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development	
	the values refer to noise levels measured on an open site at the position of the proposed residential development, well away from any existing buildings.	Potential sources of noise during the construction phase are detailed in ES Chapter 15, Construction Noise and Vibration (Document 5.15),	
	Annex B of TAN 11 provides guidance on assessing noise from different sources. With respect to noise from road traffic, Para B1 of Annex B states that, ' <i>For established roads it</i>	The measures set out in the CEMP (Document 7.4) and Noise and Vibration Management Plan (Document 7.9) would be implemented to reduce noise and vibration during construction, which would control emissions in accordance with accepted criteria, e.g. those defined in BS5228: 2014.	
	will be sufficient normally to base assessments on the current measured noise level.' The Department of Transport's 'Calculation of Road Traffic Noise' (CRTN) is identified as an appropriate document for road traffic noise.	The assessment of construction noise has concluded some receptors would be exposed to a significant noise effect during the construction phase, for full details of these receptors please see ES Chapter 15 Construction Noise and Vibration (Document 5.15). However, these effects would only occur	
	With respect to assessing noise from construction sites, Para B20 of Annex B refers to guidance presented in BS 5228, parts 1-4. In particular, Part 1: 1984, 'Code of practice for basic information and procedures for noise control' describes a method for predicting noise from construction sites as well as giving general advice.	 during the period of construction works and for the most part would be limited to short periods of time (weeks rather than years). Potential noise effects during the operational phase are detailed in ES Chapter 16, Operational Noise and Vibration (Document 5.16). This assessment has concluded that there would be no significant effects as a result of operational noise. 	

Table 8: Con	Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development	
	In considering mitigation measures for noise impacts, Para 11 of TAN 11 states: 'Measures introduced to control the source of, or limit exposure to, noise should be proportionate and reasonable' and includes protection of surrounding noise sensitive buildings (e.g. improving sound insulation in these buildings and/or screening them by purpose-built barriers) as a mitigation measure.		
TAN 12: Design (2016)	TAN 12 provides guidance on good design principles, equipping all those involved in the design of development with advice on how ' <i>Promoting sustainability through good design</i> ' and ' <i>Planning for sustainable buildings</i> ' may be facilitated through the planning system.	National Grid has followed good design principles in the routing and siting of infrastructure, including paralleling the existing OHL and aiming to synchronise the OHLs where possible. There has also been careful consideration of materials selected for the THHs and the pylon type (see Design Report (Document 7.17)).	
	Para 3.1 definition of design for planning purposes stresses its role in achieving a more holistic design response to sustainable development. The objective of good design is split into five key stages, as follows:	The Proposed Development has been designed to avoid adverse effects wherever possible and to incorporate mitigation to reduce residual effects, leading to an acceptable form of development. Mitigation by design has been detailed in section 3.6 of this document.	

Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development
	 access – ensuring ease of access for all; character – sustaining or enhancing local character, promoting a successful relationship between public and private space, promoting quality, choice and variety and promoting innovative design; 	The Consultation Report (Document 6.1) details National Grid's engagement with stakeholders relating to the design of the Proposed Development. To ensure sustainable development National Grid has assessed the environmental, cultural and socio-economic impacts arising as a result of the Proposed Development (Document 5.7 – 5.18).
	 community safety – ensuring attractive, safe public spaces, security through natural surveillance; environmental sustainability – achieving efficient use and protection of natural resources, enhancing biodiversity and designing for change; and movement – promoting sustainable means of transport. 	To ensure safe movement during the construction of the Proposed Development consultation and discussions with relevant highway authorities were undertaken to fully develop the scope of the Transport Assessment (Document 5.13.2.1). ES Chapter 13, Traffic and Transport (Document 5.13), assesses the potential effects of the Proposed Development on Traffic and Transport allowing mitigation measure to be developed as detailed in section 9 of the Chapter. An Outine Construction Traffic Management Plan (OCTMP) (Document 7.5) has been developed to manage construction traffic.
	Para 5.13.1 states a duty to consider the conservation and enhancement of biodiversity in the decision making process of a development. Good design can contribute to	A number of potential significant effects on biodiversity have been avoided through careful design or would be addressed through the implementation of standard mitigation techniques. Avoidance by design has been achieved through the following:

Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development
	conserving or enhancing the wildlife interests of an area or site.	 implementation of the tunnelling methodology beneath the marine SAC Menai Strait and Conwy Bay;
		 commencing tunnelling either side of the areas of significant woodland, including ancient woodland, along the Menai Strait;
		 routeing around Anglesey Fens/Cors Erddreiniog SAC/Ramsar/SSSI/NNR and other designated sites;
		 micrositing of pylons; and
		 paralleling the OHL with the existing OHL (with the exception of where the existing OHL is routed through the above designated sites) in order to avoid increasing the risk of bird collision impacts.
TAN 15: Development and Flood Risk (2004)	The overarching aim of TAN 15 is to direct new development away from those areas which are at high risk of flooding, stating that development should only be justified in higher risk areas if it can be demonstrated that the potential consequences of a flooding event for the particular type of development have been considered, and found to be acceptable.	An assessment of the likely effects of the Proposed Development on flood risk is presented in ES Chapter 12, Water Quality, Resources and Flood Risk (Document 5.12). Flood Consequences Assessments (Documents 5.12.2.1 – 4) have been prepared for the 400 kV OHL and the proposed THH/CSECs.

Table 8: C	Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development	
	 The guidance includes the definition of different flood zones, A, B and C, based on probability of flooding. Zone C is further sub-divided into Zone C1 and Zone C2. Zone C1 refers to areas with flood defences and Zone C2 is areas without any flood defences. All of Zone C refers to areas with an estimated probability of flooding of 0.1% or more (less than 1 in 1000 years return period). Figure 1 in TAN 15 provides more detail on these flood zones. Para 6.2 of TAN 15 states that 'new development should be directed away from Zone C land towards suitable land in Zone A, otherwise to Zone B, where river and coastal flooding will be less of an issue'. The guidance recognises that in some cases development may be required in areas at risk of flooding (i.e. Zones B and C). TAN 15 provides further guidance on land uses 	Assessment of the Proposed Development A detailed Flood Management Plan (FMP) would be prepared and submitted to NRW and LLFAs for approval post grant of the DCO. Following the adoption of design principles and environmental measures no significant hydrology and flood risk effects are anticipated The assessment concluded there would be no significant flood risk as a result of the construction and operational stages of the Proposed Development, following the implementation of mitigation measures. Therefore, the Proposed Development is considered to be in accordance with TAN 15.	
	which are acceptable in the defined flood zones, and utilities infrastructure is classed as		

Table 8:

TAN

pliance with Technical Advice Notes (TAN)	
Description	Assessment of the Proposed Development
'less vulnerable development'. It is therefore permitted in Zone C2 subject to meeting justification criteria defined in Section 6 of TAN 15 and the provision of a Flood Consequences Assessment (FCA).	
The Justification Test states that development will only be justified if it can be demonstrated that:	
• its location in Zone C is necessary to assist, or be part of, a local authority regeneration initiative or a local authority strategy required to sustain an existing settlement; or	
 its location in Zone C is necessary to contribute to key employment objectives supported by the local authority, and other key partners, to sustain an existing settlement or region; and 	
 it concurs with the aims of Planning Policy 	

 it concurs with the aims of Planning Policy Wales (PPW) and meets the definition of previously developed land; and

Table 8: Cor	Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development	
	 the potential consequences of a flooding event for the particular type of development have been considered and in terms of the criteria contained in Sections 5 and 7 and Appendix 1 (which define the requirements of a Flood Consequences Assessment) are found to be acceptable. 		
TAN 18: Transport (2007)	TAN 18 deals with all matters relating to transport and sets out how the transport elements of a development should be assessed and mitigated. Although TAN 18 makes no direct reference to the construction impact of development or to OHL developments, the principles set out in TAN 18 are still considered relevant. The TAN describes how to integrate land use and transport planning. It explains how transport impacts should be assessed and mitigated.	A traffic and transport assessment has been presented in ES Chapter 13, Traffic and Transport (Document 5.13), which also has a Transport Assessment appended (Document 5.13.2.1). The assessment was undertaken in line with the current policy framework including guidance in Appendix D and E of TAN 18 and guidance in the Department for Transport's publication entitled 'Guidance on Transport Assessment' (Ref.18), which sets out the criteria for assessing new development. This supersedes the guidance as set out in TAN 18 Appendix D. An outline OCTMP (Document 7.5) has been developed to manage the effects of construction traffic	
		The Proposed Development is considered to be consistent with TAN 18 in terms of traffic and transport.	

Table 8: Com	Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development	
TAN 20: Planning and the Welsh Language (2013)	TAN 20 provide guidance on how the planning system considers the implications of the Welsh language when LDPs are prepared.	A Welsh Language Impact Assessment (WLIA) (Document 5.26) has been undertaken to consider effects related to the Welsh Language. The assessment concludes that the effect on	
	Between 1,200 and 2,200 fluent Welsh speakers are moving out of Wales each year. One of the aims of the Welsh Government is to reverse this trend; the creation of jobs to sustain communities and the local economy is a key priority.	the Welsh Language is negligible, other than for the temporary effects of in-migration of workers, which is considered would have a minor effect. Mitigation measures are identified to address this minor effect.	
	Para 4.1.2 of TAN 20 states 'In determining individual planning applications and appeals where the needs and interests of the Welsh language may be a material consideration decisions must, as with all other planning applications, be based on planning grounds only and be reasonable. Adopted development plan policies are planning grounds, including those which have taken the needs and interests of the Welsh language into account. Planning applications should not be subject to Welsh language impact assessment, as this would		

Page	202
. age	

Table 8: Com	pliance with Technical Advice Notes (TAN)	
TAN	Description	Assessment of the Proposed Development
	duplicate LDP site selection processes where LDP objectives indicated the need for such an assessment.'	
TAN 24: The Historic Environment (2017)	Tan 24 provides planning advise and on how the planning system considers the historic environment during development plan preparation and decision making.	An assessment of potential effects on heritage assets and the settings has been provided within ES Chapter 10 Historic Environment (Document 5.10). The location of known and potential archaeological remains has been identified through
	TAN 24 provides guidance on the application of Chapter 6 of PPW and specifically the treatment of the following relevant aspects of the historic environment:	both desk study, and field investigations, including trial trenching. The assessment concludes that there would be no direct effects on Scheduled Monuments or listed buildings, though there would be some significant effects on the settings of a small number of such assets.
	archaeological remains; The Archaeological Strategy (Docu	The Archaeological Strategy (Document 7.8) details mitigation measures to reduce effects on any archaeological remains
	 conservation areas; and 	discovered. Provision would be made for the identification and
A sets out the approach to dealing with Strip, Map and Sample within are	recording of archaeological remains before and during the construction programme. This would include a programme of	
	archaeological remains within the development management process. This stresses the	Strip, Map and Sample within areas of identified archaeological interest and watching briefs elsewhere.

Table 8: Compliance with Technical Advice Notes (TAN)		
TAN	Description	Assessment of the Proposed Development
	the local planning authority and the need for assessment where archaeological remains are known to exist. It is stated that the assessment would be likely to involve a desk study, but can also involve an archaeological evaluation. The reports on such investigations are to form part of a planning application and applicants should show how they have modified development proposals to minimise effects. Within this context, it is stated that there should be a presumption in favour of the physical preservation of nationally important archaeological remains. For archaeological remains of less than national importance which may be affected, the case for preservation is to be weighed against the benefits of and need for the Proposed Development. It is important that those archaeological remains are not needlessly destroyed, but that opportunities to record archaeological evidence are taken.	

6.5 SUMMARY

- 6.5.1 As a nationally important infrastructure project, the primary policy requirements in relation to the Proposed Development are those set out in the National Policy Statements EN-1 and EN-5. However consideration has also been given the policies set by Welsh government in the form of PPW, WSP and the relevant TANs.
- 6.5.2 Where guidance is provided in relation to how assessments should be undertaken, it has been confirmed that the Proposed Development has been assessed in line with the Welsh national policy. Much of the focus of PPW is in relation to sustainable development. The Proposed Development is deemed to be the best option to provide the required reinforcement to the transmission network, whist achieving an appropriate balance between National Grid's technical, economical, amenity and environmental objectives. The Proposed Development is also consistent with the majority of Welsh national policy.
- 6.5.3 Welsh Government's forthcoming revision of PPW includes a stated preference for new power lines to be laid underground where possible. However, the policy also acknowledges that this preference should be balanced against costs. The Proposed Development has taken into consideration this requirement through the new electricity transmission line being laid under the Menai Strait for approximately 4 km, to protect the iconic views of the Menai Strait and the area's designation as an AONB. The proposed use of an OHL outside of this area was deemed the best option to achieve an appropriate balance between National Grid's technical, economical, amenity and environmental objectives.

7 Local Planning Policy

7.1 INTRODUCTION

- 7.1.1 Local planning policies are set out within local development plans; these are plans for an area which have been taken into statutory adoption and provide a framework against which to determine applications for planning permission at a local level.
- 7.1.2 Development plans can take the form of a number of different documents from Unitary Development Plans (UDP) to saved policies within County Structure Plans. In the case of Anglesey and Gwynedd, local planning policy is set out in the Joint Local Development Plan (JLDP) which was adopted in July 2017.
- 7.1.3 As with Welsh national planning policy, which was discussed in the previous chapter, it is not necessary for a nationally important infrastructure project to accord with local planning policy. However this chapter of the Planning Statement provides an assessment of the Proposed Development in the context of local planning policies considered to be of relevance.

7.2 CONTEXT

7.2.1 EN-1 Paragraph 4.1.5 states:

'Other matters that the Infrastructure Planning Commission (IPC) may consider important and relevant to its decision-making may include Development Plan Documents or other documents in the Local Development Framework. In the event of a conflict between these or any other documents and an NPS, the NPS prevails for the purposes of the IPC decision making given the national significance of the infrastructure'.

7.2.2 The Proposed Development has therefore been developed and assessed with reference to key local policies, strategies and plans, in conjunction with national and regional policies, strategies and plans.

7.3 LOCAL POLICY

7.3.1 The Planning and Compulsory Act 2004 makes it a requirement for local planning authorities in Wales to prepare a Local Development Plan (the Plan) for their areas. The Isle of Anglesey County Council and Gwynedd Council

have prepared a single plan for Anglesey and Gwynedd Planning Authority areas.

- 7.3.2 The Joint Local Development Plan (JLDP) for Anglesey and Gwynedd was adopted in July 2017 and is the planning policy document for Anglesey and Gwynedd (excluding the area within the Snowdonia National Park Planning Authority). It contains the policies and land use allocations that will facilitate the Plan area's development up to 2026. The Plan will have a significant influence on development of the whole area and individual communities.
- 7.3.3 Anglesey and Gwynedd have the joint vision by 2026 to have a strong and varied economy by taking advantage of the key and high value sectors, such as the nuclear and alternative renewable energy sectors, as stated in the JLDP.
- 7.3.4 Anglesey Energy Island Programme is detailed in the JLDP as an important economic opportunity for the area, as its states:

'Anglesey Energy Island Programme – a collaborative approach between a number of stakeholders in the public and private sectors (including the UK Government and the Welsh Government) to place Anglesey at the forefront in terms of energy research and development, generating and servicing, which will be a means of influencing major infrastructure projects bringing economic and social benefits to the Island and north west Wales.'

7.3.5 Wylfa Newydd Power Station is a significant infrastructure project. New Nuclear Build at Wylfa Supplementary Planning Guidance (Wylfa NNB SPG) provides supplementary advice on important local direct or indirect matters (Ref.19). As the Proposed Development is required to connect this new power generation to the transmission network, Wylfa NNB SPG has been considered relevant to this Proposed Development.

7.4 CONSIDERATION OF LOCAL PLANNING POLICY

- 7.4.1 An assessment of the Proposed Development against the JLDP policies considered to be of relevance has been undertaken and is provided in Table 9.
- 7.4.2 An assessment of the Proposed Development against Wylfa NNB SPG has been undertaken and is provided in Table 10.

Table 9: JLI	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
Strategic Ob	jectives				
SO1	Safeguard and strengthen the Welsh language and culture and promote its use as an essential part of community life.	Document 5.26	A WLIA (Document 5.26) has been undertaken to consider potential effects in relation to the Welsh language. Effects during maintenance and decommissioning would be expected to be of a similar type but more likely smaller scale and duration, to those identified for construction. The WLIA concludes a Negligible (not significant) effect on the Welsh Language, other than for the temporary effects of in-migration of workers, which is considered to have a minor effect. Mitigation measures are identified to address this minor effect.		
SO5	Ensure that development in the Plan area supports the principles of sustainable development and creates sustainable communities whilst respecting the varied role and character of the centres, villages and countryside.	Documents 5.7-5.18	To ensure sustainable development National Grid has assessed the environmental, cultural and socio-economic impacts arising as a result of the Proposed Development (Documents 5.7 – 5.18).		

Table 9: JI	able 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
SO6	 Minimize, adapt and mitigate the impacts of climate change. This will be achieved by: Ensuring that highly vulnerable development is directed away from areas of flood risk wherever possible; Reduce the need for energy and other resources in developments; Promote renewable and low carbon energy production within the area; Make use of suitable previously developed land and unoccupied buildings or ones that are not used to their full capacity, where available; 		 FCAs are provided as Appendices 12.1 – 4 to the ES (Documents 5.12.2.1 – 4). These FCAs address the issue of resilience to flooding and include climate change scenarios in modelling potential flood risk and mitigation proposed. National Grid has sought to avoid, as far as possible, areas at risk of flooding. Pentir and Wylfa Substations are located outside flood risk areas. Essential energy infrastructure which has to be located in flood risk areas is designed to remain operational when floods occur. In addressing flood risk, section 9 of ES Chapter 12, Water Quality, Resources and Flood Risk (Document 5.12) details relevant mitigation measures; these include: new vulnerable infrastructure are to be located in areas of low flood risk; minimise the number of watercourse crossing by temporary access tracks; appropriate water crossing design; raising flood sensitive infrastructure; and 	

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	Manage, protect and enhance		discharge Permit Compliance.	
	the quality and quantity of the water.		Construction approaches would adhere to Guidance for Pollution Prevention (2017) GPPs: Works in, near or liable to affect watercourses and would be subject to control via an NRW Flood Risk Activities Permit Consent for Main Rivers or a LLFA Flood Defence Consent For Ordinary Watercourses.	
			The FCAs (Documents 5.12.2.1 – 4) have shown that in all instances where flood risk receptors may be impacted by an associated flood hazard, there is either no significant effect, or else it has been possible to specify necessary mitigation. Incorporation of these measures in the design and construction stages would be sufficient to mitigate any potential increase flood risk due to the Proposed Development.	
			ES Chapter 12, Water Quality, Resources and Flood Risk (Document 5.12) also identifies potential effects on water quality, which are considered not to be significant, as a result of the application of mitigation measures as set out in the CEMP (Document 7.4)	

Table 9: JLI	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Greenhouse gases would be emitted during the construction phase, through the consumption of materials and energy, and through vehicular emissions; however there would be very little opportunity to substantially reduce these emissions. The potential for greenhouse gas emissions during the operation of the Proposed Development would be limited vehicle emissions and any materials used during maintenance visits etc. The Project Need Case (Document 7.1) confirms that the Proposed Development is necessary to connect Wylfa Newydd Power Station. NPS EN-1 identifies nuclear power generation as a key part of the low carbon energy mix.	
			National Grid has planned and designed the operation of the Proposed Development over its lifespan (approximately 80 years), and taken into account the impacts of climate change over this period as part of the design process.	
			The resilience of pylon design to other aspects of climate change, such as wind and storms and higher temperatures is addressed in National Grid's published Climate Adaptation Report (Ref.17).	

Table 9: JI	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
SO9	Support and capitalise on the development of Wylfa Newydd Project and associated development to maximise socio- economic opportunities for local business and sustainable	Documents 5.1 and 5.2	The Proposed Development supports the development of Wylfa Newydd Power Station proposals through developing a new 400 kV connection between the existing 400 kV Wylfa Substation on Anglesey and Pentir Substation in Gwynedd. This would facilitate the export of power from the proposed Wylfa Newydd Power Station.		
	employment opportunities for local people, including facilitating a suitable network for Wylfa Newydd Project-related associated development sites while ensuring that adverse effects of the Wylfa Newydd Project on the local communities are appropriately		The socio-economic assessment, provided in ES Chapter 17 Socio-Economics (Document 5.17) considers amenity effects on local communities. It concludes that of the 50 communities assessed at the construction phase, 13 would have minor effects and the other 37 would have negligible effects. Of the 49 communities that could be affected during operation, 10 would have a minor effect and the other 39 would have a negligible effect.		
	avoided, or mitigated and where appropriate legacy benefits are provided.		The chapter also considers opportunities for businesses and employment.		
			There would be positive effects on local and national employment during the construction of the Proposed		

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Development. It is expected that, 10% of jobs would be filled by local people and jobs would be created indirectly through the increase in local trade. However, this beneficial effect would not be significant.	
			Section 10 of Document 5.17 and Chapter 20, Inter-Project Effects (Document 5.20) reports on inter-project cumulative effects, including the proposed Wylfa Newydd Power Station.	
SO12	Diversify the Plan area's rural economy, building on opportunities, offering local employment opportunities with good quality jobs that are suitable for the local community and respects environmental interests.	Document 5.17	The generation of jobs during the construction of the Proposed Development is described in section 9.10 of ES Chapter 17, Socio-Economics (Document 5.17). The peak workforce is expected to be in the region of 450 workers per month. On average approximately 228 workers per month will be required on the Proposed Development throughout the construction period. There would be positive effects on local and national employment during the construction of the Proposed Development. It is expected that, 10% of jobs would be filled by local people and jobs would be created indirectly through the increase in local trade. However, this beneficial effect would not be significant.	

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
SO17	Protect, enhance and manage the natural and heritage assets of the Plan area, including its natural resources, wildlife habitats, and its	5.10, 5.23, 7.4, 7.8 and 7.13	Chapter 9 Ecology and Nature Conservation (Document 5.9) considers impacts on wildlife habitats and concludes that, with the exception of a moderate effect on the Gylched Covert CWS, all effects are minor or negligible.		
	landscape character and historic environment.		Effects on Landscape Character are considered in ES Chapter 7 Landscape Assessment (Document 5.7). although there would be some adverse effects on landscape character, significant negative effects have been avoided where possible through the design of the Proposed Development so it runs next to the existing overhead line as much as possible, by directing the overhead line so as to avoid vegetation loss wherever possible, avoiding important landscape features such as rocky outcrops and putting the connection in a tunnel to avoid crossing the Menai with an overhead line		
		An assessment of potential effects on heritage assets and their settings has been provided within ES Chapter 10 Historic Environment (Document 5.10).			
			Where possible, the layout of the Proposed Development has been designed to reduce the loss of or disturbance to		

Page	214
i ayu	217

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			archaeological assets, and there would be no direct effects on designated assets	
			Provision would be made for the identification and recording of archaeological remains before and during construction. This would include a programme of Strip, Map and Sample within areas of identified archaeological interest and watching briefs elsewhere. The arrangements for these measures are described in the Archaeological Strategy (Document 7.8).	
			The assessment on the historic environment has identified during construction and operation some significant effects on the settings of a small number of archaeological receptors, these are summarised in Section 11 of ES Chapter 10 Historic Environment (Document 5.10).One Historic Landscape Character Area (HLCA) within the LOHI would be most affected by the presence of the Proposed Development and this is the Arfon Plateau (HLCA23). The conclusion of the ASIDOHL is that the Proposed Development would not result in a significant effect on the LOHI.	
			Loss of trees would be compensated through the replanting of areas and the implementation of the Enhancement Strategy	

Table 9: JL	DP for Anglesey and Gwynedd Plan	ning Policies		
Policies Requirement Location in Application Documents Assessment of the Proposed Development				
			(Document 7.13). The Enhancement Strategy outlines measures and opportunities to enhance biodiversity interests.	
			Soil removed would be stored near to its original location within the working areas so that it can be reinstated in a similar location within the same plot, reducing potential effects on this natural resource.	
S018	Encourage waste management based on the hierarchy of reduce, re-use, recovery and safe disposal.	Document 7.11	Sustainable waste management through the implementation of the waste hierarchy principles has been described throughout the OWMP (Document 7.11), with a commitment to move up the hierarchy, beginning with a reduction in the	

S018	Encourage waste management based on the hierarchy of reduce, re-use, recovery and safe disposal.	Document 7.11	Sustainable waste management through the implementation of the waste hierarchy principles has been described throughout the OWMP (Document 7.11), with a commitment to move up the hierarchy, beginning with a reduction in the resources used and subsequent reduction in the waste produced; followed by reuse, recycling and only when all other options have been discounted, disposal to a licensed
			waste facility.
Welsh Langu	Welsh Language		
Strategic Policy PS 1	The Councils will promote and support the use of the Welsh	Document 5.26.	A WLIA (Document 5.26) has been undertaken to consider effects on the Welsh language. Potential effects on the Welsh language and culture during the construction and

Table 9: JLD	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	language in communities and the Plan area.		operational phases of the Proposed Development have been assessed. Effects during maintenance and decommissioning would be expected to be similar to those for construction; however they would be likely to be smaller scale and more localised. The WLIA concludes a Negligible (not significant) effect on the Welsh Language, other than for the temporary effects of in-migration of workers, which is considered to have a minor effect. Mitigation measures are identified to address this minor effect.	
Proposals for	r Nationally Significant Infrastructure P	Projects		
Strategic Policy PS 8	The ES should demonstrate how the development has considered alternative options, and undertaken a comprehensive assessment of the proposals environmental, social, linguistic and cultural, transport and economic impacts during the construction, operation and decommissioning phases, as	Volume 5 (Documents 5.1 – 5.30), Volume 6 (Documents 6.1 – 6.2), and Document 7.17 .	ES Chapter 2, Alternatives, Project History and Non-Statutory Consultation (Document 5.2) summarises the design process and discusses the main alternatives considered at each stage and the reasons for the key decisions. Further details are provided within the Design Report (Document 7.17). A comprehensive assessment has been provided on the proposal's environmental (landscape, built, historic and natural), social (including health and amenity) and economic impacts (positive, negative and cumulative) during the	

Table 9: JL	DP for Anglesey and Gwynedd Plan	ning Policies	
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development
	well as measures to avoid, reduce, alleviate and/or off-set the harm done. Flood protection measures and managing flood risk should be clearly outlined. The development should contribute to a positive outcome for local communities, visitors and the environment. The council may require appropriate packages of community benefits to be provided by the developer to the hosting community.		construction, operation (including maintenance) and decommissioning phases as outlined within the ES (Volume 5). Consultation with community groups and stakeholders has been ongoing throughout the design and evolution of the Proposed Development. An account of the pre-application consultation undertaken including a summary of the relevant responses received, and how these have been taken into account is provided in the Consultation Report (Volume 6). Where mitigation measures are required to avoid, reduce, alleviate and/or off-set the impacts arising, these are detailed in section 9 of each of the ES technical chapters (Documents 5.7 – 5.18) and summarised in the Schedule of Mitigation (Document 5.28). As required by Strategic Policy PS 8, further to Strategic Policy 5 and 6 flood preventative measures and management of flood risk are outlined in ES Chapter 11, Geology, Hydrogeology and Ground Conditions (Document 5.11). More detail on flood mitigation measures is described under Strategic Policy 6 in relation to Climate Change.

Table 9: JLD	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
Wylfa Newyd	d and Related Development				
Policy PS 9	 Planning guidance should shape the approach to the development of the nuclear power station. Proposals should: make a positive contribution to transportation policy objectives; be appropriately serviced by transport infrastructure including public transport and shall not have any adverse impacts on local communities and tourism and this shall be demonstrated in the transport assessment; form a robust construction workers accommodation strategy; 	Volume 5 (Documents 5.1 – 5.30), Documents 7.5, 7.13 and 7.17.	The Proposed Development supports the development of Wylfa Newydd by facilitating the export of power from the proposed nuclear power station. There has been ongoing engagement with the local highways authorities and Welsh Government with respect to reducing impacts wherever possible, including through the selection of appropriate construction traffic routes. The potential effects as a result of worker accommodation are considered in ES chapter 17 Socio-Economics (Document 5.17) and found not to be significant. A code of conduct is committed to in the CEMP (Document 7.4) to help manage effects related to social cohesion and community safety. It has not been necessary to provide community infrastructure facilities for construction workers, as the number likely to relocate to the area are considered to be very low. There would be positive effects on local and national employment during the construction of the Proposed Development. It is expected that, 10% of jobs would be filled		

Table 9: JI	able 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	 include measures for promoting social cohesion and community safety; contain review mechanisms to review the adequacy of mitigation or compensation measures and to make adjustments as necessary; 		by local people and jobs would be created indirectly through the increase in local trade. The ES (Volume 5) demonstrates that economic, social and environmental issues have been considered throughout the evolution of the Proposed Development, with mitigation measures proposed to reduce negative environmental, social and economic effects where possible. Chapter 20 Inter Project Cumulative Effects (Document 5.20)	
	 provide community infrastructure facilities for construction workers; and maximise employment, education, training and recruitment strategies. Early or preparatory works for the development of the nuclear power station shall demonstrate that they are necessary to ensure the timely delivery of the Wylfa Newydd Project or are 		considers the cumulative effects from the Proposed Development and the development of Wylfa Newydd Power Station. A small number of cumulative effects have been identified where the cumulative significance is higher than the significance of the effects considered separately. These relate to landscape character, visual effects and effects on the setting of a Scheduled Monument, all of which occur in the west of Anglesey and relate to cumulative effects with the Wylfa Newydd Power Station, Wylfa Nuclear Power Station Decommissioning, Rhyd-y-Groes Re-power and Llanbadrig Solar Farm.	

Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development
	 designed to provide mitigation for the effects of the construction or operation of the Wylfa Newydd Project. Specific reference has been made to ensure ecological, visual and landscape impacts on the local and wider area, as well as on cultural and historic aspects of the landscape should be avoided, minimised, mitigated or compensated for. Appropriate packages of community benefits provided by the developer will be sought to offset and compensate the community hosting the nationally 		

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
Policy ADN3	Proposals for renewable and low carbon energy technologies will be permitted provided the proposal does not have a significant unacceptable effect on landscape character, visual amenities, heritage assets and natural resources. Where appropriate, existing buildings or previously developed land should be used.	Volume 5 (Documents 5.1 – 5.30), Documents 7.4 and 7.13.	The Proposed Development would not include any power generation, though it would facilitate the power generation of Wylfa Newydd Power Station, The Proposed Development would have some significant effects on visual receptors as detailed in ES Chapter 8, Visual Assessment (Document 5.8). A number of communities have been identified that would have either a moderate or locally moderate adverse visual effects during the construction and operation stages. There would also be some effects on landscape character, as reported in ES Chapter 7 Landscape Assessment (Document 5.7). In terms of heritage assets, there are no direct effects on protected assets, although Chapter 10 Historic Environment (Document 5.10) concludes that there would be some significant effects on the setting of a small number of assets. The proposed route runs parallel to an existing OHL, optimising the use of land already impacted by the presence of transmission lines. Where possible the proposed route		

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			would be synchronised with the existing line so as to further reduce landscape and visual effects of the connection. The presence of the existing 400 kV OHL means the proposed 400 kV would not be an uncharacteristic visual element within the landscape. A number of areas of planting have been proposed to mitigate effects of vegetation loss and integrate the Proposed Development into the landscape. The proposed route diverts from the existing to allow the route to run under the Anglesey AONB and the Menai Strait to protect iconic views.		
			Loss of natural resources would be compensated through the replanting of areas and the implementation of the Enhancement Strategy (Document 7.13). The Enhancement Strategy outlines measures and opportunities to enhance biodiversity interests.		
			Soil removed would be stored near to its original location within the working areas so that it can be reinstated in a similar location within the same plot.		
			Although some significant effects have been identified, as set out above, it is confirmed that the Proposed Development is		

Table 9: JLD	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			compliant with national policy as set out in NPS EN-1 and EN5, and as such it is considered that none of the effects identified are unacceptable.		
Sustainable [Development				
PCYFF1, Strategic Policy PS 5 and PS 8,	PCYFF1 identifies Development Boundaries outside of which development will be resisted 'unless it is in accordance withnational planning policies or that the proposal demonstrates that its location in the countryside is essential'. PS 5 Support will be given to proposals that support sustainable development. Proposals should address climate change, reuse of previously developed land, community balance, Welsh language, the built and historic	Documents 5.7, 5.9, 5.10, 5.11, 5.12, 5.12.2.1 – 4, 5.17, 5.18, 5.26, 7.4 and 7.11.	Due to the nature of the Proposed Development, it is required to be developed outside of development boundaries, predominantly on agricultural land. The assessment presented in Section 5 of this report concludes that the Proposed Development is compliant with national policy as set out in EN-1 and EN-5. Strategic Policy PS5 requires protection/preservation of the following: <u>Sustainable development</u> To ensure sustainable development National Grid has assessed the environmental, cultural and socio-economic impacts arising as a result of the Proposed Development (Documents 5.7 - 5.18) and addressed the factors set out in policy PS5.		

Table 9: JL	able 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	environment, the natural		Climate change		
	environment, landscapes and biodiversity, local resources, energy conservation, avoidance of pollution, reducing effects on water resources and managing flood risk.		The resilience of pylon design to other aspects of climate change, such as wind and storms and higher temperatures is addressed in National Grid's published Climate Adaptation Report (Ref.17).		
			FCAs are provided as Appendices 12.1 – 4 to the ES (Documents 5.12.2.1 - 4). These FCAs address the issue of resilience to flooding and include climate change scenarios in modelling potential flood risk and mitigation proposed.		
			Greenhouse gases would be emitted during the construction phase, through the consumption of materials and energy, and through vehicular emissions; however there would be very little opportunity to substantially reduce these emissions. The potential for greenhouse gas emissions during the operation of the Proposed Development would be limited vehicle emissions and any materials used during maintenance visits etc.		
			The Project Need Case (Document 7.1) confirms that the Proposed Development is necessary to connect Wylfa		

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Newydd Power Station. NPS EN-1 identifies nuclear power generation as a key part of the low carbon energy mix. <u>Community balance</u>	
			A full assessment of effects on businesses, communities, tourist attractions and tourists would be impacted upon is detailed in ES Chapter 17, Socio-Economics (Document 5.17). The assessment concluded there would be no significant effects on communities.	
			Welsh language	
			A WLIA (Document 5.26) has been undertaken to consider linguistic issues and to help consider effects on the use of the Welsh Language. The assessment concludes that the effects of the Proposed Development on the Welsh Language would be largely negligible. One minor effect has been identified as a result of in-migration, however mitigation measures have been identified to address this effect.	
			Historic Environment	
			Provision would be made for the identification and recording of archaeological remains before and during the construction	

Table 9: JLD	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			programme. This would include a programme of Strip, Map and Sample within areas of identified archaeological interest and watching briefs elsewhere. The arrangements for these measures are described in Document 7.10.	
			The assessment on the historic environment has identified during construction and operation some significant effects on archaeological receptors, these are summarised in Section 11 of ES Chapter 10 Historic Environment (Document 5.10).	
			Landscapes	
			The Proposed Development avoids areas designated for their landscape quality (Anglesey AONB) through an underground cable tunnelled underneath the Menai Strait.	
			ES Chapter 7, Landscape Assessment (Document 5.7) includes an assessment of effects during construction, operation, maintenance and decommissioning of the Proposed Development.	
			During construction there would be significant effects on tree cover, however, by operation year 15 there would be no	

Table 9: JLD	able 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			significant effects on tree cover due to the maturation of replacement/mitigation planting.	
			The assessment on landscape receptors has identified some significant effects on landscape character during construction and operation; these are summarised in Section 11 of ES Chapter 7 Landscape (Document 5.7).	
			<u>Biodiversity</u>	
			The Habitat Regulations Assessment Report (Document 5.23) and ES Chapter 9 Ecology and Nature Conservation (Document 5.9) supports the application for a DCO. The potential for significant effects either alone or in combination with other relevant plans or projects on any European site of nature conservation importance has been assessed.	
			It is considered that the Proposed Development would not have any significant adverse effects on any European Site of nature conservation importance.	
			The evolution of the Proposed Development has sought to demonstrate high quality design which fully considers the	

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			natural, historic and built environment, integrating into the surrounding environment.	
			Local resources	
			Loss of natural resources would be compensated through the replanting of areas and the implementation of the Enhancement Strategy (Document 7.13). The Enhancement Strategy outlines measures and opportunities to enhance biodiversity interests.	
			Soil removed would be stored near to its original location within the working areas so that it can be reinstated in a similar location within the same plot.	
			Avoidance of pollution	
			National Grid has been in correspondence with the relevant pollution control authorities and other relevant bodies, as detailed in the Consultation Report (Volume 6) and ES Chapter 5 EIA Consultation (Document 5.5).	
			Pollution prevention measures are detailed in the CEMP (Document 7.4). Control and Management Measures (CMM) include the use of hydrocarbon interceptors, packaged water	

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			treatment works for dewatering arising's and provision for water treatment measures for treating suspended solids (should particle sizes be too small for gravity settlement to be effective).	
			Potential for artificial light pollution impacting upon human and ecological receptors has been addressed, and mitigated for within the CEMP (Document 7.4). For example, lighting would only be used when required during core working hours, unless otherwise stated and would comprise of lighting of work areas and access and egress with low level directional lighting.	
			Construction approaches would adhere to Guidance for Pollution Prevention (2017) GPPs: Works in, near or liable to affect watercourses and would be subject to control via an NRW Flood Risk Activities Permit Consent for Main Rivers or a LLFA Flood Defence Consent For Ordinary Watercourses.	
			Guidance for Pollution Prevention (GPPs) would be used, as would the SuDS Manual (Ref.16) to inform pollution prevention elements of detailed drainage strategies.	

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Reducing effects on water resources and managing flood risk	
			During construction of the Proposed Development it is considered that following the adoption of mitigation measure (section 9 of ES Chapter 12, Water Quality, Resources and Flood Risk (Document 5.12)) and the CEMP (Document 7.4), any adverse impacts on the hydrological environment would be minor to negligible (not significant).	
			FCAs are provided as Appendices 12.1 – 4 to the ES (Documents 5.12.2.1 - 4). These FCAs address the issue of resilience to flooding and include climate change scenarios in modelling potential flood risk and mitigation proposed.	
			The resilience of pylon design to other aspects of climate change, such as wind and storms and higher temperatures is addressed in National Grid's published Climate Adaptation Report (Ref.17).	
			National Grid has sought to avoid, as far as possible, areas at risk of flooding. Pentir and Wylfa Substations are located outside flood risk areas. In addressing flood risk, section 9 of ES Chapter 12, Water Quality, Resources and Flood Risk	

Page	231
i ugo	201

Table 9: JL	able 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			(Document 5.12) details relevant mitigation measures; these include:	
			 new vulnerable infrastructure are to be located in areas of low flood risk; 	
			 minimise the number of watercourse crossing by temporary access tracks; 	
			 appropriate water crossing design; 	
			effective drainage design;	
			 raising flood sensitive infrastructure; and 	
			discharge Permit Compliance.	
			The FCAs (Documents 5.12.2.1 - 4) have shown that in all instances where flood risk receptors may be impacted by an associated flood hazard, it has been possible to specify necessary mitigation. Incorporation of these measures in the design and construction stages would be sufficient to mitigate any potential increase flood risk due to the Proposed Development.	
			Water resources	

Table 9: JLD	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			During construction of the Proposed Development it is considered that following the adoption of mitigation measure (section 9 of ES Chapter 12, Water Quality, Resources and Flood Risk (Document 5.12)) and the CEMP (Document 7.4), any adverse impacts on the hydrological environment would be minor to negligible (not significant).		
Infrastructure	e and Developer Contributions				
Policy PS 2, ISA1	'The Council expect new development to ensure sufficient provision of essential infrastructure (either on-site or to service the site) is either already available or provided in a timely manner to make the proposal acceptable, by means of a planning condition or obligation.' Proposals will only be granted where adequate infrastructure capacity exists or where it is	Documents 5.2, 5.17, 7.1, and 7.17 .	This policy does not directly relate to the proposed development, as it is directed at development requiring essential infrastructure, such as residential development. The Proposed Development is, in itself, nationally significant infrastructure with the Proposed Development being categorized as a NSIP. Space for access bell mouths have been included within the Order Limits. Measure NV34 of the CEMP (Document 7.4) requires that 'a low voltage power supply will be provided to the tunnel construction compounds to power tunneling activities and generators will only be used as back up or in the case of an emergency'.		

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	delivered in a timely manner. Where proposals generate a directly related need for new or improved infrastructure and this is not provided by a service or infrastructure company, this must be funded by the proposal.		As stated above, the Proposed Development is an NSIP, required to support the Wylfa Newydd development. The need for the Proposed Development has been provided in the Project Need Case (Document 7.1). The Proposed Development supports the development of Wylfa Newydd proposals through developing a new 400 kV connection. Under Section 9 of the Electricity Act 1989 (Ref 7) National Grid is required to develop and maintain an efficient, coordinated and economical system of electricity transmission and to facilitate competition in the supply and generation of electricity.		
Developmer	nt Criteria				
Policy PCYFF2	Proposal should demonstrate its compliance with relevant policies in the Plan and National planning policy and guidance. Proposals should make the most efficient use of land and provide amenity space. Include provision for storing,	Documents 5.11 - 5.17, 5.25, 5.27, 7.4 and 7.11.	Section 5 of this planning statement demonstrated the proposal's compliance with relevant policies at national level. There is sufficient provision for the storage, recycling and waste management during construction within the various construction compounds. There is no need for such provision during operation.		

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	recycling, waste management and where applicable, appropriate management and eradication of invasive species. Planning permission will be refused where the proposal 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. Refusal would also pertain to unacceptable impacts on land allocated for other development/uses.		Sustainable waste management through the implementation of the waste hierarchy principles has been described throughout the OWMP (Document 7.11), with a commitment to move up the hierarchy, beginning with a reduction in the resources used and subsequent reduction in the waste produced; followed by reuse, recycling and only when all other options have been discounted, disposal to a licensed waste facility. Issues related to invasive species are addressed in ES Chapter 9 Ecology and Nature Conservation (Document 5.9) and also in the Biodiversity Mitigation Strategy (Document 7.7), which includes an invasive non-native species management plan (INNSMP) National Grid has carried out an assessment of those aspects of the Proposed Development which may have the potential for adverse impacts on health. Those assessments are presented in the following documents: • Chapter 11, Geology, Hydrogeology and Ground		

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Chapter 13, Traffic and Transport (Document 5.13);	
			Chapter 14, Air Quality (Document 5.14);	
			Chapter 15, Construction Noise (Document 5.15);	
			 Chapter 16, Operational Noise and Vibration (Document 5.16); and 	
			Chapter 17, Socio-Economics (Document 5.17).	
			A separate Wellbeing Report (WBR) (Document 5.27) has been prepared. The WBR does not present any primary assessment; rather, it presents the findings and conclusions from the ES and other DCO documents in relation to wellbeing. In this context, the different aspects of wellbeing are defined by using the potential effects identified by stakeholders at a workshop and the Welsh Wellbeing Goals, these goals are detailed in further in the WBR. An overall summary of the potential effect of the Proposed Development against the well-being goals is also provided. The assessment concluded there would be no significant adverse effects on wellbeing during the construction and operational phases of the Proposed Development. The Proposed	

Table 9: JLC	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Development complies with EMF exposure guidelines as detailed in the EMF Report (Document 5.25).	
			Assessments have concluded there would be no significant adverse impact on health (and quality of life) arising from the Proposed Development.	
			A comprehensive assessment of potential amenity impacts is documented in the ES Chapter 17, Socio-Economics (Document 5.17). The full list of receptors considered in the amenity assessment is presented in Appendix 17.1 (Document 5.17.2.1). The receptor are summarised as follows:	
			 Community settlements - Of the 50 communities assessed, 13 would have minor effects and the other 37 would have negligible effects; 	
			• Tourist attractions and recreational resources - There is not likely to be significant disruption to the amenity of tourist attractions and recreational resources located within 10 km of the Proposed Development; of the 37 attractions	

Table 9: JLD	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
			considered, seven would have a minor effect and the rest would be negligible;		
			 PRoW, including footpaths, bridleways and cycling routes - following the implementation of the Public Rights of Way Management Plan (Document 7.6), effects on public rights of ways and cycle routes, would not be significant; and 		
			 Commercial receptors (tourism and non-tourism businesses) - Of the 55 tourism related businesses within the study area only two would be affected significantly; 11 would have a minor effect and 42 would have a negligible effect. Of the non-tourism related businesses the majority considered would have either a negligible effect on them, or no effect at all; only three were found to have a minor effect. 		
Good Design	Good Design				
Policy PCYFF3, PCYFF4	PCYFF3 - Proposals will be expected to demonstrate high quality design which fully takes into account the natural, historic and	Documents 5.2, 7.16, 7.17 and 7.19.	ES Chapter 2, Alternatives, Project History and Non-Statutory Consultation (Document 5.2) summarises the design process and discusses the main alternatives considered at each stage and the reasons for the key decisions. Full details are within		

Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development
	 built environmental context and contributes to the creation of attractive, sustainable places. Proposals should integrate into their surroundings, and present a well-designed and executed landscape scheme. The proposal should demonstrate the layout and design of the development respects the context of the site and its place within the local landscape. PCYFF4 - 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. 		 the Design Report (Document 7.17). National Grid has designed the Proposed Development in an iterative manner taking into account it's Statutory Obligations, technical requirements and consultation feedback since project inception. The Proposed Development accords with good design principles as demonstrated in the Design and Access Statement (Document 7.16), the Design Guide (Document 7.19) and Design Report (Document 7.17). Following consultation feedback the preferred route was the favoured route corridor option as, amongst other factors, it was the shortest, most direct route and allowed the existing OHL to be followed. The evolution of the Proposed Development has sought to demonstrate high quality design which fully considers the natural, historic and built environment, integrating into the surrounding environment.

Climate Change

Table 9: JLD	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
Strategic Policy PS 6, PCYFF5	In order to alleviate the effects of climate change proposals will only be permitted where development demonstrate they have fully taken account of and responded to criteria, such as the energy hierarchy. This includes the development of low and zero carbon energy techniques wherever practical. Proposals will only be permitted where it is demonstrated with appropriate evidence, the proposal has conformed to the following criteria: • Implementation of sustainable water management measures; • Located away from flood risk areas, and aim to reduce the	Documents 5.12, 5.12.2.1 - 4 and 7.4.	Greenhouse gases would be emitted during the construction phase, through the consumption of materials and energy, and through vehicular emissions; however there would be very little opportunity to substantially reduce these emissions. The potential for greenhouse gas emissions during the operation of the Proposed Development would be limited vehicle emissions and any materials used during maintenance visits etc. The Project Need Case (Document 7.1) confirms that the Proposed Development is necessary to connect Wylfa Newydd Power Station. NPS EN-1 identifies nuclear power generation as a key part of the low carbon energy mix. National Grid has planned and designed the operation of the Proposed Development over its lifespan (approximately 80 years), and taken into account the impacts of climate change over this period as part of the design process. FCAs are provided as Appendices 12.1 – 4 to the ES (Documents 5.12.2.1 - 4). These FCAs address the issue of		

Table 9: JLDP for Anglesey and Gwynedd Planning Policies						
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development			
	overall risk of flooding within the Plan area and areas outside it,		resilience to flooding and include climate change scenarios in modelling potential flood risk and mitigation proposed.			
	taking account of a 100 years and 75 years of flood risk;		The resilience of pylon design to other aspects of climate change, such as wind and storms and higher temperatures is			
	• Be able to withstand the effects of climate change as much as	addressed in National Grid's published Climate A Report (Ref.17).	addressed in National Grid's published Climate Adaptation Report (Ref.17).			
	possible because of its high standards of sustainable design, location and layout and sustainable building methods;		National Grid has sought to avoid, as far as possible, areas at risk of flooding. Pentir and Wylfa Substations are located outside flood risk areas. In addressing flood risk, section 9 of ES Chapter 12, Water Quality, Resources and Flood Risk			
	 Safeguard the best and most versatile agricultural land 		(Document 5.12) details relevant mitigation measures; these include:			
	 Ensure that the ability of landscapes, environments and species to adapt to the harmful effects of climate change is not affected, and that compensatory environments are provided if necessary; and 		 new vulnerable infrastructure are to be located in areas of low flood risk; 			
			 minimise the number of watercourse crossing by temporary access tracks; 			
			appropriate water crossing design;effective drainage design;			

Page 241

Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development
	 Aim for the highest possible standard in terms of water efficiency and implement other measure to withstand drought, maintain the flow of water and maintain or improve the quality of water, including sustainable drainage systems. The proposal needs to address climate change challenges and demonstrate the proposal has fully taken into account the energy hierarch and reducing greenhouse gas emissions. 		 raising flood sensitive infrastructure; and discharge Permit Compliance. Construction approaches would adhere to Guidance for Pollution Prevention (2017) GPPs: Works in, near or liable to affect watercourses and would be subject to control via an NRW Flood Risk Activities Permit Consent for Main Rivers or a LLFA Flood Defence Consent For Ordinary Watercourses. Construction workers would additionally adhere to the CEMP (Document 7.4), following CMM to reduce flood risk. The FCAs (Documents 5.12.2.1 - 4) have shown that in all instances where flood risk receptors may be impacted by an associated flood hazard, it has been possible to specify necessary mitigation. Incorporation of these measures in the design and construction stages would be sufficient to mitigate any potential increase flood risk due to the Proposed Development.

Table 9: JLD	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
Policy ISA4	Existing open space should not be lost unless it can be clearly demonstrated that there is an over- provision of open space necessary for the community's requirements. Proposals that would cause significant harm to the role or importance of open land between or within towns/villages or on land important to the rural/urban character of the area, town or village will be refused.	Documents 5.18 and 7.4.	ES Chapter 17, Socio-Economics (Document 5.17) assessment has concluded there would be no loss of open space as a result of the Proposed Development. The majority of the land within the Order Limits is in agricultural use as described in ES Chapter 18, Agriculture (Document 5.18). The assessment of potential impacts on Agriculture concluded there would be no significant effects.		
Areas of Out	standing Natural Beauty				
Policy AMG1	Proposals within or affecting the setting and/or significant views into and out of the Areas of Outstanding Natural Beauty must, where appropriate, have regard to	Document 5.7.	The Proposed Development runs through the Anglesey AONB, which is the only AONB within the Order Limits. National Grid acknowledges the importance of this site both on a national and local scale, particularly with regards to the local community. Direct effects on the AONB and the iconic views of the Menai Strait would be avoided through the use of		

Table 9: JLD	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	the Area of Outstanding Natural Beauty Management Plan.		an underground cable tunnel of approximately 4 km in length which would pass beneath the AONB and Strait. The assessment has concluded indirect effects would not be significant.	
			The assessment of effects on the AONB are presented in ES Chapter 7, Landscape Assessment (Document 5.7).	
Conserving a	and Where Appropriate Enhancing the	Natural Environ	ment	
Strategic Policy PS 19, AMG5, AMG6	Policy PSmaintain and enhance biodiversity,59, AMG5,through the protection of	Documents 5.7 - 5.18.	National Grid has identified potential effects and proposed measures to mitigate these effects on the natural environment, as detailed in the ES Chapters 7 Landscape (Document 5.7) and 9 Ecology and Nature Conservation (Document 5.9).	
	been identified within the Gwynedd and Anglesey Local Biodiversity Action Plans. AMG 5 policy will afford protection to those identified species and habitats, which are not located on either internationally, nationally or local designated sites.		Design of the Proposed Development and committed mitigation measures (CMM) in relation to nature conservation are set out in section 9 of ES Chapter 9, Ecology and Nature Conservation (Document 5.9) and in the Biodiversity Mitigation Strategy (Document 7.7). These measures would reduce the overall effects of the Proposed Development on protected sites and species. The majority of habitats	

Table 9: JL	able 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	PS 19 outlines the safeguarding of Plan area's habitats and species,		would be fully re-instated on completion of the works so there would be limited long term effects.	
	geology, history, the coastline and landscapes. Proposals must have regard to protect, of sites of		The Habitat Regulations Assessment Report (Document 5.23) concludes that there would either no significant effects on the site integrity of any of the Natura 2000 sites.	
	international, national, regional and local importance and, where appropriate, their settings in line with National Policy. The proposals should demonstrate how the Proposed Development will protect, retain or enhance the local		Adherence to mitigation measures means that there would be no significant effects as a result of the Proposed Development on statutory designated sites. The only significant effect on the natural environment and non- statutory sites is on Gylched Covert CWS which would experience a moderate (significant) effect.	
	character and distinctiveness of individual Landscape Character Areas and Seascape Character Areas. Further to the protection or		Seascape Character Area (SCA) assessments have been reviewed and excluded from the landscape assessment as the landward parts of these areas overlap with the VSAAs which are already included in the assessment.	
	enhancement of networks of green/blue infrastructure, trees, hedgerows or woodland of visual,		National Landscape Character Areas (as published on the NRW website on 15 September 2017) have been reviewed but are not considered as landscape receptors in this assessment as they are based on the landscape evidence	

Table 9: JI	able 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
	 ecological, historic, cultural or amenity value. Proposals that are likely to cause direct or indirect significant harm to the natural environment will be refused, unless it can be proven that there is an overriding social, environmental and/or economic need for the development. 		 baseline represented by LANDMAP. Effects on landscape character are presented purely in relation to the LANDMAP VSAAs in the study area (in section 9.4). Figure 7.3, Landscape Character Areas (Document 5.7.1.10) and Figure 7.11, LANDMAP Visual and Sensory Aspect Areas and Landscape Character Areas (Document 5.7.1.11) illustrate the locations of the LCA and also how the VSAA and LCA relate to each other. The assessment on visual receptors has identified during construction and operation some significant effects on receptors, these are summarised in Section 11 of ES Chapter 8 Visual (Document 5.8). It is anticipated that maintenance and decommissioning activities would result in effects no greater than those anticipated during construction, and likely substantially less. It is considered that these activities would take place over a much shorter timescale and would be less intrusive than those required for construction. 	
			Adherence to mitigation measures means that there would be no significant effects as a result of the Proposed	

Table 9: JLC	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Development on statutory designated sites. The only significant effect on the natural environment and non- statutory sites is on Gylched Covert which would experience a moderate (significant) effect.	
Landscape a	nd Visual Impact			
AMG 1 AMG 2, AMG 3 and PCYFF3	An ES must include a landscape assessment and demonstrate how landscape character has influenced the design, scale, nature and site selection of the development to ensure a high quality design which fully takes into account the natural, historic and built environment. Proposals within or affecting the setting and/or significant views into and out of the Areas of Outstanding Natural Beauty must, where appropriate, have regard to	Documents 5.7, 5.8, 5.8.2.3 and 7.17.	ES Chapter 7, Landscape Assessment (Document 5.7) includes an assessment of effects during construction, operation, maintenance and decommissioning of the Proposed Development. During construction there would be significant effects on tree cover, however, by operation year 15 there would be no significant effects on tree cover due to the maturation of replacement/mitigation planting. The assessment on landscape receptors has identified some significant effects on landscape character during construction and operation; these are summarised in Section 11 of ES Chapter 7 Landscape (Document 5.7). It is anticipated that maintenance and decommissioning activities would result in effects no greater than those	

Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development
	the Area of Outstanding Natural Beauty Management Plan. The development should aim to maintain, enhance or restore the recognised character and qualities of the SLA. Proposals will be granted provided that it doesn't have significant adverse impacts upon features and qualities which are unique to the local landscape in terms of visual, historic, geological, ecological or cultural aspects. Where development could result in significant impact on the landscape, appropriate mitigation and compensation measures should be provided.		 anticipated during construction, and likely substantially less. It is considered that these activities would take place over a much shorter timescale and would be less intrusive than those required for construction. National Grid have carefully considered the routing and siting of the Proposed Development through the interactive design process as detailed within the Design Report (Document 7.17). This report provides an explanation as to how the evolution of the design reached the Proposed Development for which the DCO is sought. The Proposed Development would underground the connection via a cable tunnel of approximately 4 km in length passing beneath the Anglesey AONB and the Menai Strait in order to avoid the potential for adverse impacts on this AONB National Grid has sought to minimise adverse landscape and visual impacts through running the proposed OHL in parallel to the existing OHL for as much of the route as it is possible. This would reduce the potential for the introduction of new transmission infrastructure into areas where it is not currently present, and ensuring the Proposed Development is

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			as coherent as reasonably practicable in the landscape. When immediately parallel, the intention to synchronise pylons would reduce visual and landscape adverse effects.	
			Mitigation measures intended to reduce visual and landscape effects are provided in section 9 of ES Chapters 7 Landscape Assessment (Document 5.7) and 8, Visual Assessment (Document 5.8). Additionally, a voluntary planting scheme for residents affected by the Proposed Development, as described in the Enhancement Strategy (Document 7.13) would reduce visual effects further should the resident opt into this scheme.	
			The Proposed Development would have some significant effects on visual receptors as detailed in ES Chapter 8, Visual Assessment (Document 5.8). In total 11 communities have been identified as experiencing either moderate or locally moderate adverse visual effects during the construction and operation stages. However, none of the receptors that would experience moderate effects are considered to experience unacceptable effects.	

Page	249

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			A Residential Visual Amenity Assessment (Document 5.8.2.3) has been prepared. ES Chapter 8, Visual Assessment (Document 5.8) includes an assessment of effects during construction, operation, maintenance and decommissioning of the Proposed Development on views and visual amenity. The assessment has identified that the Proposed Development would have some significant effects on visual receptors.	
			The assessment on visual receptors has identified during construction and operation some significant effects on receptors, these are summarised in Section 11 of ES Chapter 8 Visual (Document 5.8).	
			It is anticipated that maintenance and decommissioning activities would result in effects no greater than those anticipated during construction, and likely substantially less. It is considered that these activities would take place over a much shorter timescale and would be less intrusive than those required for construction.	
Traffic and	Transport	1		

Table 9: JL	able 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
TRA1, TRA2 and TRA4	All development must mitigate its transport impacts. Larger schemes are required to prepare a Transport Assessment and Travel Plans to illustrate how the amount of trips generated will be accommodated and how accessibility to and from the site by all modes of transport will be achieved. Where appropriate, proposals should be planned and designed in a manner that promotes the most sustainable modes of transport. Policy TRA2 requires the demand for parking spaces for cars to be managed and the parking provision for other modes of transport, such as cycling, should be encouraged. Policy TRA4 states ' <i>Proposals that</i>	Documents 5.13, 7.5 and 7.6.	ES Chapter 13, Traffic and Transport (Document 5.13), assesses the potential effects of the Proposed Development on Traffic and Transport allowing mitigation measure to be developed as detailed in section 9 of the Chapter. A OCTMP (Document 7.5) has been prepared to manage construction traffic on construction traffic routes, and identifying contingency routes for construction traffic in the event that construction traffic routes are unavailable. Wherever possible existing vehicular access points have been utilised. However in a number of locations new accesses from the highway are required, though the majority of these would be temporary. There would be a requirement to cross PRoW which would necessitate their temporary closure or diversion. A PRoW Management Plan (Document 7.6) has been developed, which identifies measures to minimise the extent to which usage of PRoW/recreational routes are disrupted. Where PRoW must be temporarily closed National Grid would	

Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development
	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.'		provide diversion routes, clear signage and advanced warning of the closure would be put in place. The primary traffic and transportation effects associated with the Proposed Development would be temporary (during the construction period) being associated with the construction of haul roads, pylon foundations, pylon assembly and erection and cable installations. Following these works, there would be a period of reinstatement which would also necessitate heavy goods vehicle movements. Once operational it is envisaged that the Proposed Development would generate very few vehicle movements. It is expected that there would not be any lasting adverse effects on local receptors following completion of the Proposed Development. In light of this it is considered that there would be no 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 associated with the Proposed Development

Water Conservation

Table 9: JL	able 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
Policy PCYFF6	Water conservation measures should be detailed in the ES where practicable, including Sustainable Drainage Systems (SuDS). All proposals should implement flood minimisation or mitigation measures to reduce surface water run-off and minimise its contribution to flood risk elsewhere.	Document 5.11, 5.12, 5.12.2.1 - 4 and 7.4.	ES Chapter 12, Water Quality, Resources and Flood Risk (Document 5.12) provides an assessment of the effects of the Proposed Development on the aquatic environment (which includes water resources and flood risk receptors). Mitigation measures, including construction SuDS, are outlined in section 9 of ES Chapter 12. The assessment concluded that following the implementation of mitigation measures, there would be no significant effects. FCAs (Documents 5.12.2.1 - 4) have been prepared for the Proposed Development. National Grid has sought to avoid, as far as possible, areas at risk of flooding. Pentir and Wylfa Substations are locations outside flood risk areas. Flood resilience measures have been adopted to ensure that the design has fully taken into account changes to flood risk associated with climate change. Any works in a floodplain would incorporate measures to reduce possible obstruction or deviation of floodwater, full details are provided in the CEMP (Document 7.4).	

Page	252
гаус	200

Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development
			The drainage schemes would utilise SuDS principles for any areas requiring new drainage systems.
			A Drainage Management Plan (DMP) would be prepared by the construction contractor for the construction activities at the THH locations. This would specify measures to control discharges from temporary dewatering required during tunnel construction, and from the associated works adjacent to tunnel heads (slurry and concrete batching) and temporary shafts.
			During construction of the Proposed Development it is considered that following the adoption of design principles, hydrological mitigation measures (section 9 of ES Chapter 11 Geology, Hydrogeology and Ground Conditions (Document 5.11) and ES Chapter 12, Water Quality, Resources and Flood Risk (Document 5.12)) and CMMs outlined in the CEMP (Document 7.4), there would be no significant hydrology and flood risk residual effects.

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
Strategic Policy PS 20, AT1, AT3, AT4	The proposal should demonstrate how it will preserve and where appropriate, enhance the unique heritage assets, in respect of	Document 5.10.	An assessment of potential effects on heritage assets and their settings has been provided within ES Chapter 10 Historic Environment (Document 5.10). A phased programme of archaeological data collection has		
	international, national and local statutory designation. A Heritage Impact Assessment should provide the Local Planning Authority with enough information	identified a number of areas of archaeological interest within the Order Limits. Where possible, the layout of the Proposed Development has been designed to avoid loss of or disturbance to these, but it is anticipated that construction would involve the permanent loss of archaeological remains.			
	to adequately understand the impact of the proposals on the significance of any heritage sites affected. The proposal must additionally conserve and seek opportunities to enhance buildings,	e ne sites ek Idings,	Provision would be made for the identification and recording of archaeological remains before and during construction. This would include a programme of Strip, Map and Sample within areas of identified archaeological interest and watching briefs elsewhere. The arrangements for these measures are described in the Archaeological Strategy (Document 7.8).		
	structures and areas of locally or regionally significant non- designated heritage assets. Archaeological assessments and/or field evaluation by an	The assessment on the historic environment has identified during construction and operation some significant effects on archaeological receptors, these are summarised in Section 11 of ES Chapter 10 Historic Environment (Document 5.10).One			

Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development
	archaeological body or qualified professional is required, where appropriate, to determine the archaeological impact of the proposal before the Planning Authority determines the application.		 Historic Landscape Character Area (HLCA) within the LOHI would be affected by the presence of the Proposed Development and this is the Arfon Plateau (HLCA23). The conclusion of the ASIDOHL is that the Proposed Development would not result in a significant effect on the LOHI and this is because of: The limited extent of direct physical impacts as a
			proportion of the relevant HLCAs;The limited extent of indirect, physical impacts;
			 The relative lack of visibility of the Proposed Development from within Vaynol Park and Y Felinheli, which are important components of the historic landscape on the register; and
			• In some cases, the presence of existing modern elements of industrial use or infrastructure which affect the historic character of areas or principal assets.

Table 9: JLC	Table 9: JLDP for Anglesey and Gwynedd Planning Policies				
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development		
CYF 1, Strategic Policy PS 13 and 14,	Councils will facilitate economic growth of rural communities. The council will support the development of a year-round local tourism industry by preventing development that would have an unacceptable adverse impact on tourist facilities, including accommodation and areas of visitor interest or their setting, and maximise opportunities to restore previous landscape damage. CYF 1 lists land and units on existing employment sites which are safeguarded for employment/business enterprises and are shown on the Proposals Map.	Documents 5.17 and 5.18.	A full assessment of how businesses, tourist attractions and tourists would be affected has been detailed in ES Chapter 17 Socio-Economics (Document 5.17). This chapter additionally details potential adverse social effects arising as a result of the Proposed Development. ES Chapter 18, Agriculture (Document 5.18) confirms that "The long-term effects to landholdings as a result of permanent land use change (loss of agricultural land from the landholding) are considered to be fully mitigated through the process of discussion and negotiation between National Grid, the landowners and any agricultural tenants (if applicable), with the environmental impacts assessed through the permanent loss of agricultural land assessment". The ES concluded that the Proposed Development would not have an unacceptable adverse impact on tourist facilities, including accommodation and areas of visitor interest or their setting. It is considered as a result of the specialised nature of much of the employment, there would be negligible		

Table 9: JL	Table 9: JLDP for Anglesey and Gwynedd Planning Policies			
Policies	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			beneficial effects in terms of inward investment to the local economy and new employment opportunities during the construction period.	
			Once operational, the majority of component parts are expected to be procured from international suppliers, whilst operational works are likely to be specialist tasks which would be contracted to a network of national suppliers. The latter gives rise to the potential for some induced spend when contractors are undertaking works. Overall, the Proposed Developments operational effects on the local economy are expected to be limited.	
			In line with Policy CYF 1 the Proposed Development would not be constructed upon land and units safeguarded for employment/business enterprises as shown on the Proposals Map.	

Page	258
· age	200

Table 10: New N	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
GP 1 – Supporting the Anglesey Energy Island Programme and Anglesey Enterprise Zone	Maximise economic opportunities available to the Island's local communities. Planning applications should be accompanied by a socio- economic assessment to consider the construction and operation phases of the Wylfa NNB ['New Nuclear Build'] Project and the cumulative effects of developments in combination with other major developments proposed on the Island.	Document 5.17.	A Socio-Economic assessment has been undertaken for the all stages of the Proposed Development, as detailed in ES Chapter 17, Socio-Economics (Document 5.17). Cumulative effects from the Proposed Development in combination with other major developments proposed on the island are described in section 10. This assessment has concluded that there would be no effects that would be of greater significance when considered cumulatively than when considered separately. Potential effects have been identified for the construction, operation (including maintenance) and decommissioning phases of the Proposed Development. Economic opportunities to the island's local communities include increased employment opportunities and increased trade within local	

Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development
			communities, due to the temporary influx of construction workers.
GP 2 – Local Job Creation and Skills Development	Wylfa NNB project promoter to prepare and implement an Employment and Skills Strategy. All planning applications for relevant associated development will need to demonstrate how the aims of the Strategy will be delivered.	Document 5.17.	The Proposed Development is a Nationally Significant Infrastructure Project in its own right, and is not 'associated development' to Wylfa Newydd, in the legal sense of the term, and is not therefore subject to this requirement. The generation of jobs during the construction of the Proposed Development is described in section 9.10 of ES Chapter 17, Socio- Economics (Document 5.17). The peak workforce is expected to be in the region of 450 workers per month. The assessment concludes that employment generated by the Proposed Development would have an overall positive effect on the local employment market, but that the effect is not significant.

Table 10: New N	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance				
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development		
GP 3 – Supporting Employment, Logistics and Transport Uses	The proposal needs to accord to national planning policy and the spatial strategy and policies contained in the JLDP and reflect the locational guidance contained in Section 5 of the SPG.	Document 7.14.	This Planning Statement details how the Proposed Development accords with National Policy Statements EN-1 and EN-5. It also considers the Proposed Development against Welsh national policy, local planning policies in the JLDP and in section 5 of the SPG.		
GP 5 – Supporting the Visitor Economy	Construction and operation of the proposal should not adversely affect the value and importance of tourism to the Island. Assessment should consider the impacts of proposals on: • Transport; • Amenity of tourists; • Islands image ; • Access to the Island's natural and built environmental assets ;	Documents 5.7, 5.8, 5.13, 5.17, 5.26, 5.27 and Volume 6.	 A comprehensive assessment has been undertaken of the potential effects on tourism. The following assessments have been completed: ES Chapter 7, Landscape Assessment (Document 5.7) ES Chapter 8, Visual Assessment (Document 5.8); ES Chapter 13, Traffic and Transport (Document 5.13) ES Chapter 17, Socio-Economics (Document 5.17); 		

Table 10: New N	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance				
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	 Landscape/townscape character and views to/from natural and built environmental assets; Islands culture, identity and distinctiveness; Islands tourist attractions/facilities; and Tourism accommodation Where adverse impacts have been identified, mitigation and/or compensation measures should be identified and implement to protect and enhance the Island's visitor economy. 		 WLIA (Document 5.26); and Wellbeing Assessment (Document 5.27); In addition, meetings have been held with local people to discuss their concerns and three stages of Public Consultation have been undertaken, as detailed in the Consultation Report (Volume 6). The assessments have concluded that following the implementation of mitigation measures, the Proposed Development would have no significant adverse effects on the tourism trade, although there would be a significant effect on two tourism related businesses. 		
GP 6 – Maintaining and Enhancing Community	Wylfa NNB project promoter should ensure community services and facilities are in place to accommodate the construction and operational phases of the NNB and associated developments.	Document 5.17.	Increased demand for community services arising from the presence of construction workers is not considered in the scope of the socio-economic assessment ES Chapter 17 (Document 5.17)). This is because the		

Table 10: New I	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
Facilities and Services			duration and phasing of construction activities and the expected profile of the workforce, means that workers are very unlikely to permanently relocate to the area or register with local schools or GPs. Any potential demand for community facilities and services from construction workers is therefore considered to be so minimal that it would approximate a 'no change' or 'no impact' scenario.	
GP 7 – Protecting Health	The Wylfa New Nuclear Build (NNB) project promoter should undertake a comprehensive assessments of the health and amenity impacts of the construction and operation of the Proposed Development, including cumulative effects.	Documents 5.17 and 5.27 .	A separate WBR (Document 5.27) has been prepared. The WBR does not present any primary assessment; rather, it presents the findings and conclusions from the ES and other DCO documents in relation to wellbeing. In this context, the different aspects of wellbeing are defined by using the potential effects identified by stakeholders at a workshop and the Welsh Wellbeing Goals, these goals are detailed in further in the WBR.	

Table 10: New	able 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			An overall summary of the potential effect of the Proposed Development against the well- being goals is also provided. The assessment concluded there would be no significant adverse effects on wellbeing as a result of the Proposed Development.	
			A comprehensive assessment of potential amenity impacts has been undertaken. The full list of receptors considered in the amenity assessment is presented in Appendix 17.1 (Document 5.17.2.1). The receptor lists is summarised as follows:	
			 Community settlements - Of the 50 communities assessed, 13 would have minor effects and the other 37 would have negligible effects; 	
			 Tourist attractions and recreational resources - There is not likely to be significant disruption to the amenity of tourist attractions and recreational 	

Table 10: New I	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			 resources located within 10 km of the Proposed Development; of the 37 attractions considered, seven would have a minor effect and the rest would be negligible; PRoW, including footpaths, bridleways and cycling routes - following the implementation of the Public Rights of Way Management Plan (Document 7.6), effects on public rights of ways and cycle routes, would not be significant; and 	
			Commercial receptors (tourism and non- tourism businesses) - Of the 55 tourism related businesses within the study area only two would be affected significantly; 11 would have a minor effect and 42 would have a negligible effect. Of the non-tourism related businesses the majority considered would have either a negligible effect on them, or no effect at all; only three were found to have a	

Table 10: New	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			minor effect. A Residential Visual Amenity Assessment (RVAA) has been undertaken and is provided as Appendix 8.2 (Document 5.8.2.2).	
			Mitigation by design includes sensitive routeing and siting of infrastructure. Pylons would run parallel with the existing 400 kV OHL. The presence of the existing 400 kV OHL means the proposed 400 kV would not be an uncharacteristic visual element. National Grid has selected a similar steel lattice pylon (to the existing OHL) for the proposed OHL. The steel lattice is considered the best option to reduce visual effects as far as possible as it would not introduce conflicting shapes into the environment.	
			The consideration of the selection and assessment of the potential route corridor options and route options for the Proposed	

Table 10: New N	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Development is outlined in the Design Report (Document 7.17).	
GP 8 – Supporting Healthy Lifestyles	Resist the loss of existing open space and recreational facilities or impacts on the connectivity of green infrastructure unless appropriate provision is made.	Document 5.9.	Through careful routeing the proposed route avoids the loss of any open space Potential effects on green infrastructure are possible, but unlikely, as a result of connectivity being disrupted through impacts on PRoW, however the PRoW Management Plan (Document 7.6) would ensure that effects on PRoW's are limited.	
GP 9 – Maintaining and Creating Cohesive Communities	Assessment of socio-cultural impacts and consultation with the Island's communities is needed.	Documents 5.17, 5.26 and 5.27.	Engagement specific to the Environmental Impact assessment is set out in Chapter 5 EIA Consultation (Document 5.5) and other engagement is set out in the Consultation Report (Document 6.1). A full assessment on how businesses, communities, tourist attractions and tourists would be impacted upon is detailed in ES Chapter 17, Socio-Economics (Document	

Table 10: New N	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			5.17). The full list of receptors considered in the amenity assessment is presented in Appendix 17.1 (Document 5.17.2.1). The receptor lists is summarised as follows:	
			 Community settlements - Of the 50 communities assessed, 13 would have minor effects and the other 37 would have negligible effects; 	
			 Tourist attractions and recreational resources - There is not likely to be significant disruption to the amenity of tourist attractions and recreational resources located within 10 km of the Proposed Development; of the 37 attractions considered, seven would have a minor effect and the rest would be negligible; 	
			 PRoW, including footpaths, bridleways and cycling routes - following the implementation of the Public Rights of Way 	

Table 10: New N	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Management Plan (Document 7.6), effects on public rights of ways and cycle routes, would not be significant; and	
			Commercial receptors (tourism and non- tourism businesses) - Of the 55 tourism related businesses within the study area only two would be affected significantly; 11 would have a minor effect and 42 would have a negligible effect. Of the non-tourism related businesses the majority considered would have either a negligible effect on them, or no effect at all; only three were found to have a minor effect.	
			The Socio-Economic assessment concludes there would no significant social and economic effects, as the assessment concluded the following potential effects are not significant: • amenity;	

Table 10: New N	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			 land-take and access (non-agricultural land); 	
			 pressure on supply of tourism accommodation; 	
			 pressure on supply of private rented accommodation; 	
			 change in visitor numbers or visitor behaviour; 	
			adverse and beneficial employment effects;	
			 adverse and beneficial expenditure effects; and 	
			 adverse and beneficial effects on the tourism sector. 	
			A WLIA (Document 5.26) has been produced to consider effects on the Welsh language. The assessment concludes that the effects of the Proposed Development on the Welsh	
			Language would be largely negligible, thought there could be a minor effect in relation to in-	

Table 10: New	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			migration of workers, for which mitigation is included. A separate WBR (Document 5.27) has been prepared. The WBR does not present any primary assessment; rather, it presents the findings and conclusions from the ES and other DCO documents in relation to wellbeing. In this context, the different aspects of wellbeing are defined by using the potential effects identified by stakeholders at a workshop and the Welsh Wellbeing Goals, these goals are detailed in further in the WBR. An overall summary of the potential effect of the Proposed Development against the well- being goals is also provided. The assessment concluded there would be no significant adverse effects on wellbeing as a result of the Proposed Development.	

Table 10: New N	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
GP 12 – Tourism Accommodation	Ensure no significant adverse effects upon tourism accommodation sector.	Document 5.17.	Although there would be a significant effect on two tourism businesses, The Proposed Development would have no significant adverse effects on the tourism accommodation sector as a whole, as detailed in ES Chapter 17, Socio-Economics (Document 5.17).	
GP 13 – Maintaining and Strengthening Welsh Language and Culture	Submit alongside the development applications a detailed assessment of linguistic (including cumulative) impacts. The assessment should consider fully important linkages between Welsh language and culture and the future of the Island's communities, economic development and service provision.	Documents 5.26 and 5.27 .	A WLIA (Document 5.26) has been produced to consider effects on the Welsh language. The WLIA has assessed the potential effects on the Welsh language and culture during the construction and operational phases. Effects during maintenance and decommissioning would be expected to be similar to those for construction. Social cohesion has been considered, such as long-term effects on family ties, social networks and community cohesion.	

Table 10: New I	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			Section 7 of the WLIA (Document 5.26) considers the cumulative effects of various elements of the Proposed Development and accumulated effects of the proposals with other developments proposed in the vicinity. In addition, 'A Wales of cohesive communities' is one of the Well-being Goals considered in the Wellbeing Assessment (Document 5.27). The assessment concludes that the effects of the Proposed Development on the Welsh Language would be largely negligible, other than for the temporary effects of in-migration of workers, which is considered would have a minor effect. Mitigation measures are identified to address this minor effect.	
GP 14 – Transport	Use of rail and waterbourne transport modes should be prioritised in accordance with national planning policy and the need for road transport minimised. The approach should be set out in a detailed Transport Plan.	Volume 6 (Document 6.1 and 6.2), Documents	Rail and water-borne transport has been discussed during consultation with Network Rail, as reported in the Consultation Report (Volume 6). The Proposed Development is	

Table 10: New N	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance				
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development		
	Transport plan should clearly identify the rationale for the selected methods, how the modal splits will be achieved and clearly indicate where alignment with existing transport plans and strategy will be achieved. The proposal should make best use of existing infrastructure provision and enhance provision in order to deliver a legacy benefit. Potential impacts on highway infrastructure should be assessed, further to ensuring that highway improvements are provided where appropriate to minimise congestion, ensure safety and minimise environmental impacts associated with noise, air quality and severance. Green Travel Plans should be prepared. A Traffic Management Plan will be required which sets out how adverse impacts on key parts of the network will be mitigated.	5.13, 5.13.2.1 and 7.5.	not seeking to transport materials via rail or water-borne transport. ES Chapter 13, Traffic and Transport (Document 5.13) has considered the peak week movement of HGVs and HGV. Section 9 of ES Chapter 13, Traffic and Transport (Document 5.13) details mitigation measures which would be implemented to reduce traffic and transport effects. The OCTMP (Document 7.5) outlines measures to reduce traffic and transport effects including the management of construction traffic and identifying contingency routes for construction traffic in the event that other more favourable and efficient routes are unavailable. The TA (Document 5.13.2.1) includes a framework Travel Plan (TP) (section 12). The TP supports and encourages sustainable		

Table 10: New	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development	
			travel (public transport, cycling, walking, and car-sharing).	
GP 16 – Managing Waste Sustainably	Sustainable waste management principles are to be incorporated into the construction and operation of the Wylfa NNB Project. A Site Waste Management Plan must be provided.	Document 7.11.	The OWMP (Document 7.11) has been prepared, presenting the approach to waste management for the construction of the Proposed Development.	
	Waste management activities associated with the proposal, either alone or in combination with other proposals, will not adversely affect the environment or human health.		Details on proposed recovery and disposal systems would be developed further in the Site Waste Management Plan (SWMP) and Materials Management Plan (MMP) to be prepared by the main works Contractors.	
			Sustainable waste management through the implementation of the waste hierarchy principles has been described throughout the OWMP (Document 7.11).	
			Assessments conclude waste management activities associated with the Proposed Development, either alone or in combination	

Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance						
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development			
			with other proposals would not significantly affect the environment or human health.			
GP 18 – Mitigating Climate Change	Minimise the contribution of the proposal to climate change including through the preparation and implementation of a Carbon Management Plan.	Documents 5.7 - 5.18.	Greenhouse gases would be emitted during the construction phase, through the consumption of materials and energy, and through vehicular emissions; however there would be very little opportunity to substantially reduce these emissions. The potential for greenhouse gas emissions during the operation of the Proposed Development would be limited vehicle emissions and any materials used during maintenance visits etc. The Project Need Case (Document 7.1) confirms that the Proposed Development is necessary to connect Wylfa Newydd Power Station. NPS EN-1 identifies nuclear power generation as a key part of the low carbon energy mix.			

Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance						
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development			
GP 19 – Adapting to Climate Change	Incorporation of appropriate design, layout and building methods that will withstand the effects of climate change. Associated developments should be located away from flood risk areas. Where essential infrastructure is located in areas of flood risk, it should be designed so as to remain operational when flooding occurs.	Documents 5.12.2.1 - 4.	The FCA, provided in in Appendices 12.1 – 4 (Documents 5.12.2.1 – 4), addresses the issue of resilience to flooding. National Grid has sought to avoid, as far as possible, areas at risk of flooding. The design of the Proposed Development has sought to minimise the areas of temporary and permanent OHL infrastructure within areas of flood risk. Pentir and Wylfa Substations are located outside flood risk areas. Flood risk receptors have been identified for fluvial and surface water sources in accordance with the FCA (Appendices 12.1 – 4, Documents 5.12.2.1-4). The assessment found following the adoption of flood resilience measures, there would be no significant flood risks. Current projections around the impact of climate change in the UK forecast extremes of			

Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance						
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development			
			heavy rain and drought weather and more occurrences of high wind. The design of the OHL has accounted for wind, ice and wind-on- ice loadings.			
GP 20 – Conserving and Enhancing the Natural Environment	 Ensure the Island's unique and distinctive natural environment is conserved, and where possible, enhanced. The proposal should demonstrate there will would be no significant adverse impacts on: Designated sites (e.g. SSSI, Natura 2000 sites); key habitat and species, including those identified in the Anglesey Local Biodiversity Action Plan; 	Documents 5.9 and 7.13 .	A search for areas of geological conservation importance has been undertaken as described in section 7 of ES Chapter 11, Geology, Hydrogeology and Ground Conditions (Document 5.11). No Geological Sites of Special Scientific Interest (GSSSI) or Regionally Important Geodiversity Sites (RIGS) are present within 1 km of the Order Limits of the Proposed Development. No effects on designated sites of geological conservation importance have been identified.			
	 the ecological functionality of nature conservation sites and their connectivity with the wider landscape; 		ES Chapter 9, Ecology and Nature Conservation (Document 5.9) presents information about the ecological effects (terrestrial and marine) that could result from the construction, operation, maintenance and			

General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development
	 regionally important Geological and Geomorphological Sites Seascape Character Areas Important landscape including AONB and Heritage Coast Local landscape character with reference to Special Landscape Areas and Landscape Character Areas; and Wales Coast Plan. Where adverse impacts cannot be avoided, appropriate mitigation and/or compensation measures should be implemented. 		decommissioning of the Proposed Development. Protected species, statutory designated sites and non-statutory nature conservation designations located within the study area have been identified and assessed for potential effects. The majority of potential significant effects have been avoided through careful design and routeing of the Proposed Development, of have been addressed through the implementation of standard mitigation measures. These standard measures include working hours, light control, waste management and pollution prevention and control. Measures specific to potential ecology effects include careful timing of work, vegetation management in the appropriate season, vegetation protection zones and an ecological watching brief where required. All

of these standard and ecology specific

Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development
			measures would be applied through the implementation of the CEMP (Document 7.4). Standard biosecurity measures are also included, with further restrictions potentially being required in specific locations due to presence of a particularly valued species or habitats. More specific mitigation measures are reported in the Biodiversity Mitigation Strategy (Document 7.7).
			Adherence to mitigation measures means that there would be no significant effects as a result of the Proposed Development on statutory designated sites. The only significant effect reported in Chapter 9 Ecology and Nature Conservation is on the Gylched Covert County Wildlife Site, which would experience a moderate (significant) effect due to a loss of habitat. Almost all other effects identified are temporary and the majority are negligible.

Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development
			The majority of habitats would be fully re- instated on completion of the works so there would be limited long term effects. Enhancement opportunities for biodiversity interests are reported in in Enhancement Strategy (Document 7.13).
			For some designated sites and habitats it is anticipated that there would be a net enhancement as a result of mitigation measures implemented in combination with the implementation of the new habitats. It has been considered that the embedded mitigation measures and proposals create an acceptable proposal when balanced against the need for the Proposed Development.
			There would be no significant effect on any protected or notable species as a result of the Proposed Development. Individuals or small numbers of some species would though be temporarily affected during construction,

Table 10: New N	Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance		
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development
			maintenance and decommissioning. The habitats supporting these species would be replaced, or improved ecologically where possible.
			The Habitat Regulations Assessment Report (Document 5.23) assesses the potential for significant effects on the integrity of Natura 2000 sites, either alone or in combination with other relevant plans or projects on any European site of nature conservation importance.
			The assessment concludes that the Proposed Development would not result in a likely significant effect on a Natura 2000 site alone or in combination with other plans and projects.
GP 21 – Conserving the	The Wylfa NNB project promoter will be expected to demonstrate that the construction and operational stages of the NNB and	Documents 5.12, 5.20 and 7.4.	ES Chapter 20, Inter-Project Effects (Document 5.20) has considered how the effects from the Proposed Development would

Page	282
. age	

Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development
Water Environment	associated developments, either alone or in combination with other proposals would not have an adverse impact on water quality, riparian habitats and aquatic species or commercial and recreational users. Where the potential for adverse impacts are identified, measures should be implemented to mitigate these impacts.		combine and interact with the effects of other developments (proposed and approved). This assessment has concluded that there would be no adverse cumulative effects on water quality, riparian habitats and aquatic species or commercial and recreational users. Section 9 of ES Chapter 12, Water Quality, Resources and Flood Risk (Document 5.12) and the CEMP (Document 7.4) provide details of the mitigation measures required to reduce adverse effects on the water environment. The careful siting of infrastructure has been a key consideration as part of the design process which has helped reduce or prevent potential effects. Recreation and commercial receptors are considered in ES Chapter 17 Socio- economics (Document 5.17). No potential water user receptors are identified upon which there would be any significant effects.

Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development
GP 22 – Conserving and Enhancing the Historic Environment	The proposal should demonstrate that the Island's designated cultural heritage assets and their settings are conserved and enhanced.	Document 5.10.	An assessment of potential effects on heritage assets and their settings has been provided within ES Chapter 10 Historic Environment (Document 5.10). The location of known and potential archaeological remains has been identified through both desk study, and field investigations, including trial trenching. The assessment concludes that there would be no direct effects on Scheduled Monuments or listed buildings, though there would be some significant effects on the settings of a small number of such assets. The Archaeological Strategy (Document 7.8) details mitigation measures to reduce effects on any archaeological remains discovered. Provision would be made for the identification and recording of archaeological remains before and during the construction programme. This would include a programme of Strip, Map and Sample within areas of

Table 10: New Nuclear Build at Wylfa: Supplementary Planning Guidance			
General Principles	Requirement	Location in Application Documents	Assessment of the Proposed Development
			identified archaeological interest and watching briefs elsewhere.
GP 23- Planning Obligations	The County Council will seek to ensure that the proposal avoids, minimises and mitigates adverse impacts during the construction and operational phases. Proposals should take full account of existing initiatives, plans and strategies on the Island and engage effectively with local communities, the County Council and other organisations as appropriate, at the pre-application stage, to identify appropriate compensation and mitigation for the adverse impacts of the Proposed Development.	Volume 5 and Volume 6.	The ES has demonstrated that, where reasonably practicable, the Proposed Development has avoided, reduced and mitigated significant adverse impacts that could arise during the construction and operational phases (Volume 5). Extensive engagement with the County Council, stakeholders and local communities, including three consultation stages, is documented in the Consultation Report (Volume 6) and the EIA Consultation Report (Document 5.5).

7.5 SUMMARY

7.5.1 Paragraph 4.1.5 of EN-1 confirms that:

'Other matters that the IPC may consider both important and relevant to its decision-making may include Development Plan Documents or other documents in the Local Development Framework. In the event of a conflict between these or any other documents and an NPS, the NPS prevails for purposes of IPC decision making given the national significance of the infrastructure.'

7.5.2 Notwithstanding the fact that the Proposed Development will be predominantly considered against the policies within NPS EN-1 and NPS-EN5, due consideration has also been given to the JLDP and Wylfa NNB SPG as they are identified as being potentially important considerations, as stated in EN-1 Paragraph 4.4.5 which states:

'Other matters that the Infrastructure Planning Commission (IPC) may consider important and relevant to its decision-making may include Development Plan Documents or other documents in the Local Development Framework. In the event of a conflict between these or any other documents and an NPS, the NPS prevails for the purposes of the IPC decision making given the national significance of the infrastructure'.

- 7.5.3 Nuclear power is considered part of the low carbon energy mix. The Proposed Development therefore supports a primary objective of the JLDP, that being the Anglesey Energy Island Programme, as the Proposed Development supports low carbon energy generation, being the necessary infrastructure to facilitate the operation of the Wylfa Newydd Power Station.
- 7.5.4 The Proposed Development is largely in accordance with polices set out in the JLDP and Wylfa NND SPG. Regard has been given to avoiding or reducing significant adverse effects arising from construction and operational activities where possible. As identified in Table 9, there are a small number of local polices where the Proposed Development is not fully compliant; however, the JLDP was not prepared with NSIPs in mind, which is why Parliament has given this type of NSIP its own national policy which, as confirmed in Section 5, the Proposed Development is in accordance with.

8 Summary, and Planning Balance

- 8.1.1 The Proposed Development is required to provide the necessary electricity transmission infrastructure, to facilitate the export of power from the proposed Wylfa Newydd Power Station. This will assist the UK in meeting future energy demands whilst at the same time tackling climate change through facilitating the export of low carbon energy.
- 8.1.2 The Planning Act 2008 requires that the application for the Proposed Development, as a nationally significant electricity transmission infrastructure project, should be decided in accordance with NPS EN-1 and NPS EN-5. These NPSs are statements of Governmental policy on energy infrastructure in general, and, of particular relevance to the Proposed Development, the infrastructure required for its delivery.
- 8.1.3 There is significant policy support for the Proposed Development in NPS EN-1 and NPS EN-5, which are the primary basis for decision making for the Proposed Development.
- 8.1.4 As stated in EN-5 the UK's move to a low carbon economy, whilst maintaining security of supply, will be heavily dependent on the availability of a fit for purpose and robust electricity network.
- 8.1.5 In accordance with national policies in EN-1 and EN-5, the Proposed Development has limited significant adverse impacts, where it was possible and reasonable to do so. Significant time has been invested in consulting on the proposals and refining the Proposed Development prior to making the DCO application, including to ensure that potential effects have been managed as far as reasonably practicable. The iterative process adopted has allowed careful consideration of each response received during the extensive stakeholder engagement work, and this has helped to ensure that the design of the Proposed Development has been able to address many of the potential adverse effects associated with its construction, operation and decommissioning.
- 8.1.6 As well as the Proposed Development being supported by the NPSs, this Planning Statement has demonstrated that the Proposed Development is in accordance with those NPSs and that by providing the necessary infrastructure this brings significant benefits in supporting the security of the UK's energy supply.

- 8.1.7 The Welsh Government is committed to promoting sustainable development in Wales, with a presumption in favour of sustainable development being set out in section 4.3 of PPW (9th Edition). The local planning system supports these aims. The EIA process, including extensive stakeholder engagement, has ensured that the construction of the Proposed Development is as sustainable as can be reasonably expected. The operation of the Proposed Development is considered to represent sustainable development, in that it will transmit low carbon energy, on a fit for purpose and robust electricity network.
- 8.1.8 The SoS may also consider that other documents are both important and relevant to its decision making, and this may include Welsh policy and the local development plans. However the NPSs have primacy in the determination of the DCO application. Welsh national planning policy, LDPs and Wylfa NNB SPG are potential considerations and may be taken into account.
- 8.1.9 Each topic chapter in the ES has given consideration to relevant local planning policy, either in the body of the chapter or a supporting appendix, and this information has also been presented in this Planning Statement. It has been demonstrated that the Proposed Development is compliant with the majority of local planning objectives and policies set by the two local planning authorities within whose administrative boundaries it is located. Although there are a small number of areas where it is not fully compliant, this is not unexpected for nationally significant linear infrastructure of this type, and it is considered that any non-compliance issues would be substantially outweighed by the benefits of the Proposed Development.
- 8.1.10 Overall it is considered that the planning balance lies strongly in favour of grant of development consent for the Proposed Development.

9 References

- Ref. 1 The Department for Communities and Local Government. Planning Act 2008: Application Form Guidance. London: The Stationery Office, 2013.
- Ref. 2 The Planning Inspectorate Advice Note six: Preparation and Submission of Application Documents (version 7). Bristol: The Planning Inspectorate, 2016.
- Ref. 3 Department of Energy and Climate Change. Overarching National Policy Statement for Energy (EN-1). London: UK Government, 2011.
- Ref. 4 Department of Energy and Climate Change. National Policy Statement for Electricity Networks Infrastructure (EN-5). London: UK Government, 2011.
- Ref. 5 Climate Change Act 2008, c.27. Available at: https://www.legislation.gov.uk/ukpga/2008/27/pdfs/ukpga_2008002 7_en.pdf [Last Accessed: 13.04.2018].
- Ref. 6 Department of Energy and Climate Change. National Policy Statement for Nuclear Power Generation (EN-6) Volume I of II. London: The Stationery Office, 2011.
- Ref. 7 Electricity Act 1989, c.29. Available at: http://www.legislation.gov.uk/ukpga/1989/29/contents [Last Accessed: 13.04.2018].
- Ref. 8 Department for Communities and Local Government. Planning Act 2008: Guidance for the examination of application for development consent. London: Department for Communities and Local Government, 2015
- Ref. 9 National Grid. Our Approach to the Design and Routeing of New Electricity Transmission Lines, 2012. Available at: https://www.nationalgrid.com/sites/default/files/documents/13794-Our%20approach%20to%20the%20design%20and%20routeing%2 0of%20electricity%20transmission%20lines.pdf [Last Accessed: 13.04.2018].

Ref. 10	National Grid. North Wales Connections Strategic Scoping Report, 2015. Available at: http://nationalgrid.opendebate.co.uk/files/nationalgrid/North_Wales/ North_Wales_Connection_Strategic_Options_Report_January_201 5.pdf?_sm_au_=iVV7qDFQFMLQrTsr [Last Accessed: 13.04.2018].
Ref. 11	National Grid. North Wales Connection Project Wylfa to Pentir Overhead Electricity Transmission Line – Route Corridor Identification Report, 2012. Available at: http://nationalgrid.opendebate.co.uk/files/nationalgrid/North_Wales/ W-P-Full-Report.pdf [Last Accessed: 13.04.2018].
Ref. 12	National Grid. North Wales Connection Wylfa to Pentir Preferred Route Corridor Selection Report Final, October 2015. Available at: http://nationalgrid.opendebate.co.uk/files/nationalgrid/North_Wales/ WP_Prefd_Route_Corridr_Selectn_Rpt_Final_Full_Issue_Oct15_L R.pdf [Last Accessed: 13.04.2018].
Ref. 13	National Grid. North Wales Connection Wylfa to Pentir Route Options Report Final, 2015. Available at: http://nationalgrid.opendebate.co.uk/files/nationalgrid/North_Wales/ WP%20Route%20Optns%20Rpt_Final%20(Full%20Issue),%20Oct 15_LR.pdf [Last Accessed: 13.04.2018].
Ref. 14	International Commission on Non-Ionising Radiation Protection. INCIRO Guidelines for limiting exposure to time varying electric, magnetic and electromagnetic fields (up to 300 GHz), 1998. Health Physics, Volume 74 (4). Page 494-522.
Ref. 15	Welsh Government (2016). Guidance on Climate Change Allowances for Planning Purposes. Available at http://gov.wales/docs/desh/publications/160831guidance-for-flood- consequence- [Last Accessed 2018].
Ref. 16	CIRIA C753 (2015). The SuDS Manual.
Ref. 17	National Grid (2016). Climate adaptation reporting second round: National Grid. Available at: https://www.gov.uk/government/publications/climate-adaptation- reporting-second-round-national-grid [Last Accessed: 26/07/2017].
Ref. 18	Communities and Local Government, Department for Transport. Guidance on Transport Assessment. London: Blackwell and other Accredited Agents, 2007.

Ref. 19	Ynys Môn Isle of Anglesey County Council. New Nuclear Build at Wylfa: Supplementary Planning Guidance, 2014. Available at: http://www.anglesey.gov.uk/Journals/2014/08/11/q/k/h/Wylfa-NNB- SPG-Adopted-July-2014.pdf [Last Accessed: 01/08/2017].
Ref. 20	Department for Environment, Food and Rural Affairs. Construction Code of Practice for the Sustainable Use of Soils on Construction Sties, 2009. Available at: https://assets.publishing.service.gov.uk/government/uploads/syste m/uploads/attachment_data/file/69308/pb13298-code-of-practice- 090910.pdf [Last Accessed: 26/04/2018]
Ref 21	The Planning Inspectorate Advice Note nine: Using the Rochdale Envelope (version 3). Bristol: The Planning Inspectorate, 2016.
Ref 22	National Grid plc: The National Grid Company plc and new high voltage transmission lines – guidelines for line routeing (the Holford Rules) and undergrounding: March 2003
Ref 23	The National Grid Company plc: NGC Substations and the Environment: Guidelines on Siting and Design.
Ref 24	National Grid plc: Summary of Important Project Changes and Updates, January 2015
Ref 24	Department of Transport. Calculation of Road Traffic Noise. HMSO. 1988.