Arklow Bank Wind Park 2

Environmental Impact Assessment Report

Volume II, Chapter 17: Seascape, Landscape and Visual

sse Renewables

Version	Date	Status	Author	Reviewed by	Approved by
1.0	21/05/2024	Final (External)	OPEN	GoBe Consultants	Sure Partners Limited

Statement of Authority

This Seascape, Landscape and Visual Impact Assessment (SLVIA) has been authored by Optimised Environments Limited (OPEN), a multi-disciplinary design company with landscape architecture and environmental planning at its core. OPEN currently has over 50 staff across its three offices in Edinburgh, Manchester and London. OPEN has ISO 9001, ISO 14001 and ISO 45001 providing assurance of the company's level of professional service, consideration of its influence on the environment and the attainment of high quality standards.

The seascape, landscape and visual chapter of the EIAR has been authored by Gemma Kitson BSc Hons MLA CMLI and Simon Martin MLPM CMLI, who have considerable professional experience in the field of SLVIA for offshore wind farms and the wider environmental impact assessment (EIA) process.

Gemma Kitson is a chartered landscape architect with five years' professional experience. Gemma has experience on a wide range of environmental projects, with a particular focus on renewable energy infrastructure, including SLVIA for offshore wind farm development. Gemma has been involved in SLVIA for offshore wind farms, as well as landscape and visual impact assessment (LVIA) of the onshore infrastructure of offshore wind farms.

Simon Martin is a chartered landscape architect and an Associate Director of OPEN with over 20 years' professional experience in landscape practice, specialising in LVIA of development proposals, including offshore wind farms. During his professional landscape practice, Simon has gained considerable expertise in the fields of LVIA; including SLVIA, landscape planning and feasibility; and the wider environmental impact assessment (EIA) process particularly for renewable energy and infrastructure projects. Over recent years, Simon has been the lead assessor for the SLVIAs for several offshore wind farms in UK waters, including projects in the Moray Firth in Scotland and a number of Nationally Significant Infrastructure Projects (NSIP) off the southern and eastern coasts of England. These have included SLVIA site survey works, impact assessment reporting, leading expert topic group meetings, consultation events and appearing as an Expert Witness during examination at issue specific hearings for the Thanet Extension, East Anglia TWO and Rampion 2 offshore wind farm projects.

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Glossary

Term	Meaning
Arklow Bank Wind Park 1 (ABWP1)	Arklow Bank Wind Park 1 consists of seven wind turbines, offshore export cable and inter-array cables. Arklow Bank Wind Park 1 has a capacity of 25.2 MW. Arklow Bank Wind Park 1 was constructed in 2003/04 and is operated by Arklow Energy Limited. It remains the first and only operational offshore wind farm in Ireland.
Arklow Bank Wind Park 2 – Offshore Infrastructure	"The Proposed Development", Arklow Bank Wind Park 2 Offshore Infrastructure: This includes all elements under the existing Maritime Area Consent.
Arklow Bank Wind Park 2 (ABWP2) (the Project)	Arklow Bank Wind Park 2 (ABWP2) (The Project) is the onshore and offshore infrastructure. This EIAR is being prepared for the Offshore Infrastructure. Consents for the Onshore Grid Infrastructure (Planning Reference 310090) and Operations Maintenance Facility (Planning Reference 211316) has been granted on 26th May 2022 and 20th July 2022, respectively. • Arklow Bank Wind Park 2 Offshore Infrastructure: This includes all elements to be consented in accordance with the Maritime Area Consent. This is the subject of this EIAR and will be referred to as 'the Proposed Development' in the EIAR. • Arklow Bank Wind Park 2 Onshore Grid Infrastructure: This relates to the onshore grid infrastructure for which planning permission has been granted. • Arklow Bank Wind Park 2 Operations and Maintenance Facility (OMF): This includes the onshore and nearshore infrastructure at the OMF, for which planning permission has been granted. • Arklow Bank Wind Park 2 EirGrid Upgrade Works: any non-contestable grid upgrade works, consent to be sought and works to be completed by EirGrid.
Array Area	The Array Area is the area within which the Wind Turbine Generators (WTGs), the Offshore Substation Platforms (OSPs), and associated cables (export, inter- array and interconnector cabling) and foundations will be installed.
Cable Corridor and Working Area	The Cable Corridor and Working Area is the area within which export, inter-array and interconnector cabling will be installed. This area will also facilitate vessel jacking operations associated with installation of WTG structures and associated foundations within the Array Area.
Competent Authority (CA)	The authority designated as responsible for performing the duties arising from the EIA Directive as amended. For this application, the Competent Authority is An Bord Pleanála (ABP).

Term	Meaning
Environmental Impact Assessment (EIA)	An Environmental Impact Assessment (EIA) is a statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment as amended by Directive 2014/52/EU of the European Parliament and of the Council (EIA Directive).
EirGrid	State-owned electric power transmission system operator (TSO) in Ireland and Transmission Asset Owner (TAO) for the Project's transmission assets.
Landfall	The area in which the offshore export cables make landfall and is the transitional area between the offshore cabling and the onshore cabling.
Maritime Area Consent (MAC)	A consent to occupy a specific part of the maritime area on a non-exclusive basis for the purpose of carrying out a Permitted Maritime Usage strictly in accordance with the conditions attached to the MAC granted on 22nd December 2022 with reference number 2022-MAC-002.
Mitigation Measure	Measure which would avoid, reduce, or remediate an impact.
Permitted Maritime Usage	The construction and operation of an offshore wind farm and associated infrastructure (including decommissioning and other works required on foot of any permission for such offshore wind farm).
The Application	The full set of documents that will be submitted to An Bord Pleanála in support of the consent application.
The Developer	Sure Partners Limited

Acronyms

Term	Meaning
AA	Appropriate Assessment
ABP	An Bord Pleanála
ABWP1	Arklow Bank Wind Park 1
ABWP2	Arklow Bank Wind Park 2
AHA	Area of High Amenity
AONB	Area of Outstanding Natural Beauty
CAA	Civil Aviation Authority
CAP	Climate Action Plan
CIA	Cumulative Impact Assessment
CLVIA	Cumulative Landscape and Visual Impact Assessment
CMLI	Chartered Members of the Landscape Institute
CPO	County Policy Objective
DART	Dublin Area Rapid Transport
DCCAE	Department of Communications, Climate Action and Environment
DECC	Department of Energy and Climate Change
DP	Decommissioning Programme
DTM	digital terrain model
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EIS	Environmental Impact Statement
ELC	European Landscape Convention

Term	Meaning
EPA	Environmental Protection Agency
GIS	Geographic Information System
HAT	Highest Astronomical Tide
HFoV	Horizontal Field of View
HWM	High-Water Mark
IAA	Irish Aviation Authority
IAIP	Integrated Aeronautical Information Package
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
ICAO	International Civil Aviation Organisation
IEMA	Institute for Environmental Management and Assessment
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for the Conservation of Nature
LAT	Lowest Astronomical Tide
LCA	Landscape Character Area
LMP	Lighting and Marking Plan
LVIA	Landscape and Visual Impact Assessment
LWM	Low-Water Mark
MAC	Maritime Area Consent
MCA	Maritime and Coastguard Agency
MGN	Marine Guidance Note
NASA	National Aeronautics and Space Administration
NIS	Natura Impact Statement
NS	NatureScot

Term	Meaning
OGI	Onshore Grid Infrastructure
OMF	Operation and Maintenance Facility
OREDPII	Offshore Renewable Energy Development Plan
OS	Ordnance Survey
OSP	Offshore Substation Platform
RSCA	Regional Seascape Character Area
SAAO	Special Amenity Area Order
SCA	Seascape Character Area
SCT	Seascape Character Type
SEA	Strategic Environmental Assessment
SLVIA	Seascape, Landscape and Visual Impact Assessment
SPS	Significant Peripheral Structure
VIIRS	Visible Infrared Imaging Radiometer Suite
WMNP	Wicklow Mountains National Park
WTG	Wind Turbine Generator
ZTV	Zone of Theoretical Visibility

Units

Unit	Description
cd	Candela (unit of luminous intensity)
m	Metre
km	Kilometre
MW	Mega Watt
NM	Nautical Miles
fpm	Flashes per minute

17 Seascape, Landscape and Visual

17.1 Introduction

17.1.1.1 This chapter of the Environmental Impact Assessment Report (EIAR) presents the assessment of the potential impacts of the Arklow Bank Wind Park 2 Offshore Infrastructure (hereafter referred to as 'the Proposed Development') on seascape, landscape and visual receptors. Specifically, this chapter considers the potential impact of the Proposed Development on terrestrial receptors and how they perceive changes to views and to the landscape and seascape character during the construction, operational and maintenance, and decommissioning phases. It also assesses the cumulative effects of the Proposed Development in conjunction with other developments.

17.1.1.2 This chapter has been prepared by qualified landscape architects at Optimised Environments Ltd (OPEN) by chartered members of the Landscape Institute (CMLI) with extensive professional experience in undertaking seascape, landscape and visual impact assessments (SLVIA). This includes preparation of the chapter by Gemma Kitson, BSc Hons MLA CMLI, and Simon Martin, MA Hons CMLI, and review by Lynda Thomson, BA Hons CMLI.

17.1.1.3 This chapter of the EIAR should be read in conjunction with the project description provided in Volume III, Chapter 4: Description of Development, and Volume III, Appendix 18.2 Cultural Heritage Visual Impact Assessment Report, due to the inter-relationship with cultural heritage impacts. This chapter draws upon information contained within:

- Volume III, Appendix 17.1: Seascape, Landscape and Visual Impact Assessment (SLVIA) Methodology, setting out the full methodology for the SLVIA, which is summarised in Section 17.5;
- Volume III, Appendix 17.2: SLVIA Preliminary Assessment;
- Volume III, Appendix 17.3: SLVIA Viewpoint Visualisations (Project Design Option 1);
- Volume III, Appendix 17.4: SLVIA Viewpoint Visualisations (Project Design Option 2); and
- Volume III, Appendix 17.5: SLVIA Figures

17.1.1.4 This EIAR chapter:

- Presents the existing environmental baseline established from desk studies, site-specific surveys and consultation;
- Identifies any assumptions and limitations encountered in compiling the environmental information;
- Presents the potential environmental effects on seascape, landscape and visual resources arising from the Proposed Development, based on the information gathered and the analysis and assessments undertaken; and
- Describes any necessary monitoring and/or mitigation measures that will be implemented to prevent, minimise, reduce or offset the possible environmental effects of the Proposed Development on seascape, landscape and visual resources.

17.2 Regulatory background

17.2.1.1 This section identifies the legislation, policy and other documentation that has informed the assessment of effects with respect to seascape, landscape and visual receptors. Further information on policies relevant to the Environmental Impact Assessment (EIA) and their status is provided in Chapter 2: Policy and Legislation. A summary of the policy provisions relevant to seascape, landscape and visual resources are provided in Table 17.1.

Table 17.1: Summary of regulatory background

Publisher	Name of document incl. reference	Key provisions
Statutory		
Legislation		
European Commission, 2011	European Communities (Marine Strategy Framework) Regulations 2011 (S.I. No. 249 of 2011);	Transposes EU Directive 2008/56/EC (Marine Strategy Framework Directive) into Irish law.
Oireachtas, 2000	Planning and Development Act 2000 as amended (S.I. No. 30 of 2000);	Requires, amongst other things, a description of the likely significant environmental effects from the Proposed Development including landscape and visual effects.
Council of Europe, 2000	European Landscape Convention;	The European Landscape Convention (ELC) is an international treaty concerning the protection, management and planning of all landscapes in Europe. Ireland ratified the ELC in 2002. This confers an obligation on Ireland to implement policy changes and meet objectives concerning the protection and management of its landscape, defined as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors" (ELC, 2000). The National Landscape Strategy for Ireland 2015 – 2025 is used to ensure compliance with the ELC.
Planning Policy and Development Control		
Department of Energy and Climate Change (DECC), 2014	Offshore Renewable Energy Development Plan (OREDP); https://www.gov.ie/pdf/?file=https://assets.gov.ie/27215/2bc3cb73b6474beebbe810e88f49d1d4.pdf#page=null	Contains policy relating to the sustainable development of Ireland's offshore renewable energy potential. This includes suggested mitigation of effects on seascape at the project level, which should be undertaken at project design stage.
Department of Energy and Climate Change (DECC), 2022	Strategic Environmental Assessment (SEA) of the Offshore Renewable Energy Development Plan (OREDPII) in Ireland:	Contains the Appropriate Assessment (AA) screening process and SEA scoping report of the Maritime area associated with OREDPII. This resource

Publisher	Name of document incl. reference	Key provisions
	Environmental Report https://www.gov.ie/en/publication/71e36-offshore-renewable-energy-development-plan-ii-oredp-ii/#environmental-assessments	has some important information on existing baseline conditions in the maritime area.
Department of Housing, Planning and Local Government, 2018	National Planning Framework – Project Ireland 2040; https://www.npf.ie/wp-content/uploads/Project-Ireland-2040-NPF.pdf	National Policy Objective 61 recommends the preparation of a National Landscape Character Assessment, as well as the development of guidance to be used in local landscape character assessment, with the aim of ensuring consistency between landscape character assessments across planning and administrative boundaries. This has not yet been delivered at the time of carrying out the SLVIA.
Department of Housing, Local Government and Heritage, 2021	National Marine Planning Framework; https://www.gov.ie/pdf/?file=https://assets.gov.ie/139100/f0984c45-5d63-4378-ab65-d7e8c3c34016.pdf#page=null	Proposals should demonstrate how the impacts of a development on the seascape and landscape of an area have been considered. The proposal will only be supported if they demonstrate that they will, in order of preference: a) avoid, b) minimise, or c) mitigate significant adverse impacts on the seascape and landscape of the area. If it is not possible to mitigate significant adverse impacts, the public benefits for proceeding with the proposal that outweigh significant adverse impacts on the seascape and landscape of the area and its significance must be demonstrated. A statement of need for the Proposed Development is provided in Volume I, Chapter 1 Introduction.
Wicklow County Council, 2022	Wicklow County Development Plan (2022 – 2028); https://www.wicklow.ie/Portals/0/adam/Documents/NZy04adS4UupjOnDVMmH9g/Link/Volume%201%20-%20FULL%20Written%20Statement%20CDP%202022-2028%20as%20altered.pdf	This document lists views and prospects which should be protected due to their high amenity value. County Policy Objective (CPO) 17.38 states that these views and prospects should be considered within applications for development, with an accompanying evaluation of how the Proposed Development would alter the view / prospect. CPO 17.35 states that development proposals should take the Wicklow Landscape Assessment into consideration, including the key landscape features and characteristics, and the key development considerations as described for each landscape area. CPO 17.36 states that development proposals within the Area of Outstanding Natural Beauty (AONB) and which have the potential to result in significant

Publisher	Name of document incl. reference	Key provisions
		effects on the landscape should be subject to a Landscape and Visual Impact Assessment (LVIA).
Wicklow County Council, 2018	Arklow and Environs Local Area Plan (2018 – 2024); https://www.wicklow.ie/Portals/0/Documents/Planning/Development-Plans-Strategies/Local-Area-Town-Settlement-Plans/Arklow/Arklow-Environs-Local-Area-Plan-2006-2012/Arklow%20and%20Environs%20Local%20Area%20Plan%202018%20-%202024%20Written%20Statement%20as%20altered.pdf	Objective HT3 contains a provision to protect the character of the natural heritage, "in particular, those features of the natural landscape… which contribute to its special interest". The document states that this should be done in accordance with the objectives set out in the Wicklow County Development Plan.
Wexford County Council, 2022	Wexford County Development Plan (2022 – 2028); https://consult.wexfordcoco.ie/en/consultation/wexford-county-development-plan-2022-2028/chapter/volume-1-written-statement	Objective L01 contains provision to consider the Landscape Character Units and their sensitivity in the determination of planning applications. Objectives L06, L07 and L08 also concern landscape and visual effects of development in relation to landscape character across the county. Objective L04 states that development should be "appropriately sited, designed and landscaped" in relation to their setting in the landscape, and that visual impacts should be minimised. Objective L11 concerns the protection of important views, including in particular "views to and from the sea, rivers, landscape features, mountains, tourism sites and landmark structures such as bridges and urban settlements" from adverse effects of development as a result of inappropriate "design, scale, character or cumulative impact". Objective L13 concerns the consideration of the effects of development on the special qualities of designated landscapes within Wexford. Objective L16 requires the production of an LVIA for "developments which may have a significant negative impact on the landscape".
Carlow County Council, 2022	Carlow County Development Plan (2022 – 2028); https://consult.carlow.ie/en/consultation/carlo	Policy LA P1 concerns the protection and maintenance of the "overall integrity of the County's landscape, by recognising its capacity to sustainably integrate and absorb appropriate development, and by ensuring that development protects, retains and, where necessary, enhances the appearance and

Publisher	Name of document incl. reference	Key provisions
	w-county-development-plan-2022-2028/chapter/volume-1-written-statement	character of the landscape, and does not unduly damage or detract from those features which contribute to its value, character distinctiveness and sensitivity". Policies LA P2 and LA P5 concern the landscape and visual effects of development on upland landscapes and river valleys / corridors respectively. Policy LA P6 concerns the appropriate "siting, layout, design and scale" of development proposals. Policy LA P8 requires the production of an LVIA for "development proposals which may have significant landscape or visual impacts, and/or which are located within or adjacent to sensitive landscapes". The document provides a list of views and prospects which "contribute to the County's landscape". Policy LA P11 requires that these views are protected. Policy LA O1 states that assessment of development should take account of "the recommendations and assigned Landscape Character Areas, Landscape Types, and Landscape Sensitivity, and the Schedule of Views, Prospects and Scenic Routes" provided within the Plan.
Dun Laoghaire and Rathdown County Council, 2022	Dun Laoghaire and Rathdown County Development Plan (2022 – 2028); https://www.dlrcoco.ie/sites/default/files/atoms/files/written_statement.pdf	Policy Objective GIB2 concerns the ongoing protection of "the County's landscapes, townscapes and seascapes in accordance with the recommended strategies as originally outlined in the Landscape Character Assessment (2002 and since updated)". Policy Objective GIB3 presents the Council's intention to carry out a Seascape Assessment during the period of the Plan. This has not been published at the time of undertaking the SLVIA.
Dublin City Council, 2022	Dublin City Development Plan 2022-2028; https://www.dublincity.ie/sites/default/files/2023-02/Final%20Vol%201%20Written%20Statement.pdf	Objectives GIO16, GIO17 and GIO18 present the Council's intention to produce respectively a Landscape Character Assessment, Views and Prospects Study and Landscape Conservation Areas Review during the period of the Plan. These documents have not been published at the time of undertaking the SLVIA.
Fingal County Council, 2023	Fingal Development Plan 2023-2029; https://www.fingal.ie/sites/default/files/2023-04/FCC%20%282023%29%20Fingal%20Development%20Plan%20Written%20Statement%20%28April%202023%29.pdf	Policy GINHP25 requires that development should "ensure the preservation of the uniqueness of a landscape character type by having regard to the character, value and sensitivity of a landscape".

Publisher	Name of document incl. reference	Key provisions
Guidelines and technical standards		
Environmental Protection Agency (EPA), 2022	Guidelines on the Information to be Contained in Environmental Impact Assessment Reports https://www.epa.ie/publications/monitoring--assessment/assessment/EIAR_Guidelines_2022_Web.pdf	These Guidelines apply to the preparation of all Environmental Impact Assessment Reports undertaken in the State (Ireland). They do not contain any specific guidance in relation to SLVIA.
Department of Housing, Planning and Local Government, 2018	Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment; https://www.gov.ie/pdf/?file=https://assets.gov.ie/44535/34aa9919f24243b79454994bc06476e1.pdf#page=null	States that an EIAR should include consideration of the baseline environment, and how this would likely change in the absence of the Proposed Development, as well as the potential for likely significant cumulative effects. States that an EIAR should include consideration of the cumulative effects arising from the Proposed Development, including both the interaction between the various impacts within the Proposed Development, as well as the interaction between the Proposed Development and existing and proposed projects in the same area.
Department of Communications, Climate Action and Environment (DCCAE), 2017	Guidance on Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) Preparation for Offshore Renewable Energy Projects (hereafter referred to as the DCCAE Guidance); https://www.gov.ie/pdf/?file=https://assets.gov.ie/76533/6a82b451-e09f-483b-849e-07d4c7baa728.pdf#page=null	Advises that cumulative assessments need only consider existing and consented projects, and that cumulative interactions with projects at other stages in the planning process do not need to be considered. The SLVIA has diverted from this guidance in this respect, and assesses cumulative interactions with projects at other stages in the planning process, in line with best practice guidance for SLVIA, as described in the methodology in Appendix 17.1. States that each phase of the Proposed Development should be considered within the EIA process in order to fully consider all effects which may arise from the Proposed Development during its lifetime. States that the zone of influence of the Proposed Development is likely to differ based on the topic under consideration. When determining the zone of influence, several factors should be considered, including the physical footprint of the project, the area likely to be subject to significant effects and the study area. States that a description of the baseline environment should be included in order to identify likely significant effects.

Publisher	Name of document incl. reference	Key provisions
		States that the baseline of the receiving environment should inform the likely significance of an effect as well as its "vulnerability and sensitivity".
Maritime and Coastguard Agency (MCA), 2016	Marine Guidance Note (MGN) 654 - Safety of Navigation: Offshore Renewable Energy Installations (OREIs) - Guidance on UK Navigational Practice, Safety and Emergency Response https://assets.publishing.service.gov.uk/media/64637cd60b72d3000c34454c/MGN_654.pdf	Marine navigation lanterns: Corner or significant peripheral structure (SPS) 3 yellow marine lanterns, 5 nautical miles (NM), 140 candela (cd) International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) category 2 rated (≥ 99,0 % availability) On condition – 1 h before dusk Off conditions – 1 h after dawn
Irish Aviation Authority (IAA), 2015	Guidance Material on Off-Shore Wind Farms ASAM No. 018 https://www.iaa.ie/docs/default-source/publications/advisory-memoranda/aeronautical-services-advisory-memoranda-(asam)/guidance-material-on-off-shore-wind-farms.pdf?sfvrsn=5aad0df3_8	'Yellow lights will be fixed to all machines and shall be located appropriately at a point(s) on the structure above the Highest Astronomical Tide but below the lowest point of the arc of the structure's rotor blades. Such lights will be visible through 360° in azimuth and will have vertical divergence of 5° above and below the horizontal, 5 nautical miles visibility and a minimum of 99% availability. Structures chosen as suitable for representing the periphery of wind farms are termed SPS. Such structures will be spaced along the periphery of wind farms at intervals of no more than 3 nautical miles, where practicable. Such structures will be lighted with flashing lights of distinctive navigational characteristic fitted above the HAT but below the lowest point of the arc of the structure's rotor blades. Such lights will be visible through 360° in azimuth and have a vertical divergence of 5° above and below the horizontal, 10 nautical miles visibility and a minimum of 99% availability.' Lighting required to protect air navigation will be supplemented as follows: 'All Significant Peripheral Structures, of height ≥ 90m, to the highest point of the structure including the top of blade spin where appropriate, above Mean Sea Level; will be fitted with high intensity warning lighting meeting the following requirements: the lighting must be mounted on the highest point practicable of the fixed structure; be in accordance with the International Civil Aviation Organisation (ICAO) Annex 14 standards, on a H24 basis, for High Intensity Type A lighting:- colour white with a flash rate of 40~60 fpm;

Publisher	Name of document incl. reference	Key provisions
		have an effective intensity, with background luminance above 500cd/m², of 200,000 cd ± 25%; have an effective intensity, with background luminance 50~500cd/m², of 20,000 cd ± 25%; have an effective intensity, with background luminance below 50cd/m², of at least 2,000 cd; light fittings will be fully cut off so that practically no light will be emitted below the horizontal, or as otherwise agreed with the IAA; all lights across the farm should flash in synchronisation and reductions in light intensity should occur simultaneously, if practicable; be visible through 360° in azimuth any light which fails shall be repaired or replaced as soon as is reasonably practicable. An alerting system for light failure will be put in place, such as remote monitoring or other suitable method agreeable to the IAA.'
UK Government, 2016	The Air Navigation Order 2016 – No. 765 Civil Aviation https://www.legislation.gov.uk/uksi/2016/765/contents/made	Wind Turbine Generator (WTG) aviation lighting: (1) (a) WTG height 60 m or more above sea level at the Highest Astronomical Tide (HAT). (2) WTG to be fitted with at least one medium intensity steady red light positioned as close as reasonably practicable to the top of the fixed structure. (3) If four or more wind turbine generators are located together in the same group, with the permission of the Civil Aviation Authority (CAA) only those on the periphery of the group need be fitted with a light. (4) The lights must be so fitted as to show when displayed in all directions. (5) When displayed— (a)the angle of the plane of the beam of peak intensity emitted by the light must be elevated to between three and four degrees above the horizontal plane; (8) If visibility in all directions from every wind turbine generator in a group is more than 5 km the light intensity for any light required by this article to be fitted to any generator in the group and displayed may be reduced to not less than 10% of the minimum peak intensity specified for a light of this type.

17.2.1.2 In addition, a number of other guidance documents specific to the assessment undertaken for seascape, landscape and visual are available from jurisdictions/countries with established offshore renewable energy sectors where comprehensive guidance has been developed. This guidance has been used to inform the approach to the assessment of potential impacts. This includes:

- Landscape Institute and Institute for Environmental Management and Assessment (IEMA) (2013). 'Guidelines for Landscape and Visual Impact Assessment: Third Edition (GLVIA3)'.
- Landscape Institute (2019). 'Technical Guidance Note 06/19 Visual Representation of Development Proposals'.
- Landscape Institute (2021) 'Technical Guidance Note 02/21 Assessing the Value of Landscapes outside National Designations'.
- NatureScot (2021). 'Assessing the Cumulative Impact of Onshore Wind Energy Developments'.
- NatureScot (2017). 'Siting and Designing Windfarms in the Landscape, Guidance (Version 3)'.
- NatureScot (2017). 'Visual Representation of Windfarms, Guidance (Version 2.2)' (herein referred to as 'NS Visual Representation').

17.3 Consultation

17.3.1.1 Consultation with regard to seascape, landscape and visual amenity has been undertaken in line with the general process described in Volume III, Chapter 3: EIA Methodology. The key element to date has included consultation with stakeholders to agree viewpoint locations.

17.3.1.2 Table 17.2 summarises consultation undertaken with regard to seascape, landscape and visual amenity.

Table 17.2: Summary of consultation relating to SLVIA

Date	Consultation type	Consultation and key issue raised	Section where provision is addressed
September 2020	Transport Infrastructure Ireland (TII) Response to EIA scoping request for feedback	The developer should assess visual impacts from existing national roads.	Viewpoint added to assess impacts from N11/ M11 (see Section 17.10.1 and Section 17.11.1).
September 2020	Fáilte Ireland Response to EIA scoping request for feedback	Recommend consideration of Fáilte Ireland's Guidelines for the Treatment of Tourism in an EIA. The guidelines state: "locations which are visually sensitive or renowned for their scenic or landscape beauty, should be considered carefully".	A range of viewpoints, including beaches, tourist locations and roads (national and local) have been included and assessed within the visual impact assessment in this SLVIA (see Section 17.10.1 and Section 17.11.1).
October / November 2020	Feedback from public consultation	Concerns that the visual impact on north county Wexford will not be addressed.	A range of viewpoints have been included within the visual assessment which are located on coastline and from important inland areas of northern Wexford (see

Date	Consultation type	Consultation and key issue raised	Section where provision is addressed
			Section 17.10.1 and Section 17.11.1).
		Assessment should consider visual impacts from beaches, iconic/ tourist locations and from existing national roads.	A range of viewpoints, including beaches, tourist locations and roads (national and local) have been included and assessed within the visual impact assessment in this SLVIA (see Section 17.10.1 and Section 17.11.1).
		Concerns relating to the proximity of the Proposed Development and impact on areas of significant/outstanding natural beauty and landscape value.	Upland and coastal viewpoints in areas of AONB (Wicklow) have been included as part of the visual impact assessment (see Section 17.10.1 and Section 17.11.1)..
		Issue regarding incorrect information on height of turbines shown on photomontages.	Photomontages (included in Volume III, Appendix 17.3 and Appendix 17.4; Viewpoint Visualisations) have been prepared in accordance with current NatureScot Guidance.

17.4 Study area

17.4.1.1 The spatial scope of the seascape, landscape and visual assessment is defined as 60 km from the Array Area, this being the area of sea within which the WTGs, Offshore Substations Platforms (OSPs) and inter-array cables will be located (Volume III, Appendix 17.5, Figure 17.2).

17.4.1.2 The SLVIA Study Area is defined as a radius of 60 km based on the outer limit of the area where significant effects on seascape, landscape and visual receptors could occur for Project Design Option 1 and 2, based on professional judgement; the Zone of Theoretical Visibility (ZTV) (Volume III, Appendix 17.5, Figure 17.6.1 and 17.6.2); and identification of additional impact pathways, as described in the Scoping Report. Significant effects will not occur beyond 60 km due to the limited changes to views arising from the Proposed Development at distances of over 60 km and the low frequency of days with atmospheric conditions that permit visibility above this distance. Additionally, where landscape and visual receptors fall outside the ZTV, there is no opportunity for significant effects. The 60 km radius SLVIA Study Area has been identified in line with published good practice referenced in 'Visual Representation of Wind Farms' (NatureScot, 2017), as well as through professional experience of the limit of significant seascape, landscape and visual effects associated with offshore wind farm development and the project specific impact assessment undertaken for the Proposed Development, which have found significant effects to occur at close range.

17.4.1.3 Broadly, the SLVIA Study Area, as shown in Volume III, Appendix 17.5, Figure 17.2, is defined by a western terrestrial area, including land within the counties of Wicklow, Wexford, Kildare, Carlow and Dublin (including South Dublin, Dun Laoghaire Rathdown, Dublin City and Fingal), and an eastern offshore area defined by waters of the Irish Sea.

17.5 Methodology

17.5.1 Methodology to inform the baseline

Desktop studies

17.5.1.1 Information on the seascape, landscape and visual receptors within the SLVIA was collected through a detailed desktop review of existing studies and datasets. These reports are summarised in Table 17.3.

Table 17.3: Summary of desktop reports and data resources

Title	Source	Year	Author
Wicklow Landscape Assessment, Appendix 5	Wicklow County Development Plan	2016 to 2022 (referenced within 2022 – 2028 County Development Plan)	Wicklow County Council
Wicklow Wind Energy Strategy, Appendix 5	Wicklow County Development Plan	2022 – 2028	Wicklow County Council
Arklow and Environs Local Area Plan Written Statement	Arklow and Environs Local Area Plan	2018 – 2024	Wicklow County Council
Wexford Landscape Character Assessment, Volume 7	Wexford County Development Plan	2022 – 2028	Wexford County Council
Wexford Wind Energy, Volume 10	Wexford County Development Plan	2013 – 2019	Wexford County Council
Carlow County Landscape Character Assessment and Schedule of Protected Views, Volume 2b, Appendix 7.	Carlow County Development Plan	2022 – 2028	Carlow County Council
Dun Laoghaire Rathdown County Development Plan, Appendix 8: Landscape Assessment Study and Landscape / Seascape Character Areas	Dun Laoghaire Rathdown County Development Plan	2022 – 2028	Dun Laoghaire Rathdown County Council
Fingal County Development Plan, Section 9.6.13 Landscape, 9.6.14 Landscape Character	Fingal County Development Plan	2023 – 2029	Fingal County Council

Title	Source	Year	Author
Assessment, 9.6. 15 Views and Prospects			
Kildare County Development Plan, Section 13.3 Landscape Character Assessment	Kildare County Development Plan	2023 - 2029	Kildare County Council
South Dublin County Development Plan, Appendix 9: Landscape Character Assessment	South Dublin County Development Plan	2022 - 2028	South Dublin County Council
Dublin City Development Plan chapter 10 Green Infrastructure	Dublin City Development Plan	2022 – 2028	Dublin City Council
Regional Seascape Character Assessment for Ireland	Marine Institute	2020	Minogue, R., Foley, K., Collins, T., Hennessy, R., Foherty, P., Vaughan, E. and Black, D.
Night Pollution Map	World Atlas	2015	N/A
Visible Infrared Imaging Radiometer Suite (VIIRS)	National Aeronautics and Space Administration (NASA)	2022	NASA

Site specific surveys

17.5.1.2 In order to inform the EIAR, site-specific surveys were undertaken. A summary of the surveys used to inform the SLVIA is outlined in Table 17.4 below.

Table 17.4: Site specific surveys

Data source	Date(s) of survey	Overview of survey	Survey contractor	Reference to further information
Field work	July/August 2020 (10/07, 11/07, 21/07 and 31/08)	Photography survey work throughout SLVIA Study Area	RPS	-
Field work	August 2023	Field work throughout SLVIA Study Area	OPEN	-

17.6 Baseline environment

17.6.1 Introduction

17.6.1.1 An overview of the current baseline conditions of the receiving environment for seascape, landscape and visual receptors across the SLVIA Study Area is initially outlined in this section. It also describes the likely state of the environment in the event that the Proposed Development is not implemented.

17.6.1.2 The DCCAE Guidance states that a description of the baseline environment should be included within an EIA in order to identify likely significant effects, and that the baseline of the receiving environment should inform its "vulnerability and sensitivity" as well as the likely significance of an effect. The baseline for the SLVIA comprises those elements of the receiving environment which may be changed by the Proposed Development, through physical effects of visibility/views of the Proposed Development.

17.6.1.3 In line with GLVIA3 (Landscape Institute, 2013), the baseline therefore 'establishes the area in which the development may be visible' in order to define the relevant aspects of the current seascape, landscape and visual environment of the SLVIA Study Area.

17.6.1.4 In accordance with NatureScot guidance and GLVIA3 (para 7.13), existing projects and those which are under construction are included in the SLVIA baseline and described as part of the baseline conditions.

17.6.2 The Array Area

17.6.2.1 The Array Area is located approximately 6 km from the Irish coast at its closest point and comprises an area of 63.4 km^2. The operational Arklow Bank Wind Park 1 is located within the Array Area, commissioned in 2004, and consists of seven GE 3.6-MW WTGs with a blade tip height of 124m.

17.6.2.2 The Array Area is located within the Regional Seascape Character Area (RSCA) 13: South East Irish Sea (Marine Institute, 2020). The key characteristics of this SCT are defined as follows (Marine Institute, 2020):

- *"This SCA includes the most southeasterly point in Ireland at Carnsore Point and forms the juncture between the Celtic and Irish Sea.*
- *Ireland's most southeasterly island Tuskar Rock is within this SCA.*
- *Coastal form comprises broad, medium scale bays and estuaries*
- *The SCA is renowned for its long sandy beaches and is well established coastal resorts such as Courtown.*
- *Long established historical towns that retain a fishing function including Arklow and Wexford.*
- *These are active, busy settlements with strong connections to the sea.*
- *Dynamic coastline that has seen considerable effects of erosion and deposition associated with Wexford Harbour as at Rosslare Island.*

17.6.2.3 *Views vary from south to north, with low headlands framing those in the south, as the land rises further north, the mountains provide a montane setting to the coastal areas from Arklow onwards.*SCA13 is also noted as the first SCA to have an offshore wind farm on the Arklow Banks (Marine Institute, 2020) that is recognised as an influence on views experienced and the sense of place.

17.6.3 Cable Corridor and Working Area

17.6.3.1 The Cable Corridor and Working Area extends from the north and south of the Array Area to the coast north of Arklow. From the northern part of the Array Area, the route extends to the south-

west, and from the southern part to the north-west, with both routes meeting approximately adjacent to the centre of the Array Area. The Landfall spans a section of the coast at Johnstown North.

17.6.4 Visual Baseline – Views and Visual Amenity

Nature of Views: Overview

17.6.4.1 The visual baseline focuses on and describes the area in which the Proposed Development may be visible, as defined by its ZTV, the different groups of people who may experience views of the Proposed Development (visual receptors), the viewpoints where they will be affected and the nature of views at those points.

17.6.4.2 An understanding of the baseline visual resource and nature of views is provided in the Regional Seascape Character Assessment for Ireland (Marine Institute, 2020), with reference to the five RSCAs which occur within the SLVIA Study Area. These comprise RSCA 16: North Eastern Irish Sea Islands and Beaches; RSCA 15: Dublin Bay; RSCA 14: Irish Sea Sandbanks & Broad Bays; RSCA 13: South East Irish Sea; and RSCA 12: Celtic Sea Bays and Beaches, as shown in Volume III, Appendix 17.5, Figure 17.3.

17.6.4.3 Key views from Dublin Bay (RSCA 15), towards the northern extent of the SLVIA Study Area, are described as being "*from the elevated heads that frame this SCA and allow long views along the coast north and south, into Dublin Bay and out to the Irish Sea*" (Marine Institute, 2020). Long-distance views are available from a range of features within this RSCA, including headlands such as Howth Head, Killiney Hill and promenades along the coastline including at Clontarf and Sandymount. In particular, the view south over Killiney Bay is highlighted as panoramic. Views are also available from the sea towards the coastline from recreational and passenger boats, including towards the Victorian frontage of Dun Laoghaire which "*is eminent from the sea, with the newer Library referencing the Ferry in its structure*", as well as towards the more industrial character of Dublin Port.

17.6.4.4 From the Irish Sea Sandbanks & Broad Bays (RSCA 14), also within the northern part of the SLVIA Study Area, "*long views across the Irish Sea are possible from the elevated heads or points and viewpoints along the coastal road, or accessed via pathways for example at Killiney Hill or Wicklow Head*". The coastline across this RSCA is generally elevated, and there are views inland both from the coast and the sea towards Bray Head and the Sugar Loaf Mountains.

17.6.4.5 The majority of the coastline within the central and southern parts of the SLVIA Study Area is located within the South East Irish Sea (RSCA 13). This extends south from Wicklow Head to Carnsore Point, at the southern extent of the SLVIA Study Area. Within this area, "*views along the coast comprise mostly low lying headlands that frame the view but do not dominate*". There are longer distance views from more elevated areas within the north of the RSCA, for example at Wicklow Head. There are few islands across this area of seascape, and therefore "*visual reference points and clues are provided by these headlands and sometimes by the offshore turbines*". Views are available inland "*from the passenger and freight ferries from Rosslare Port, the fishing vessels and recreational users such as kayakers and inshore fishermen*".

Blade Tip ZTV

17.6.4.6 The visual baseline focuses on and describes the area in which each of the Project Design Options for the Proposed Development may be visible, as defined by the ZTV (Volume III, Appendix 17.5, Figure 17.6.1 and 17.6.2 (A3) and Figures 17.7.1 and 17.7.2 (A1)), the different groups of people who may experience views of the Proposed Development (visual receptors) (Volume III, Appendix 17.5, Figure 17.5, 17.5i and 17.5ii), the viewpoints where they will be affected and nature of views at those points.

17.6.4.7 Seascape, landscape and visual effects will only occur where the Proposed Development is visible and its introduction changes or influences the visual amenity and view experienced by people. The area from which the Proposed Development may be visible is defined by the Blade Tip ZTV shown in Volume III, Appendix 17.5, Figure 17.6.1 and 17.6.2 (A3) and Volume III, Appendix 17.5, Figure 17.7.1 and 17.7.2 (A1). The ZTVs reflect the blade tip heights of 273m for Project Design Option 1, and 287m for Project Design Option 2, as defined within Volume II, Chapter 4: Description of Development.

17.6.4.8 The ZTV has been calculated using digital terrain data, which does not account for the screening effects of vegetation or built form. It also does not indicate the decrease in visibility that occurs with increased distance from the Array Area or atmospheric visibility due to the weather conditions. The Blade Tip ZTV therefore presents the theoretical maximum weather visibility and is likely to overstate the actual visibility of the Proposed Development, which would be further screened by vegetation or built form and prevailing atmospheric conditions.

17.6.4.9 The ZTVs in Volume III, Appendix 17.5, Figure 17.6.1 and 17.6.2 show that there is no visibility of the Proposed Development from the seascape beyond approximately 70 km, due to the effects of earth curvature, which would effectively 'hide' the WTGs below the horizon beyond this distance, and very limited visibility of reduced numbers of blade tips between 60 – 70 km.

17.6.4.10 The ZTVs (Volume III, Appendix 17.5, Figure 17.6.1 and 17.6.2) also shows that the Proposed Development will not be visible from areas shown in white in the mapping with no ZTV colouring, where the terrain prevents views of the Proposed Development. Notably, these areas where the Proposed Development will not be visible include:

- Coastline to the north of Greystones, where headlands to the south and the angle of the coastline prevent visibility of the Array Area from parts of Killiney Bay and Dublin Bay;
- Southern parts of Wicklow Bay, from which the Array Area is screened by the headland at Wicklow Head; and
- The majority of areas inland beyond approximately 40 km, beyond which the Array Area is screened by the topography, with the exception of higher ground within and around the Blackstairs Mountains, to the west of Enniscorthy, and high ground to the south of Wexford.

17.6.4.11 The ZTV (Volume III, Appendix 17.5, Figure 17.6.1 and 17.6.2) shows that the main areas of higher theoretical visibility of the Proposed Development will be from the open seas within the SLVIA Study Area, the offshore and inshore water to the east of the Irish coast, and the adjacent east-facing coastlines between Wicklow Head and Cahore Point. This includes headlands comprising Wicklow Head, Ardmore Point, Mizen Head, Kilmichael Point and Cahore Point; beaches including Magherabeg Beach, Brittas Bay Beach, Clogga Beach, Kilgorman Strand, Ballymoney Beach and Donaghmore Bay Beach; and several settlements and associated coastlines, including to the east of Kilpoole and Blainroe, Ballinacarrig, Arklow and Courtown.

17.6.4.12 The ZTV also shows that there will be areas of more intermittent theoretical visibility from areas of higher ground at greater distance from the Proposed Development, including across the Wicklow Mountains to the north-west; the Blackstairs Mountains to the south-west; to the south of Wexford; and to the east of Enniscorthy.

Horizontal Angle ZTV

17.6.4.13 The 'horizontal angle ZTV' (Volume III, Appendix 17.5, Figure 17.8.1 and 17.8.2) measures how much of the horizontal field of view is occupied by the Proposed Development, in theoretical views. It is calculated from a grid of receptors in the Study Area and measures the maximum spread from the furthest left to the furthest right theoretically visible turbine of the Proposed Development, as a horizontal angle in degrees. The horizontal angle ZTV provides a more realistic picture of the likely effect of the Proposed Development because the results reflect the effect that distance has on its apparent size and horizontal spread: a large object up-close has

more visual impact than the same sized object further away (all other things being equal). The horizontal angle ZTV is displayed using coloured bands showing incremental degrees of horizontal angle, in order to highlight areas of higher effect.

17.6.4.14 The horizontal angle ZTV also allows the following assessments to be made:

- The horizontal field of view (HFoV) occupied by the Proposed Development is greatest along the closest sections of coastline and reduces gradually to the north and south with increasing distance from the array.
- The horizontal angle ZTV shows that the widest horizontal field of view is occupied in close proximity to the Proposed Development, particularly offshore within the array itself, where the WTGs occupy more than 180 degrees (50%) of the HFoV.
- The Proposed Development will occupy a relatively wide HFoV of between 90 and 180 degrees (25 to 50%) of the HFoV within approximately 13 km to the east and west, including from the coastline between Ballynacraig in the north and Clogga in the south.
- The Proposed Development will also occupy a relatively wide HFoV of between 60 and 90 degrees of the field of view within approximately 13 km to the east and west, including from the coastline between Wicklow Hea and Ballynacraig in the north and between Tara Hill and Clogga in the south.
- The HFoV occupied by the Proposed Development decreases considerably with distance along the coast to the north and south, and with increasing distance inland away from the coast;
- Beyond Wicklow Head to the north, the HFoV reduces to 20-30 degrees and to 10-20 degrees to the north of Newcastle beach.
- Around Cahore Point to the south, the HFoV reduces to 20-30 degrees and to 10-20 degrees to the south of Cahore Point extending to Curracloe Beach and 5-10 degrees at Rosslare.

17.6.4.15 The horizontal angle ZTV illustrates how the visual effect of the Proposed Development will diminish with distance; with less visual effect from distant locations, where it occupies a small HFoV, and a greater visual effect from locations at very close proximity in the sea near to the Array Area, where it occupies a larger HFoV at close range.

17.6.4.16 It should also be noted that this theoretical measure includes the full angle from the furthest left to the furthest right extent of the Proposed Development, and that in reality the WTGs are sited with visible space/gaps between them, which allow views through the site to the seascape or skyline beyond.

Visual Receptors

17.6.4.17 The principal visual receptors in the SLVIA Study Area are focused along the closest sections of the Irish coastline, including people within settlements, driving on roads, visiting tourist facilities or historic environment assets, and engaged in recreational activity such as walking and cycle routes where the sea is a strong influence in the baseline view. Visual receptors that are scoped in to the SLVIA are identified in Table 17.5 and in the preliminary assessment in Volume III, Appendix 17.2, as those that have potential to be significantly affected by the Proposed Development.

17.6.4.18 The ZTV has been used to identify all of the visual receptors within the SLVIA Study Area that may experience significant effects as a result of the Proposed Development, as shown in Volume III, Appendix 17.5, Figures 17.11.1 – 17.11.2ii. These receptors that define the baseline are identified in the preliminary assessment (Volume III, Appendix 17.2) and summarised in Table 17.5.

Table 17.5: Baseline visual receptors scoped in to SLVIA

Type of receptor	Visual receptors scoped in to SLVIA
Settlements	Kilpoole & Blainroe (undertaken from representative viewpoint 2)
	Ballynacarrig, Brittas & Cornagower (undertaken from representative viewpoint 4)
	Arklow (undertaken from representative viewpoints 10 and 11)
	Courtown (undertaken from representative viewpoint 18)
Long distance recreational routes	Wexford Coastal Path
Transport routes	R750
	Railway between Dublin and Wexford
	Dublin – Cherbourg Ferry
	Wicklow Prospect 30. R750 to Arklow (undertaken as part of R750 route assessment)
	Wicklow Prospect 31. R750 Wicklow to Arklow (undertaken as part of R750 route assessment)
	Wicklow Prospect 35. L2172 and L6167 at Crone Upper, Redcross (undertaken from representative viewpoint 7)
	Wicklow Prospect 53. L5108-63 Castletimon, Brittas (undertaken from representative viewpoints 3 and 4)

Wexford Coastal Path

17.6.4.19 The Wexford Coastal Path passes along the coastline of Wexford County, as shown in Volume III, Appendix 17.5, Figure 17.5, 17.5i and 17.5ii. It begins near Arthurstown, at the border of Wexford County with Waterford County, in the south-west of the SLVIA Study Area, and terminates at Kilmichael Point, on the border with Wicklow County, just over 10 km from the Array Area. It generally follows the coastline itself, with the exception of short stretches of the route which follow the road network, due to the presence of cliffs or otherwise inaccessible stretches of coastline. The route experiences open views out to sea along much of its length. As shown in Volume III, Appendix 17.5, Figures 17.11.1 – 17.11.2ii, much of the route will experience theoretical visibility of the Proposed Development, particularly between Cahore Point and Kilmichael Point. Other stretches of the route will experience lower theoretical visibility, including along the stretch of coastline to the south of Cahore Point, and where it passes close to Wexford.

Main Road Routes

17.6.4.20 There are a number of major routes which pass through the SLVIA Study Area, including the N11 / M11 road which broadly follows the coast and passes from Dublin in the north to Courtown towards the south of the SLVIA Study Area, before passing further inland towards Enniscorthy. This route is located approximately 10.53 km from the Array Area at its closest point, and experiences open views out to sea from several sections, including notably from Johnstown to the north of Arklow, where it passes in closer proximity to the coast. There is also a network of 'R' roads which pass through the SLVIA Study Area, and which experience theoretical visibility of the Array Area within a minimum distance of approximately 6.62 km. In particular, the R750

passes close to the coast between Wicklow and Arklow, and much of the route is within the ZTV. There are also several minor roads which pass in close proximity to the coast within the area covered by the ZTV, as shown in Volume III, Appendix 17.5, Figure 17.11.1 – 17.11.2ii.

Beaches

17.6.4.21 The beaches within the SLVIA Study Area act as a key visitor focus along the coastline. There is a diversity of beaches including those with golden sands backed by dunes like Brittas Bay Beach, while others are situated within rocky coves, such as the one at Silverstrand. There are also rocky beaches and stretches of coastal defences at the Murrough beach just north of Wicklow Harbour. Many of these beaches will experience theoretical visibility of the Proposed Development, particularly those between Wicklow Head and Cahore Point, as shown in Volume III, Appendix 17.5, Figures 17.6.1 and 17.6.2.

Visibility

17.6.4.22 Whilst ZTV mapping can model the theoretical visibility of the Proposed Development, it is important to note that atmospheric conditions will affect visibility. The Met Office defines visibility as *'the greatest distance at which an object can be seen and recognised in daylight, or at night could be seen if the general illumination were raised to a daylight level'* (Met Office, 2000).

17.6.4.23 There is no published visibility data for Ireland, so it is not possible to quantify the likely visibility of the Proposed Development. However, the views of the Proposed Development that will be experienced by people will be influenced substantially by the prevailing weather and visibility conditions in the area. Generally, visibility declines with distance, and parts of the Study Area at greater distances from the Array Area are likely to experience less frequent visibility of the Proposed Development. This is taken into account within the viewpoint assessment, with judgements relating to how likely actual visibility is at any given viewpoint, as a result of the distance to the Array Area.

Viewpoints

17.6.4.24 The term 'viewpoint' is used to describe a place from where a view is gained, and that represents specific conditions or viewers (visual receptors).

17.6.4.25 Viewpoints have been compiled within the SLVIA Study Area based on consultee feedback, views of the Arklow Bank Wind Park 1 (ABWP1) , the ZTV for the Proposed Development, desk study and field survey observations. Viewpoints within the SLVIA Study Area are set out in Table 17.6 and shown in Volume III, Appendix 17.5: Figure 17.5i and 17.5ii. They take into account a range of factors, including:

- a range of viewpoints from which there are likely to be significant effects;
- those representative of views within the SLVIA Study Area, from specific viewpoints and illustrative of certain effects;
- the accessibility to the public, and potential number and sensitivity of viewers who may be affected;
- the viewing direction, distance and elevation, including a range of distances between approximately 6 km – 41 km to test threshold of significance from coastal to inland areas;
- the nature of the viewing experience and activities (e.g. static views, views from settlements, tourist destinations, and views from sequential points along roads and recreational routes);
- the view type (for example panorama, vistas and glimpses);
- areas of high landscape, scenic or recreational value (such as the designated landscapes);
- various landscape character areas and local authority administrative areas; and
- potential for integrated approach – viewpoints representing several aspects from the same location, such as visual effects of the offshore and onshore infrastructure, or views representing onshore cultural heritage assets.

17.6.4.26 Baseline panoramas showing the existing view from these viewpoints are shown in the relevant baseline panoramas that are cross referenced for each viewpoint in Table 17.6. The nature of views from these viewpoints is described for each viewpoint within the baseline description of each geographic area that follows.

Table 17.6: Viewpoints included in the SLVIA

No.	Viewpoint	Distance to Array Area (km)	Principal visual receptor	Landscape designation
1	Wicklow Head	7.17	Recreational receptors visiting Wicklow Head	Southern Coastal Area (Coastal Area AONB)
2	Blainroe Golf Club	6.56	Recreational receptors at the golf course	Southern Coastal Area (Coastal Area AONB)
3	Ballynacarrig 3rd Class Road	8.48	Road users	Southern Coastal Area (Coastal Area AONB)
4	Ballynacarrig Public House	7.46	Road users	Southern Coastal Area (Coastal Area AONB)
5	Brittas Bay Beach	7.78	Recreational receptors visiting the beach	Southern Coastal Area (Coastal Area AONB)
6	Tongelee 3rd Class Road	9.06	Road users	Southern Coastal Area (Coastal Area AONB)
7	Ballinvally 3rd Class Road	13.60	Road users	South East Mountain Lowlands (Area of High Amenity (AHA) 3)
8	Ballinaskea 3rd Class Road	11.63	Road users	No landscape designation
9	Johnstown N11 / M11	12.25	Road users	No landscape designation
10	Ferry Bank, Arklow	12.30	Recreational receptors walking along the shoreline	No landscape designation

No.	Viewpoint	Distance to Array Area (km)	Principal visual receptor	Landscape designation
11	Arklow Town	13.31	Residential receptors and recreational receptors visiting Arklow	No landscape designation
12	Moneyribbin 3rd Class Road	21.36	Road users	Southern Hills (AHA 2)
13	Clogga Amenity Area	11.67	Recreational receptors visiting the coast	Southern Coastal Area (Coastal Area AONB)
14	Kilmichael Point	11.01	Recreational receptors visiting the coast	Kilmichael Point Distinctive Landscape
15	Clones Coast Road	11.64	Recreational receptors visiting the coast, and residential receptors	No landscape designation
16	Tara Hill Minor Road	14.46	Road users	Tara Hill Distinctive Landscape
17	Ballymoney Beach	14.29	Recreational receptors visiting the coast	No landscape designation
18	Courtown Harbour Beach	16.49	Recreational receptors visiting the coast	No landscape designation
19	Cahore Point	19.32	Recreational receptors visiting the coast and walking on the Wexford Coast Path	Cahore Point Distinctive Landscape
20	Curracloe Beach	41.61	Recreational receptors visiting the coast	No landscape designation
21	Barnacleagh Minor Road	17.68	Road users	No landscape designation
22	Johnstown Coast Road	11.33	Road users	Southern Coastal Area (Coastal Area AONB)

No.	Viewpoint	Distance to Array Area (km)	Principal visual receptor	Landscape designation
23	Kileagh Minor Road	20.26	Road users	South East Mountain Lowlands (AHA 3)
24	Mizen Head	8.11	Residential receptors, recreational receptors visiting the coast, and cyclists travelling along Scenic Route 31	Southern Coastal Area (Coastal Area AONB)
25	Newcastle Beach	18.41	Recreational receptors visiting the coast	Northern Coastal Area (Coastal Area AONB)
26	Scarr Mountain	29.46	Recreational receptors including walkers	Wicklow Mountains National Park (WMNP), Mountain and Lakeshore AONB
27	Tara Hill Track	14.96	Recreational receptors including walkers	Tara Hill Distinctive Landscape
28	Greystones Cliff Walk	30.52	Recreational receptors walking along the coastal route	Northern Coastal Area (Coastal Area AONB)
29	Sorrento Park	40.99	Recreational receptors visiting the park	No landscape designation

17.6.4.27 The existing view and sensitivity to change for each of the above viewpoints is described in Section 17.10.1. Baseline photographic panoramas showing the existing view from each viewpoint are shown in Volume III, Appendix 17.3, Figures 17.19.1 to 17.47.1 for Design Option 1 and Volume III, Appendix 17.4 Figures 17.6.2 to Figure 17.47.2 for Design Option 2.

17.6.5 Dark Skies and Night Time Lighting

17.6.5.1 The baseline lighting conditions across the study area vary considerably and OPEN is not aware of a single data source that serves to provide a detailed or quantitative evidence base. The assessment of night-time effects is not based on quantitative measurement of light levels but relies on the professional judgement of Chartered Landscape Architects.

17.6.5.2 To provide some context to the assessment, Figures 17.12 and 17.13, illustrate information relating to light pollution in the study area. These are based upon data from World Atlas Night Pollution Map (2015) and National Aeronautics and Space Administration (NASA) Visible Infrared

Imaging Radiometer Suite (VIIRS) (2022). This Open Source data has been used to help understand and illustrate the existing baseline lighting levels of the Study Area.

17.6.5.3 Figure 17.12 shows the baseline brightness of the sky throughout the Study Area, indicating areas which have a higher or lower baseline brightness. The figure shows that brightness is influenced by proximity to settlement, including in particular high brightness around Dublin, in the north of the Study Area. The coastline within approximately 20 km of the Array Area generally has lower levels of sky brightness, due to more limited areas of settlement. Similarly, upland areas within the Wicklow Mountains also experience lower levels of sky brightness, as do upland areas within Carlow, and coastal parts of Wexford.

17.6.5.4 Figure 17.13 shows the baseline lighting radiance. Each pixel in the mapping shows the level of radiance (night lights) shining up into the night sky, which have been categorised into colour bands to distinguish between different light levels. The map clearly identifies the main concentrations of night-time lights, creating light pollution that spills up into the sky.

17.6.5.5 Figure 17.13 indicates lower overall sky brightness in close proximity to the Array Area, and across the seascape of the SLVIA study area, with areas of greater radiance focused around the settled coastal part of the Study Area. These area of brighter night-time lighting radiance are focussed on areas of settlement, including Arklow and Wicklow, within approximately 10 - 15 km of the Array Area. However, there are also areas of limited baseline radiance, including stretches of coastline to the north and south of Arklow within approximately 8 – 12 km of the Array Area, and a long stretch of coastline to the south of Cahore Point, beyond around 20 km from the Array Area. This indicates that there are limited existing sources of lighting within these parts of the Study Area. Figure 17.13 also indicates that upland parts of Wicklow, and rural parts of Carlow and Wexford, located away from the main population centres and settlements, have limited sources of existing lighting.

17.6.5.6 The impression gained from Figures 17.12 and 17.13 is borne out by the assessment experience from visiting and inspecting the study area at night. Higher levels of darkness are experienced from inland and coastal parts of the Study Area set at distance from the main settlements. In contrast, areas which are more heavily influenced by visible lighting at night arise as a consequence of a number of light sources including:

- Towns and settlements (street lighting / buildings / retail areas);
- Roads and road junctions, including service areas;
- Vehicles using the road network;
- Lighting of vessels in the sea; and
- Lighting of the existing ABWP1 WTGs, including aviation lights situated at the nacelle level and marine navigational lighting.

17.6.5.7 Lighting at these locations provides a level of baseline illumination which is apparent in close proximity and longer-distance views from more elevated inland locations when looking towards the coast. However, this baseline lighting is generally characterised by distinct points of light and concentrations of lighting within coastal towns and villages, where views are available towards these light sources. Although there is limited baseline lighting radiance within the Array Area and the surrounding seas, as indicated by Figure 17.12, the coastal parts of the Study Area within approximately 20 km of the Array Area have a brighter radiance of baseline lighting within settlements and on transport routes at night, limited by intervening rural areas with lower levels of night-time lighting.

17.6.5.8 An assessment of the effects of night-time lighting associated with the Proposed Development is undertaken from four representative viewpoints. These comprise Viewpoint 4: Ballynacarrig Public House; Viewpoint 10: Ferry Bank; Arklow; Viewpoint 13: Clogga Amenity Area; and Viewpoint 24: Mizen Head. These viewpoints have been selected to enable consideration of the

effects of night-time lighting on a range of receptors, and at locations in the Study Area which feature different levels of baseline lighting.

17.6.6 Seascape Character Baseline

Seascape Overview

17.6.6.1 Seascape, like landscape, is about the relationship between people and place and the part it plays in forming the setting to our everyday lives. Seascape results from the way that the different components of the environment, both natural and cultural, interact and are understood and experienced by people.

17.6.6.2 The Marine Institute (2020) refers to the definition of seascape included within 'An Approach to Seascape Character Assessment' (Natural England, 2012), which states that seascape is "*an area of sea, coastline and land, as perceived by people, whose character results from the actions and interactions of land with sea, by natural and/or human factors.*" This document provides a summary of what constitutes seascape.

17.6.6.3 Although seascape character '*principally applies to coastal and marine areas seaward of the low-water mark*' and landscape character '*principally applies to terrestrial areas lying to the landward side of the high-water mark*' (Natural England, 2012), there is in fact a subtler transition between seascape and landscape and the importance of the interaction of sea, coastline and land as perceived by people is highlighted in definitions of seascape in the Natural England guidance (Natural England, 2012). This guidance is referred to within the Regional Seascape Character Assessment for Ireland (Marine Institute, 2020) and is therefore assumed to apply in Ireland, in the absence of Ireland-specific guidance.

17.6.6.4 The seascape impact assessment in this SLVIA therefore focuses particularly on areas of onshore landscape with views of the coast or seas and marine environment, as perceived by people, on the premise that the most important effect of offshore windfarms is on the perception of seascape character from the coast.

17.6.6.5 The Array Area covers an offshore area of 63.4 km^2 located within the Irish Sea, approximately 6 km from the closest section of the mainland Irish coastline (Volume III, Appendix 17.5, Figure 17.2). Broadly, the SLVIA Study Area is formed by the Irish Sea and the Irish coastline between Malahide in the north and Carnsore Point in the south.

Regional Seascape Character Assessment for Ireland

17.6.6.6 The baseline description of the seascape of the SLVIA Study Area is informed by the Regional Seascape Character Assessment for Ireland (Marine Institute, 2020), which covers the coastline and seascape of the SLVIA Study Area.

17.6.6.7 The Regional Seascape Character Assessment for Ireland identifies five RSCAs within the SLVIA Study Area. These RSCAs are shown on Volume III, Appendix 17.5: Figure 17.3. The RSCAs that are scoped in to the SLVIA are identified through the preliminary assessment carried out in Volume III, Appendix 17.2.

17.6.6.8 The Array Area is located within RSCA 13: South East Irish Sea. This RSCA stretches along the coastline of the majority of the SLVIA Study Area, between Wicklow Head and Carnsore Point. An overview of the RSCA is provided in the assessment:

17.6.6.9 "*This Seascape Character Area (SCA) comprises a portion of the coastline of east Wexford and Wicklow and extends from Carnsore Point in the south, to 12 nautical miles offshore and ends at Wicklow Head. It comprises a variety of SCTs, namely SCT 7 (Broad estuarine bays and complex low plateau and cliff coastline), SCT 8 (Low lying and estuarine coastal plain with long, narrow sandy beaches) and offshore SCT 12 (Shallow offshore waters).*

17.6.6.10 *"The SCA forms the juncture between the Celtic and Irish Seas; the imaginary boundary between St George's Channel extending from Carnsore Point to St David's Head, Pembrokeshire. Ireland's most southeasterly island Tuskar Rock is within this SCA.*

17.6.6.11 *"The coastal form comprises an interplay of broad, moderate scale bays and estuaries. Long, relatively narrow beaches are a key characteristic in this SCA and are punctuated by Carnsore Point, Cahore Point, Kilmichael Point and Wicklow Head. From Raven Point north to Cahore Point a spectacular series of strands are present including Curracloe, Ballinesker and Morriscastle Beach.*

17.6.6.12 *"The hinterland is primarily agricultural with tillage and pasture; holiday homes, caravan parks associated with the beaches are present particularly around Curracloe and Courtown. Coastal and inland topography is generally low in elevation along this SCA, even at headland such as Greenore Point (22mOD) and Cahore Point (35mOD). Tara Hill (253mOD), to the Northeast of Gorey, is the only noticeable elevated feature along the coastal plain. The rocks at Greenore Point, south of Rosslare are the oldest bedrock in the south east of Ireland, and are associated with the Avalonia continent, when the Iapetus Ocean was in existence around 600 million years ago."*

17.6.6.13 The northernmost part of the SLVIA Study Area is located within RSCA 16: North Eastern Irish Sea Islands and Beaches. This is an area of shallow coastline which comprises low-lying estuarine costal plan, long narrow sandy beaches, broad estuarine bays and complex low plateau, and cliff coastline. To the south of RSCA 16: North Eastern Irish Sea Islands and Beaches is RSCA 15: Dublin Bay. This is a relatively small RSCA, and "*comprises the distinctive horseshoe bay of Dublin, framed by the elevated quartzite headland of Howth Head, to the north, and Killiney Hill, an elevated granite head to the south*". The seascape character of this area is described as "*a busy and active area, with the busiest port in the country and the capital city*".

17.6.6.14 Further south, between RSCA 15: Dublin Bay and RSCA 13: South East Irish Sea, is RSCA 14: Irish Sea Sandbanks & Broad Bays. This area stretches from Killiney Bay to Wicklow Head, and is differentiated from the neighbouring RSCAs by "*the changing geology, increased elevation and ever greater influence of the Dublin region as seen through a greater urbanisation and modification of the coast*". At the southern extent of the SLVIA Study Area there is a small area within RSCA 12: Celtic Sea Bays and Beaches.

Seascape Receptors

17.6.6.15 As described in Section 17.6.6.8 above, the Array Area is located within the South East Irish Sea (RSCA 13). The offshore cable corridor is also located within this RSCA. As shown in Volume III, Appendix 17.5, Figures 17.9.1 and 17.9.2, high-level theoretical visibility of Project Design Option 1 and 2 will also be available from RSCA 14: Irish Sea Sandbanks and Broad Bays. RSCAs identified within the preliminary assessment (Volume III, Appendix 17.2) as requiring detailed assessment are summarised in Table 17.7.

Table 17.7: Seascape receptors scoped in to SLVIA

Type of receptor	Seascape receptors scoped in to SLVIA 2
RSCA	RSCA 13: South East Irish Sea RSCA 14: Irish Sea Sandbanks and Broad Bays

17.6.6.1 A description of the baseline seascape character and sensitivity to change for each of the above RSCAs that are identified in the preliminary assessment (Volume III, Appendix 17.2) as requiring detailed assessment, is set out in Section 17.10.2.

17.6.7 Landscape Baseline

Regional Landscape Character

17.6.7.1 Landscape character principally applies to terrestrial areas lying to the landward side of the high-water mark. There is currently no national-level landscape character assessment within Ireland. The SLVIA therefore focusses on landscape character as defined at a county level by local authorities across the SLVIA Study Area. All County Councils within the SLVIA Study Area, with the exception of Dublin City, have published Landscape Character Assessments, as referenced in Table 17.3. Landscape Character Areas (LCAs) across the SLVIA Study Area are shown in Volume III, Appendix 17.5: Figures 17.4 – 17.4iii.

17.6.7.2 These provide a county-wide, consistent landscape character framework, and the LCAs defined in these county-wide scale assessments are considered to be of an appropriate scale to allow assessment of the effects of the Proposed Development over the relatively wide SLVIA Study Area, at a sufficient level of detail.

17.6.7.3 The LCAs within these landscape character assessments that are scoped in to the SLVIA are identified in Table 17.8 and in the preliminary assessment in Volume III, Appendix 17.2, as those that have potential to be significantly affected by the Proposed Development.

Table 17.8: Landscape character receptors within ZTV

Type of receptor	Landscape character receptors scoped in to SLVIA
LCA	The Mountain Uplands (Wicklow) The Bray Mountains Group / Northern Hills (Wicklow) Northern Coastal Area (Wicklow) Southern Coastal Area (Wicklow) Uplands (Wexford) Lowland (Wexford) Coastal (Wexford)

Landscape Designations

17.6.7.4 Certain landscapes found within the SLVIA Study Area have been designated or defined due to their scenic qualities or historic landscape qualities as shown in Volume III, Appendix 17.5: Figure 17.4. The ZTV has been used to identify landscape designations and defined areas within the SLVIA Study Area that may have visibility of the Proposed Development, as shown in Volume III, Appendix 17.5, Figures 17.10.1 – 17.10.2iii. The landscape designations that are scoped in to the SLVIA are identified in Table 17.9 and in the preliminary assessment in Volume III, Appendix 17.2. There are two national level landscape designations within the SLVIA Study Area, the WMNP, and the Bray Head Special Amenity Area Order (SAAO).

Table 17.9: Landscape designations within ZTV

Type of receptor	Landscape designation scoped in to SLVIA
National Park	Wicklow Mountains
Special Amenity Area Order (SAAO)	Bray Head

17.6.8 'Do nothing' scenario

17.6.8.1 Annex IV of the EIA Directive sets out the information required to be included in an EIAR. This includes "a description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge". In the event that the Proposed Development does not proceed, an assessment of the future baseline conditions has been carried out and is described within this section.

17.6.8.2 The baseline character of the landscape in the SLVIA Study Area is likely to change in the future as a result of the effects of climate change, land use policy, environmental improvements and development pressures, regardless of whether ABWP2 progresses to construction or not.

17.6.8.3 A range of policies impact on the management of the landscape, ranging from international obligations, national policy and regulation, through to community strategies and development frameworks. Landscape planning policies covering designated landscapes within the SLVIA Study Area generally seek to conserve and enhance the natural beauty of the area, while recognising the need to adapt to inevitable change over time, and the need to respond to development pressures that reflect the changing needs of society.

17.6.8.4 There is overwhelming evidence that global climate change, influenced by the human use of fossil fuels, raw materials and intensive agriculture, is occurring (Intergovernmental Panel on Climate Change (IPCC) 2014). Any notable change in climate is likely to present potential changes to the coastline of the SLVIA Study Area in a variety of ways. The legislative framework already exists to ensure that no net loss of internationally important habitat occurs, but there remains a need to increase understanding of the potential effects of climate change on the characteristic landscapes of the SLVIA Study Area and to develop longer term strategies that will mitigate any adverse effects of climate change.

17.6.8.5 One of the key drivers for change within the SLVIA Study Area that is likely to change the current baseline scenario is the need for further renewable energy infrastructure development, including offshore wind farm development. The Climate Action Plan (Government of Ireland, 2024) (CAP 2024) includes a national target of at least 5GW of generating capacity from offshore wind by 2030, much of which is proposed to be sited in the Irish Sea. CAP 2024 aims to close the emissions gap and sets ambitious climate action targets for delivery on Ireland's climate goals, which will inevitably result in changes to landscape and seascape character in order accommodate infrastructure projects capable of meeting this target.

17.6.8.6 Further development pressures which may change the baseline conditions, include suburbanisation and increased tourist development influences, particularly around the coastal landscapes and established coastal towns within the SLVIA Study Area, which have potential to increase the developed influence and reduce perceived naturalness of the coastline.

17.6.9 Data limitations

17.6.9.1 There are some data limitations relating to seascape, landscape and visual amenity, however these do not affect the robustness of this assessment. The identified gaps are considered to be limited and will not affect the assessments of likely significance assessed for relevant receptors.

17.6.9.2 There are limitations in the production of photomontage and wireline visualisations (Volume III, Appendix 17.3, Figure 17.19.1 to Figure 17.47.1 and Volume III, Appendix 17.4 Figure 17.19.2 to Figure 17.47.2) and ZTVs (Volume III, Appendix 17.5, Figure 17.6.1 and 17.6.2) as assessment tools, and limitations in the accuracy of digital terrain model (DTM) data, which are described in Volume III, Appendix 17.1: SLVIA Methodology. The use of detailed terrain models (Ordnance Survey (OS) Ireland 10m resolution)), production of visualisations to recognised standard and field survey assessment of impacts minimises these limitations.

17.6.9.3 Effects have not been downgraded either in magnitude or significance due to variations as a result of weather/visibility and how frequently/infrequently the effects will be experienced. Effects are based on a maximum theoretical visibility scenario with clear meteorological visibility conditions, and need to be considered in the context of the limited time effects will actually occur.

17.6.9.4 As described in full in Section 17.12, there are limitations with regards projects included in the cumulative assessment, particularly those at Scoping stage at the time of writing, which include Dublin Bay and Codling Wind Park. Information sharing has taken place between the Developer and the Phase 1 projects which are included in the cumulative assessment in order to allow a greater degree of certainty in the cumulative assessment. Information received directly from these projects has therefore formed the basis for the assessment of cumulative effects, and is the most up to date information available at the time of writing this assessment.

17.7 Key parameters for assessment

17.7.1 Project Design Options and parameters

17.7.1.1 The assessment of significance of effects has been carried out on both of the two discrete Project Design Options detailed in Volume II, Chapter 4, Description of Development. This approach has allowed for a robust and full assessment of the Proposed Development.

17.7.1.2 The two Project Design Options and parameters relevant to each potential impact are detailed in Table 17.10 and Table 17.11.

Table 17.10: Project design parameters and impacts assessed – Project Design Option 1

Potential impact	Phase			Project design option 1
	C	O	D	
Seascape impacts Landscape impacts Landscape designation impacts Visual impacts	✓	✓	✓	**Construction phase** Installation of 56 offshore WTGs (with a tip height of 273 m above Lowest Astronomical Tide (LAT) and rotor diameter of 236 m) and two OSPs (of 53 m in height above LAT (excluding antennae) and 46 m in length and 33.5 m in width above LAT) on monopile foundations, located at the northern and southern extents of the Array Area, with an allowance for up to 100m micrositing: • Movement of boats to and from the Array Area undertaking survey and construction operations; • Boats, cranes and other equipment in and around the Array Area; • Views of turbines and other structures under construction; and • Movement of boats associated with offshore export cable laying to Landfall. **Operational and maintenance phase** Installation of 56 offshore WTGs (with a tip height of 273 m above LAT and rotor diameter of 236 m) and two OSPs on monopile foundations, located at the northern and southern extents of the Array Area: • Introduction of WTGs within open sea; • Introduction of associated structures, including OSPs; and • Boat movements to and from the Array Area. **Decommissioning** As above for construction phase, though in reverse with structures being removed. **Lighting and Marking** Detailed proposals can be found in the Lighting and Marking Plan (LMP) (Volume III, Appendix 25.6). There are two scenarios assessed for the lighting and marking, relating to guidance issued by the Irish Aviation Authority (2015) and the Civil Aviation Authority (2016). As described in the LMP, the IAA have indicated during consultation that there may be intentions to align with the approach taken in the wider EU or in the UK. Note that the assessment of effects arising from visible lighting requirements (aviation and marine navigational) of the Proposed Development are therefore based on the lighting specified to

Potential impact	Phase C O D	Project design option 1
		accord within the active IAA 2015 guidance (white aviation lighting scenario), however a further assessment is also made, which considers the potential effects of aviation lighting specified to accord with the Air Navigation Order 2016 (red aviation lighting scenario). • White aviation lighting scenario (IAA, 2015) • Type A high intensity lights mounted on the nacelle roof of 14 SPS. • White colour with a flash rate of 40~60 flashes per minute (fpm), all lights across the wind farm should flash in synchronisation. • Effective intensity at night of 2,000 cd (with background luminance below 50cd/m²). • Cover 360º visibility in azimuth. • Light cut off so that practically no light will be emitted below horizontal. • Red aviation lighting scenario (UK Air Navigation Order 2016) • All WTGs fitted with one medium intensity 2,000cd steady red light positioned on the nacelle roof. • Lights fitted so as to show when displayed in all directions. • Angle of the plane of the beam of peak intensity emitted by the light elevated to between three and four degrees above the horizontal plane; • Not more than 10% of the minimum peak intensity specified for a light of this type is to be visible at a depression of 1.5 degrees or more below the horizontal plane. • If visibility in all directions from every WTG is more than 5 km the light intensity may be reduced to not less than 10% of the minimum peak intensity specified for a light of this type (i.e. not less than 200cd). • Marine navigational lighting will also be present, and will not differ based on the aviation lighting scenario: • SPS fitted with all round yellow flashing lights with nominal 5 nautical miles visibility, with SPS spaced along the periphery of Proposed Development at intervals of no more than 3 nautical miles. • Yellow lights will be fixed to all WTGs with nominal 5 nautical miles visibility. • Lights to be visible through 360° in azimuth and have a vertical divergence of 5° above and below the horizontal. • Located not less than 6m and not more than 30m above Highest Astronomical Tide (HAT);

Table 17.11: Project design parameters and impacts assessed - Project Design Option 2

Potential impact	Phase			Project design option 2
	C	O	D	
Seascape impacts	✓	✓	✓	**Construction phase** Installation of 47 offshore WTGs (with a tip height of 287 m above LAT and rotor diameter of 250 m) and two OSPs (of 53 m (excluding antennae) x 46 m x 33.5 m above LAT) on monopile foundations, located at the northern and southern extents of the Array Area, with an allowance for up to 100m micrositing: • Movement of boats to and from the Array Area undertaking survey and construction operations; • Boats, cranes and other equipment in and around the Array Area; • Views of turbines and other structures under construction; and • Movement of boats associated with offshore export cable laying to Landfall. **Operational and maintenance phase** Installation of 47 offshore WTGs (with a tip height of 287 m above LAT and rotor diameter of 250 m) and two OSPs on monopile foundations, located at the northern and southern extents of the Array Area: • Introduction of WTGs within open sea; • Introduction of associated structures, including OSPs; and • Boat movements to and from the Array Area. **Decommissioning** As above for construction phase, though in reverse with structures being removed. **Lighting and Marking** Detailed proposals can be found in the Lighting and Marking Plan (LMP) (Volume III, Appendix 25.6). There are two scenarios assessed for the lighting and marking, relating to guidance issued by the Irish Aviation Authority (2015) and the Civil Aviation Authority (2016). As described in the LMP, the IAA have indicated during consultation that there may be intentions to align with the approach taken in the wider EU or in the UK. Note that the assessment of effects arising from visible lighting requirements (aviation and marine navigational) of the Proposed Development are therefore based on the lighting specified to
Landscape impacts				
Landscape designation impacts				
Visual impacts				

accord within the active IAA 2015 guidance (white aviation lighting scenario), however a further assessment is also made, which considers the potential effects of aviation lighting specified to accord with the Air Navigation Order 2016 (red aviation lighting scenario).

- White aviation lighting scenario (IAA, 2015)
- Type A high intensity lights mounted on the nacelle roof of 14 SPS.
- White colour with a flash rate of 40~60 flashes per minute (fpm), all lights across the wind farm should flash in synchronisation.
- Effective intensity at night of 2,000 cd (with background luminance below 50cd/m²).
- Cover 360º visibility in azimuth.
- Light cut off so that practically no light will be emitted below horizontal.

- Red aviation lighting scenario (UK Air Navigation Order 2016)
- All WTGs fitted with one medium intensity 2,000cd steady red light positioned on the nacelle roof.
- Lights fitted so as to show when displayed in all directions.
- Angle of the plane of the beam of peak intensity emitted by the light elevated to between three and four degrees above the horizontal plane;
- Not more than 10% of the minimum peak intensity specified for a light of this type is to be visible at a depression of 1.5 degrees or more below the horizontal plane.
- If visibility in all directions from every WTG is more than 5 km the light intensity may be reduced to not less than 10% of the minimum peak intensity specified for a light of this type (i.e. not less than 200cd).
- Marine navigational lighting will also be present, and will not differ based on the aviation lighting scenario:
- SPS fitted with all round yellow flashing lights with nominal 5nautical miles visibility, with SPS spaced along the periphery of Proposed Development at intervals of no more than 3 nautical miles.
- Yellow lights will be fixed to all WTGs with nominal 5 nautical miles visibility.
- Lights to be visible through 360° in azimuth and have a vertical divergence of 5° above and below the horizontal.
- Lights positioned on or immediately above the upper rail of the tower platform approximately 15 metres above Mean Sea Level. Four lights situated at the corners of the tower platform.

17.7.2 Impacts scoped out of the assessment

17.7.2.1 On the basis of the baseline environment and the description of development outlined in Volume II, Chapter 4: Description of Development, a number of impacts are proposed to be scoped out of the assessment for SLVIA. These impacts are outlined, together with a justification for scoping them out, in Table 17.12.

Table 17.12: Impacts scoped out of the assessment for SLVIA

Potential impact	Justification
Effects (daytime) of the construction, operation and decommissioning of the offshore elements of the Proposed Development on seascape, landscape and visual receptors outside the 60 km radius Study Area and / or outside the ZTV.	The 60 km radius SLVIA Study Area is defined to an outer limit within which significant effects could occur, based on the criteria described in Section 17.4.1.2. Significant effects will not occur beyond 60 km due to the limited changes to views arising from the Proposed Development at distances of over 60 km. Additionally, where landscape and visual receptors fall outside the ZTV, there is no opportunity for significant effects.
Physical effects of the construction, operation and decommissioning of the offshore elements of the Proposed Development on landscape character within the Study Area.	No potential for significant effects on landscape receptors due to the Proposed Development's offshore location. Due to the offshore location of the WTGs and the offshore Cable Corridor and Working Area , the Proposed Development will only affect the perceived character and qualities of the landscape, which is considered as an indirect effect. No physical attributes that define landscape character or special qualities of designated landscapes will be changed.
Impacts of offshore cable route during construction and operation.	During construction, effects on seascape, landscape and visual receptors are unlikely to be significant, due to the nature of the offshore export cable route; and the distant visibility of related activity offshore within an expansive seascape context. The sporadic nature of related above-sea construction activity means its effects will be short-term and temporary. Related above-sea construction activity is mainly related to the movement of sea vessels, which are an established component of the baseline seascape and views of it. Long-range visibility of this activity further reduces its impact. During operation, no potential for significant effects on seascape, landscape and visual receptors arising from the offshore Cable Corridor and Working Area, due to its location below the sea surface and its lack of visibility.

17.8 Impact assessment methodology

17.8.1 Overview

17.8.1.1 The SLVIA has followed the methodology set out in Volume II, Chapter 5: EIA Methodology. Specific to the SLVIA, the following guidance documents have informed the approach and method taken:

- Landscape Institute and IEMA (2013) - Guidelines for Landscape and Visual Impact Assessment: Third Edition (GLVIA3);
- Landscape Institute (2019). Visual Representation of Development Proposals;
- Landscape Institute (2021). Landscape Value and Valued Landscapes. A Technical Guidance Note;

- Natural England (2012). An Approach to Seascape Character Assessment;
- Natural England (2014). An Approach to Landscape Character Assessment;
- NatureScot (2017) - Siting and Designing Wind farms in the Landscape, Guidance (Version 3) (herein referred to as 'NatureScot Siting and Designing');
- NatureScot (2017) - Visual Representation of Wind farms, Guidance (Version 2.2) (herein referred to as 'NatureScot Visual Representation');
- The Planning Inspectorate (2019) – Advice Note 17: Cumulative Effects Assessment;
- Scottish Natural Heritage (NatureScot) (2012). Assessing the Cumulative Impact of Onshore Wind Energy Developments.

17.8.1.2 This section sets out the scope and methodology for the EIAR assessment for seascape, landscape and visual receptors. The scope and methodology for seascape, landscape and visual receptors has been developed as the Proposed Development design has evolved and responds to feedback received to date as set out in Section 17.3.

17.8.1.3 The methodology for the assessment of seascape, landscape and visual impacts of the Proposed Development (consisting of WTGs, their foundations, array cables and offshore export cables) is set out in full in Volume III, Technical Appendix 17.1 SLVIA Methodology. An overview is provided in the following sections.

17.8.1.4 The assessment has been undertaken in accordance with the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3) (Landscape Institute and IEMA, 2013) and other best practice guidance. An overview of the SLVIA process is provided here and illustrated diagrammatically in Plate 17.1.

17.8.1.5 The SLVIA assesses the likely effects of the construction, operation and maintenance, and decommissioning of the offshore elements of the Proposed Development on the seascape, landscape and visual resource, encompassing effects on seascape / landscape character, designated landscapes, visual effects and cumulative effects.

17.8.1.6 A full and proportionate level of assessment has been undertaken. The level of assessment may be 'preliminary' (requiring desk-based data analysis) or 'detailed' (requiring site surveys and investigations in addition to desk-based analysis). A preliminary assessment of all seascape, landscape and visual receptors is undertaken within Appendix 17.2 of the EIAR, using desk-based information and ZTV analysis (Volume III, Appendix 17.5 Figure 17.6.1 to Figure 17.11.2). The preliminary assessment identifies which seascape, landscape and visual receptors are unlikely to be significantly affected, which are subject to a preliminary assessment, and those receptors that are more likely to be significantly affected by the offshore elements of the Proposed Development, which require a 'detailed assessment'. A 'detailed assessment' approach is undertaken for seascape, landscape and visual receptors/effects that are identified in the preliminary assessment as requiring detailed assessment. This detailed assessment may include primary baseline data collection (for example through site surveys), quantitative and qualitative assessment methodologies, and modelling such as ZTV analysis (Figure 17.6.1 to Figure 17.11.2) and wireline / photomontage visualisations (Figure 17.16.1 – 17.44.1 (Option 1) and Figure 17.16.2 – 17.44.2 (Option 2).

17.8.1.7 The seascape, landscape and visual assessment unavoidably involves a combination of quantitative and qualitative assessment and wherever possible a consensus of professional opinion has been sought through consultation, internal peer review, and the adoption of a systematic, impartial, and professional approach.

17.8.1.8 The SLVIA is based on the design parameters described in Volume III, Chapter 4: Description of Development, and the Project Design Options identified as appropriate for the SLVIA as described in Section 17.7.

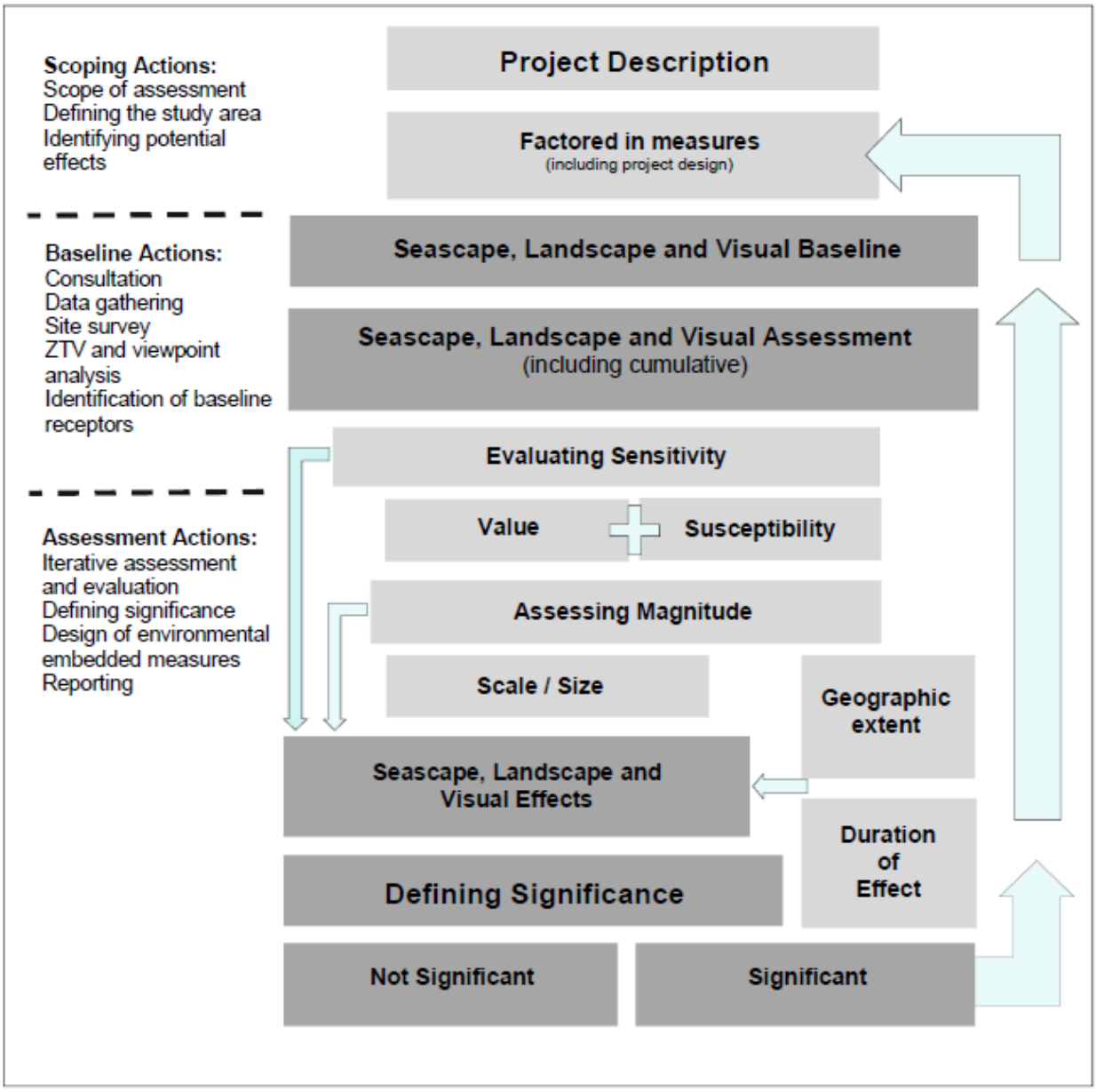

Plate 17.1: Overview of approach to SLVIA

17.8.2 Impact assessment criteria

17.8.2.1 The seascape, landscape and visual effects (and whether they are significant) are determined by an assessment of the 'sensitivity' of each receptor or group of receptors and the 'magnitude of change' that would result from the Proposed Development.

17.8.2.2 The evaluation of sensitivity takes account of the value and susceptibility of the receptor to the Proposed Development. This is combined with an assessment of the magnitude of change which takes account of the size and scale of the proposed change. By combining assessments of sensitivity and magnitude of change, a level of seascape, landscape or visual effect can be evaluated and determined. The resulting level of effect is described in terms of whether it is significant or not significant, and the geographical extent, duration and the type of effect is described as either direct or indirect; temporary or permanent (reversible); cumulative; and beneficial, neutral or adverse.

SENSITIVITY

17.8.2.3 The sensitivity of seascape, landscape and visual receptors is an expression of the combination of the judgements made about the value of that receptor and its susceptibility to the specific type of change or the development proposed. Landscape value is the 'inherent' component, which is independent of the development proposal, while the other component, susceptibility, is development specific.

17.8.2.4 The value of a seascape, landscape or view receptor is a reflection of the value that society attaches to that seascape, landscape or view. There are a range of factors that are used to establish value but the presence of designations at national or local levels often reflects the level of value or importance they signify to society. The range of factors that can be considered when identifying landscape value include natural heritage, cultural heritage, landscape condition, associations, distinctiveness, recreational, perceptual (scenic), perceptual (wildness and tranquillity) and functional factors (Landscape Institute, 2021).

17.8.2.5 The susceptibility of a seascape or landscape to change is a reflection of its ability to accommodate the changes that will occur as a result of the addition of the Proposed Development, based on its characteristics, robustness, scale, topography, openness/enclosure, perceptual qualities and the associations between the landscape/seascape receptor and the Proposed Development. The susceptibility of visual receptors (people) relates mainly to the activity of the viewer (residents, motorists, walkers etc) and the experience of the viewer - the extent to which attention or interest may be focused on the view and visual amenity, which combine to influence how susceptible viewers are to the potential effects of the Proposed Development.

17.8.2.6 An overall assessment of the sensitivity of each seascape, landscape and visual receptor has been made by combining the assessment of the value of the receptor and its susceptibility to change. In SLVIA, sensitivity is specific to the Proposed Development and to the location in question. An overall level of sensitivity has been applied for each visual receptor or view – high, medium-high, medium, medium-low or low. These levels are not defined as such, however the basis for sensitivity assessments has been made clear using evidence and professional judgement in the evaluation of each receptor, with reference to criteria that tend towards higher or lower sensitivity levels as set out in Volume III, Technical Appendix 13.1: SLVIA Methodology.

MAGNITUDE

17.8.2.7 This section describes the criteria applied in this chapter to assign values to the magnitude of potential impacts and the sensitivity of the receptors. The terms used to define magnitude and sensitivity are based on those which are described in further detail in Volume II, Chapter 5: EIA Methodology of the EIAR.

17.8.2.8 The magnitude of change affecting seascape, landscape and visual receptors is an expression of the scale of the change that will result from the Proposed Development and is dependent on a number of variable regarding the size or scale of the change that will arise. The geographic extent over which the change will be experienced is also assessed, which is distinct from the size or scale of change. Magnitude levels for the SLVIA are defined in Table 17.13.

Table 17.13: Definition of terms relating to the magnitude of an impact

Magnitude	Definition
High	Seascape / landscape: The Proposed Development will result in a large-scale change and major loss of key landscape elements / characteristics or the addition of large scale or numerous new and uncharacteristic features or elements that will affect the

Magnitude	Definition
	seascape/landscape character and the special landscape qualities / integrity of a landscape designation.
	Visual: The Proposed Development will result in a high level of alteration to the baseline view, forming the prevailing influence and/or introducing elements that are substantially uncharacteristic in the existing view. The addition of the generation assets of the Proposed Development will result in a high change, loss or addition to the baseline view.
Medium-high	Intermediate rating with combination of criteria from high or medium magnitude.
Medium	Seascape/landscape: The Proposed Development will result in a medium scale change and moderate loss of some key landscape elements / characteristics or the addition of some new medium scale uncharacteristic features or elements that could partially affect the seascape/landscape character and the special landscape qualities / integrity of a landscape designation.
	Visual: The Proposed Development will result in a medium level of alteration to the baseline view, forming a readily apparent influence and/or introducing elements that are potentially uncharacteristic in the existing view. The addition of the generation assets of the Proposed Development will result in a medium change, loss or addition to the baseline view.
Medium-low	Intermediate rating with combination of criteria from medium or low magnitude.
Low	Seascape/landscape: The Proposed Development will result in a small-scale change and minor loss of a few landscape elements / non key characteristics, or the addition of some new small-scale features or elements of limited characterising influence on seascape / landscape character / designations.
	Visual: The Proposed Development will result in a low level of alteration to the baseline view, providing a slightly apparent influence and/or introducing elements that are characteristic in the existing view. The addition of the generation assets of the Proposed Development will result in a low change, loss or addition to the baseline view.
Negligible	Seascape/landscape: The Proposed Development will result in a very small-scale change that may include the loss or addition of some landscape elements of limited characterising influence. The seascape/landscape characteristics and character will experience negligible change.
	Visual: The Proposed Development will result in a negligible alteration to the existing view. If visible it may form a barely discernible influence and/or introduce elements that are substantially characteristic in the baseline view. The addition of the generation assets of the Proposed Development will result in negligible change, loss or addition to the baseline view.

SIGNIFICANCE OF EFFECT

17.8.2.9 The significance of the effect upon the seascape, landscape and visual resource is determined by correlating the magnitude of change and the sensitivity of the receptor. The particular method employed for this assessment is presented in Table 17.14. Where a range of significance of effect is presented in Table 17.14, the final assessment for each effect is based upon expert judgement.

17.8.2.10 The matrix in Table 17.14 is used as a guide to help inform the threshold of significance when combining sensitivity and magnitude to assess significance. On this basis potential impacts are assessed as of negligible, minor, moderate and major. In those instances where there would be no effect, the magnitude has been recorded as 'Zero' and the level of effect as 'None'.

17.8.2.11 For the purposes of this assessment, any effects with a significance level of major and major/moderate have been deemed significant in EIA terms (dark shaded boxed in Table 17.14). 'Moderate' levels of effect (indicated in mid-grey in Table 17.14) have the potential, subject to the assessor's professional judgement, to be considered as significant or not significant, depending on the sensitivity and magnitude of change factors evaluated. These assessments are explained as part of the assessment, where they occur. Significance can therefore occur at a range of levels depending on the magnitude and sensitivity, however in all cases, a significant effect is considered more likely to occur where a combination of the variables results in the Proposed Development having a defining effect on the landscape/seascape character or view. Definitions are not provided for the individual categories of significance shown in the matrix and the reader should refer to the detailed definitions provided for the factors that combine to inform sensitivity and magnitude.

17.8.2.12 Effects assessed as being either moderate-minor, minor negligible level are assessed as non-significant (white shaded boxes in Table 17.14).

17.8.2.13 In line with the emphasis placed in GLVIA3 upon the application of professional judgement, an overly mechanistic reliance upon a matrix is avoided through the provision of clear and accessible narrative explanations of the rationale underlying the assessment made for each landscape and visual receptor.

Table 17.14: Significance of effect matrix

		Magnitude of Change					
		High	**Medium-high**	**Medium**	**Medium-low**	**Low**	**Negligible**
Sensitivity	**High**	Major (significant)	Major (significant)	Major-moderate (significant)	Moderate (significant or not significant)	Moderate-minor (not significant)	Minor (not significant)
	Medium-high	Major (significant)	Major-moderate (significant)	Moderate (significant or not significant)	Moderate (significant or not significant)	Moderate-minor (not significant)	Minor (not significant)
	Medium	Major-moderate (significant)	Moderate (significant or not significant)	Moderate (significant or not significant)	Moderate-minor (not significant)	Minor (not significant)	Minor (not significant)
	Medium-low	Moderate (significant or not significant)	Moderate (significant or not significant)	Moderate-minor (not significant)	Minor (not significant)	Minor (not significant)	Negligible (not significant)
	Low	Moderate-minor (not significant)	Moderate-minor (not significant)	Minor (not significant)	Minor (not significant)	Negligible (not significant)	Negligible (not significant)

GEOGRAPHICAL EXTENT

17.8.2.14 The geographic extent over which the seascape/landscape and visual effects will be experienced is also assessed, which is distinct from the size or scale of effect. This evaluation is not combined in the assessment of the level of magnitude, but instead expresses the extent of the receptor that will experience a particular magnitude of change and therefore the geographical extents of the significant and not significant effects.

17.8.2.15 The extent of the effects varies depending on the specific nature of the Proposed Development and is principally assessed through analysis of the extent of perceived changes through visibility of the WTGs.

DURATION AND REVERSIBILITY

17.8.2.16 The duration and reversibility of seascape, landscape and visual effects is based on the period over which the Proposed Development is likely to exist and the extent to which it will be removed and its effects reversed at the end of that period. The Rehabilitation Schedule provides details of the rehabilitation activities which will be undertaken following the operational phase of the Proposed Development. This will involve removal of the WTGs and OSPs, and for the purposes of the SLVIA, the Proposed Development is therefore considered to be reversible. The methodology used for the SLVIA does not include duration and reversibility as part of magnitude of change, as there is potential that the reversibility aspect could alter or reduce potentially significant effects even though they are long-term. The duration and reversibility of the effects is instead determined separately in relation to the assessed effects.

17.8.2.17 Long-term, medium-term and short-term seascape / landscape effects are defined as follows:

- Long-term – more than 10 years;
- Medium-term – six to 10 years; and
- Short-term – one to five years.

17.8.2.18 Duration and reversibility are not incorporated into the assessment of magnitude of change, but are stated separately in relation to the assessed effects (i.e. as short / medium / long-term and temporary / permanent) and are considered as part of drawing conclusions about significance, combining with other judgements on sensitivity and magnitude, to allow a final judgement to be made on whether each effect is significant or not significant.

NATURE OF EFFECTS

17.8.2.19 Generally, in the development of 'new' wind farms, a precautionary approach has been adopted, which assumes that significant landscape and visual effects are weighed on the adverse side of the planning balance. Unless it is stated otherwise, the effects considered in the assessment have been considered to be adverse. Beneficial or neutral effects may, however, arise in certain situations and are stated in the assessment, where relevant.

VISUAL REPRESENTATION METHODOLOGY

17.8.2.20 The methodology for the production of visual representations (photomontages and ZTVs) of the Proposed Development is set out in full in Volume III: Appendix 17.1.

17.8.2.21 The visual representations presented in Volume III, Appendix 17.3, Figures 17.19.1 to 17.47.1 for Design Option 1 and Volume III, Appendix 17.4 Figures 17.19.2 to Figure 17.47.2 for Design Option 2 have been produced in accordance with Visual Representation of Wind Farms (NatureScot, 2017) and Visual Representation of Development Proposals (TGN 06/19) (Landscape Institute, 2019).

17.8.2.22 The ZTVs in Figures 17.6.1 to 17.11.2ii, and 17.14.1 to 17.14.2, have also been produced in line with guidance in Visual Representation of Wind Farms (NatureScot, 2017) and are generated using Geographic Information System (GIS) software (ESRI ArcGIS Pro) to model the theoretical visibility of the Proposed Development.

17.8.3 Factored in measures

17.8.3.1 The Project Design Options set out in Volume II, Chapter 4: Description of Development includes a number of designed-in measures and management measures (or controls) which have been factored into the Proposed Development and are committed to be delivered by the Developer as part of the Proposed Development.

17.8.3.2 These factored-in measures are standard measures applied to offshore wind development, including lighting and marking of the Proposed Development, use of 'soft-starts' for piling operations etc, to reduce the potential for impacts. Factored-in measures relevant to the assessment on SLVIA are presented in Table 17.15. These measures are integrated into the description of development and have therefore been considered in the impact assessment (i.e. the determination of magnitude and therefore significance assumes implementation of these measures). These measures are considered standard industry practice for this type of development. This approach is in line with EPA guidance which states that 'in an EIAR it may be useful to describe avoidance measures that have been integrated into the proposed proposal' (EPA, 2022).

Table 17.15: Factored in measures

Factored in measure	Justification
Adherence to a Lighting and Marking Plan (LMP) (Volume III, Appendix 25.6)	The LMP confirms compliance with legal requirements with regards to shipping, navigation and aviation marking and lighting.
Adherence to a Rehabilitation Schedule (Volume III, Appendix 4.1).	The Rehabilitation Schedule outlines measures and programme for the decommissioning of the Proposed Development.
Promulgation of information to the IAA	The IAA will be informed of the locations, heights and lighting status of the wind turbines, including estimated and actual dates of construction and the maximum heights of any construction equipment to be used, prior to the start of construction, to allow inclusion on aviation charts and in the IAA Integrated Aeronautical Information Package (IAIP).
Layout design	The layout of WTGs and substation(s) have been designed in such a way as to minimise the impacts on Seascape, Landscape, Visual Impacts Assessment (SLVIA) where possible.
Charting of all structures associated with the Proposed Development on relevant nautical and electronic charts (Volume III, Appendix 25.7: Vessel Management Plan)	To ensure third party vessels are aware of the Proposed Development and associated locations to facilitate passage planning and minimise allision risk
Aviation lighting (Volume III, Appendix 25.6: LMP)	Aviation lighting[1] will include WTG mounted lights of up to 2,000 Candela (Cd) displayed at night only. Dimmable to 200 Cd when visibility is greater than 5 km. White light fittings will be fully cut off so that practically no light will be emitted below the horizontal.
The Developer confirms and commits that it will not carry out any works in respect of the Proposed Development under the planning permission (if granted) at the same time as any activities the subject of	The Developer was granted a Foreshore Licence (FS007339) for Site Investigations (associated with the Proposed Development) from the Minister for Housing, Local Government and Heritage in May 2022. The Developer confirms and commits that it will not carry out any works in respect of the Proposed Development under the planning permission (if granted) at the same time as any

[1] With respect to aviation lighting, Ministers and planning authorities are using planning conditions to manage effects. It is recognised that the EIA Report should not necessarily specify one mitigation option with regards to aviation lighting, as these are evolving rapidly, and developers need flexibility to utilise the most appropriate mitigation. Conditions provide some flexibility for developers to identify the most appropriate mitigation option(s) post consent and prior to construction, and to agree these with the relevant decision maker.

Factored in measure	Justification
the Foreshore Licence for Site Investigations (FS007339).	activities the subject of the Foreshore Licence for Site Investigations (FS007339) being carried out. As such there is no temporal overlap between the activities consented in this Foreshore Licence and the Proposed Development and there will be no potential for cumulative effects.
The Developer confirms and commits that it will not carry out any works in respect of the Proposed Development under the planning permission (if granted) at the same time as any activities the subject of the Foreshore Licence Application for Site Surveys FS007555 (should a licence be granted) are being carried out.	The Developer submitted a Foreshore Licence Application for Site Surveys to the Minister for Housing, Local Government and Heritage in April 2023 (FS007555) and this application is pending determination. The Developer confirms and commits that it will not carry out any works in respect of the Proposed Development under the planning permission (if granted) at the same time as any activities the subject of the Foreshore Licence Application for Site Surveys FS007555 (should a licence be granted) are being carried out. As such there is no temporal overlap between the activities proposed in the Foreshore Licence Application and the Proposed Development.

17.9 Assessment of the significance of effects

17.9.1.1 The impacts of the construction, operational and maintenance and decommissioning phases of both project design options forming the Proposed Development have been assessed on seascape, landscape and visual receptors. The potential impacts arising from the construction, operational and maintenance and decommissioning phases of the Proposed Development are listed in Table 17.10 and Table 17.11, along with the project parameters against which each impact has been assessed.

17.9.1.2 A description of the potential effect on seascape, landscape and visual receptors caused by each identified impact is provided in Section 17.10 and Section 17.11.

17.10 Assessment of Project Design Option 1

17.10.1 Impact 1 – Visual Effects

Viewpoint 1: Wicklow Head

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.1 This viewpoint is located on a footpath at Wicklow Head. It is located to the south of the 'Rear Lighthouse' and south-west of the 'Front Lighthouse'. The active Wicklow Head Lighthouse is located further east. The viewpoint is representative of views experienced by recreational receptors visiting Wicklow Head.

17.10.1.2 To the east, views are available of the coastline and the Irish Sea, with the headland at Wicklow Head in the foreground. The headland is clothed in rough grassland and bracken and features rocky outcrops, stone walls and isolated clumps of woody vegetation. The operational lighthouse

is screened from view by the topography of the headland, although the disused 'Front Lighthouse' can be seen to the north-east.

17.10.1.3 Views are also available over the Irish Sea to the south, and the coastline is clearly visible including the nearby headlands at Ardmore Point and Ballynacarrig together with coastal farmland featuring mature hedgerow vegetation. Further inland the afforested hills at Castletimon are visible in the distance. Mizen Head is visible further south. The existing WTGs associated with ABWP1 form a distinct visible element of the view to the south-east.

17.10.1.4 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB) which indicates a higher value. It is a well-known amenity area and open, expansive views of the sea and surrounding coastlines are available. Overall, the value of the view is considered to be High.

17.10.1.5 This viewpoint is representative of views experienced by recreational receptors at this visitor attraction, who are likely to have an appreciation of their surroundings. Existing views of ABWP1 reduce the susceptibility to the Proposed Development by establishing development of this type as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-High.

17.10.1.6 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.7 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation, decommissioning and cable-laying vessels. At a distance of 7.16 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible, with activity towards the north of the Array Area particularly evident due to its closer proximity to the viewpoint. Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 1 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.8 During the operation and maintenance phase, the magnitude of change experienced at this viewpoint will be High. The full extent of the WTGs and OSPs within the Array Area will be visible across the open sea view to the south-east, at a distance of approximately 7.16 km to the nearest WTG, although the southern OSP may be difficult to discern due to distance. They will occupy a horizontal extent of approximately 41.83°.

17.10.1.9 The WTGs will be seen in front of the more distant, smaller scale WTGs within ABWP1. The ABWP1 WTGs will appear beyond WTGs within central to southern parts of the Array Area. The difference in scale will be apparent. The WTGs will be visible on the horizon and set against the skyline. Their man-made appearance, upright form and movement will contrast with the horizontal appearance of the sea. There is a degree of stacking visible across the WTGs within the centre of the Array Area. In contrast, the WTGs within closest proximity at the northern part of the Array Area appear more balanced in terms of spacing. Those towards the south of the Array Area are also relatively evenly spaced, although they appear more concentrated due to the greater distance from the viewpoint. The WTGs will occupy a large proportion of the available views of the seascape from this viewpoint, and the large scale of the WTGs will contrast with the existing landscape and seascape context visible in the view.

17.10.1.10 Looking south-east, the Array Area will sometimes appear backlit by the sun in the morning. The OSPs will be visible at the northern and southern extents of the Array Area, to the left and right of the horizontal spread of the WTGs.

17.10.1.11 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Wicklow Head during the operational & maintenance phase will be **Major (significant).**

Viewpoint 2: Blainroe Golf Club

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.12 This viewpoint is located at Blainroe Golf Club, to the north-east of the clubhouse on higher ground above a small sandy bay. The viewpoint is representative of the views experienced by recreational receptors at the golf course. Similar views are likely to be experienced by residential receptors within the settlement of Blainroe and Kilpoole to the west.

17.10.1.13 Views are available to the east and south of the coastline and the Irish Sea with the landscape of the golf course in the foreground. The landform of the golf course is relatively flat, and features fairways and putting greens along with tracts of woodland and scrub and copses of trees, many of which are coniferous. The topography slopes down steeply beyond the edge of the golf course towards the sea to the east. There are views towards a small bay to the south-east, contained by rocky, roughly vegetated land to the south. Several WTGs within ABWP1 are visible to the south-east, although a number are screened from view by the coastline to the south of the small bay.

17.10.1.14 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB) which indicates a higher value. Open views of the sea are available, although these are relatively contained in nature. Overall, the value of the view is considered to be High.

17.10.1.15 This viewpoint is representative of views experienced by recreational receptors at the golf course. These receptors are likely to have an appreciation of their surroundings, although the appreciation of views over the surrounding landscape and seascape are not the primary focus of their activities. Existing views of WTGs within ABWP1 reduce the susceptibility to the Proposed Development by establishing development of this type as a feature of the baseline view. Overall, the susceptibility is considered to be Medium.

17.10.1.16 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.17 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 6.55 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible, with activity towards the north of the Array Area particularly evident due to its closer proximity to the viewpoint.

17.10.1.18 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 2 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.19 During the operational and maintenance phase, the magnitude of change experienced at this viewpoint will be High. The WTGs will be located at a minimum distance of approximately 6.55 km, and will occupy a horizontal extent of approximately 59.53°. There will be some screening of WTGs towards the south of the Array Area by the landform of the coastline to the south-east and vegetation within the golf course. Approximately 17 WTGs at the southern extent of the Array Area will be fully or heavily screened by coniferous woodland within the golf course. The lower towers of several more WTGs will be screened by the landform.

17.10.1.20 The WTGs will be seen closer to the viewpoint than the smaller scale WTGs within ABWP1, the lower towers of which are screened below the landform of the golf course. WTGs towards the south of the Array Area will be situated in front of these smaller operational WTGs. The difference in scale between the two developments will be apparent. The WTGs will be visible on the horizon and set against the skyline. Their man-made appearance, upright form and movement will contrast with the horizontal appearance of the sea. The existing landscape and seascape context visible from this viewpoint to the east and south-east is relatively small-scale, with outward views contained by the small rugged bay to the south-east. The scale of the WTGs will be contrast with this context. An area of seascape visible to the north-east will remain undeveloped.

17.10.1.21 There is limited stacking of WTGs in this view, with only a small number of WTGs appearing to be stacked beyond one another. However, the WTGs within the closest, northern part of the Array Area will appear to be positioned in groups of three to four WTGs, with gaps between these groups. This is due to the layout of the WTGs and the angle of view towards the Array Area from this viewpoint. The WTGs within the southern part of the Array Area will appear in a more continuous group, and will appear well balanced and relatively evenly spaced.

17.10.1.22 Looking south-east, the Array Area will sometimes appear backlit by the sun in the morning. The OSP at the northern extent of the Array Area will be visible, while the OSP to the south will be screened by the coastline and vegetation cover to the south-east.

17.10.1.23 These effects will occur over a relatively limited geographical extent. The ZTV indicates that theoretical visibility will extend throughout the surrounding landscape to a distance of approximately 1.5 km west of the viewpoint, and further north and south. However, the settlements of Kilpoole and Blainroe, located to the west of the viewpoint, are likely to experience more limited visibility of the Proposed Development due to intervening vegetation within the surrounding landscape. In particular, extensive vegetation along the R750 near Blainroe will screen views to the east, and there will also be screening as a result of built form within the settlements. Overall, the effects of the Proposed Development are considered to be relatively localised to the area around the viewpoint and along the neighbouring coastline.

17.10.1.24 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Blainroe Golf Club during the operational & maintenance phase will be **Major (significant).**

Viewpoint 3: Ballynacarrig 3rd Class Road

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.25 This viewpoint is located on a minor road to the west of the small settlement of Ballynacarrig. It is representative of views experienced by local residents travelling on roads within the surrounding area. Similar views may be experienced by residents within the settlement.

17.10.1.26 Views are available to the south-east from a slightly elevated location of undulating coastal farmland with mature hedgerows and mature trees. Scattered isolated individual dwellings are dispersed throughout. In longer-distance views, the Irish Sea is clearly visible. The existing WTGs associated with ABWP1 form a distinct visible element of the view.

17.10.1.27 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB) and the route is designated as Prospect No. 53 by Wicklow County Council, both of which indicate a higher value. Relatively contained views are available towards the coast, although these are seen at longer distance, and the relationship with the coast is more limited than in other parts of the AONB. Overall, the value of the view is considered to be Medium-High.

17.10.1.28 The viewpoint is representative of views experienced by residents travelling around the local area in proximity to their residence. Similar views will also be experienced from scattered residential properties within the surrounding landscape. Although road users are considered to be of lower susceptibility due to their attention being focussed on the road, residents in the area surrounding their properties are considered to be of higher susceptibility to changes in the surrounding view. The presence of WTGs within ABWP1 slightly reduces susceptibility by establishing this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-High.

17.10.1.29 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.30 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 8.50 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible, with activity across northern parts of the Array Area particularly evident due to its closer proximity to the viewpoint. Some activity will be screened from view by vegetation at this viewpoint.

17.10.1.31 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 3 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.32 During the operation and maintenance phase, the magnitude of change experienced at this viewpoint will be High. The WTGs will be located at a minimum distance of approximately 8.50 km, and will occupy a horizontal extent of approximately 87.94°. There will be some screening of WTGs towards the north of the Array Area by the landform to the east of the viewpoint and vegetation throughout the surrounding landscape and alongside the road. Four WTGs will be fully screened, with a further two being heavily filtered. This screening effect may be somewhat reduced in winter, when vegetation is likely to be less extensive.

17.10.1.33 The WTGs will be seen in front of the smaller scale WTGs within ABWP1 and the difference in scale between the two developments will be apparent. The WTGs will be visible on the horizon and set against the skyline in the most open direction of view. The Array Area will occupy almost the full horizontal extent of the seascape visible from this location. This more open direction of view is framed by the surrounding undulating, farmed landscape, which will draw the eye towards the Array Area. The man-made appearance of the WTGs, their upright form and their movement will contrast with the horizontal appearance of the sea. The scale of the WTGs will also contrast with the relatively small-scale, complex landscape pattern visible in the fore- to mid-ground of the view.

17.10.1.34 There will be a degree of stacking visible across the WTGs, and some small gaps between WTGs in the layout, due to the angle of view towards the Array Area and the layout of the WTGs. However, overall the WTGs will appear well balanced and relatively evenly spaced.

17.10.1.35 Looking south-east, the Array Area will sometimes appear backlit by the sun in the morning. The OSP at the northern extent of the Array Area will be screened from view by the intervening landform and vegetation, while the OSP to the south will be visible at the far right of the Array Area, albeit at distance.

17.10.1.36 The geographic extent of the effects is likely to be somewhat widespread. Some residents within the settlement of Ballynacarrig are also likely to experience visibility of the Proposed Development from within and around their properties, at a distance of approximately 7 km. Views from within the settlement will likely be more limited than those experienced at the viewpoint, due to screening by surrounding vegetation and the effect of topographical changes between the viewpoint and the settlement.

17.10.1.37 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Array Area on receptors at Ballynacarrig 3rd Class Road during the operational & maintenance phase will be **Major (significant).**

Viewpoint 4: Ballynacarrig Public House

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.38 This viewpoint is located at the junction between the R750 and a minor road, near Ballynacarrig Public House. The viewpoint is representative of road users on the R750. Similar views will be experienced by residential receptors within the small settlements of Brittas and Cornagower which are positioned along the R750 close to this viewpoint.

17.10.1.39 Views are available to the south-east over the R750, with associated road signage forming a feature of the foreground. The entrance to the Potters Point Holiday Park forms a notable feature visible in relatively close proximity to the east. Beyond the road, land cover comprises coastal farmland with hedgerows, some of which feature mature trees. The Irish Sea forms the backdrop in longer distance views. To the south, the coastline at Mizen Head is visible in the distance. The existing WTGs associated with the ABWP1 form a distinct visible element of the view to the south-east.

17.10.1.40 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB) and at the junction between two roads which are designated as Prospect No. 31 and Prospect No. 53 by Wicklow County Council, both of which indicate a higher value. The foreground of the view comprises a busy road with associated signage, although there are longer-distance views to the coastline and Irish Sea. Overall, the value of the view is considered to be Medium-High.

17.10.1.41 The viewpoint is representative of views experienced by road users travelling in both directions on this route. Road users are considered to be of lower susceptibility due to their attention being focussed on the road, and the presence of ABWP1 within the baseline view further reduces susceptibility by establishing this type of development as a feature of the baseline. Overall, the susceptibility is considered to be Medium-Low.

17.10.1.42 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.43 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated

with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 7.52 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity towards the north of the Array Area will be screened from view by intervening vegetation, while activity across southern parts of the Array Area will be more evident.

17.10.1.44 Taking into account the Medium sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 4 during the construction and decommissioning phases will be **Major-Moderate (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION & MAINTENANCE

17.10.1.45 During the operation and maintenance phase, the magnitude of change experienced at this viewpoint will be High. The WTGs will be located at a minimum distance of approximately 7.52 km, and will occupy a horizontal extent of approximately 91.56°. Approximately 17 WTGs at the northern extent of the Array Area, in closest proximity to the viewpoint, will be fully screened by vegetation around the entrance to Potters Point to the east. The Array Area will therefore occupy a smaller horizontal extent of the seascape and at greater distance than that indicated by the wirelines in Figure 17.22.1.

17.10.1.46 Where visible, the WTGs will be seen in front of the smaller scale WTGs within ABWP1 and the difference in scale between the two developments will be apparent. The WTGs will be visible on the horizon and set against the skyline in the most open direction of view. The Array Area will occupy a large proportion of the seascape visible from this location, with a section of the seascape to the south of the Array Area remaining undeveloped. This more open direction of view is framed by the surrounding undulating farmed landscape, which will draw the eye towards the Array Area, and road users travelling along the minor road will experience direct views in this direction. For road users travelling along the R750, views towards the Array Area will be oblique.

17.10.1.47 The man-made appearance of the WTGs, their upright form and their movement will contrast with the horizontal appearance of the sea, although they will be seen in the context of road signage along the R750 which will slightly moderate the magnitude of change. The large scale of the WTGs will be apparent and will appear to contrast with the scale of the existing landscape and seascape context.

17.10.1.48 There will be a degree of stacking visible across the WTGs, with the blades of a number of WTGs appearing to overlap, and some gaps between groups of WTGs, due to the angle of view towards the Array Area and the layout of the WTGs. However, overall the WTGs will appear relatively well balanced, particularly towards the south of the Array Area. WTGs within the central part of the visible section of the Array Area will appear most uneven. This is also the portion of the view in which the ABWP1 WTGs are visible, creating a somewhat cluttered layout in this part of the Array Area.

17.10.1.49 Looking south-east, the Array Area will sometimes appear backlit by the sun in the morning. The OSP at the northern extent of the Array Area will be screened from view by the intervening vegetation, while the OSP to the south will be visible at the far right of the Array Area, albeit at distance.

17.10.1.50 The geographic extent of the effects is likely to be relatively contained. Within the nearby settlements of Brittas and Cornagower, visibility of the Proposed Development will be reduced compared to that experienced at the viewpoint. This is due to screening by intervening vegetation along the R750 and in the surroundings of properties, and the position of the viewpoint in a particularly open part of the landscape. Towards Cornagower, sand dunes along the coast will also prevent views to the east towards the Proposed Development.

17.10.1.51 Taking into account the Medium sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Ballynacarrig Public House during the operational & maintenance phase will be **Major-Moderate (significant).**

Viewpoint 5: Brittas Bay Beach

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.52 This viewpoint is located on the beach at Brittas Bay, close to the path which leads between the beach and the Brittas Bay North car park. Views are representative of those experienced by recreational receptors visiting the beach.

17.10.1.53 From this point near the centre of the bay, panoramic views are available to the north-east, east and south-east. Views are available of the Irish Sea with the expansive beach at Brittas Bay in the foreground. The coastal promontory associated with Ballynacarrig is clearly visible to the north. Mizen Head is clearly visible to the south of the viewpoint. The existing WTGs associated with the ABWP1 form a distinct visible element of the view to the south-east.

17.10.1.54 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB), which indicates a higher value. It is a well-used visitor attraction, and open, expansive views of the sea and surrounding coastlines are available. The overall value of the view is considered to be High.

17.10.1.55 The viewpoint is representative of views experienced by recreational receptors, whose attention is likely to be focussed on their surroundings. This indicates a higher susceptibility, although the existing influence of ABWP1 in the baseline somewhat reduces susceptibility to development of this type. Overall, the susceptibility is considered to be High.

17.10.1.56 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.57 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 7.73 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity will be visible throughout the Array Area, although it will be particularly evident towards the north due to the closer proximity of this part of the Array Area.

17.10.1.58 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 5 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.59 During the operation and maintenance phase, the magnitude of change experienced at this viewpoint will be High. The WTGs will be located at a minimum distance of approximately 7.73 km, and will occupy a horizontal extent of approximately 101.19°. They will occupy a large proportion of the view of the Irish Sea available to recreational visitors to the beach, being seen across the view from the north-east to the south. Due to the open, expansive views available from this location, all WTGs within the Array Area will be visible to their full extents. The two OSPs, at

the northern and southern extents of the Array Area, will also be visible, with the northern OSP apparent in closer proximity and the southern OSP appearing at greater distance.

17.10.1.60 The WTGs will be visible on the horizon and set against the skyline in the most open direction of view. The man-made appearance of the WTGs, their upright form and their movement will contrast with the horizontal appearance of the sea, and will interrupt the open, panoramic views available from this location. The Array Area will occupy the central frame of the seascape visible from this location, while small sections of the seascape to the north and south of the Array Area will remain undeveloped. There are limited vertical visual reference points in this view, although the smaller-scale WTGs within ABWP1 are visible along the horizon to the south-east. The WTGs within the Array Area will be seen in front of the WTGs within ABWP1 and the difference in scale between the developments will be apparent.

17.10.1.61 There will be some stacking towards the central part of the Array Area, where the blades of several WTGs will appear to overlap, and there will be some gaps on either side of WTGs. Towards northern and southern parts of the Array Area, the WTGs will appear to be more balanced in terms of spacing. However, overall the WTGs will appear relatively balanced, particularly towards the northern and southern parts of the Array Area.

17.10.1.62 Looking south-east, the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the turbines.

17.10.1.63 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Brittas Bay Beach during the operational & maintenance phase will be **Major (significant).**

Viewpoint 6: Tongelee 3rd Class Road

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.64 This viewpoint is located on a minor road near Tongelee, to the west of Brittas Bay. It is representative of views experienced by road users travelling south-east along this route.

17.10.1.65 To the east and south-east, views are available of undulating coastal farmland in the foreground, in use as pasture. The coastline and Irish Sea are clearly visible in the distance. To the north, an isolated dwelling and associated grounds is visible in the foreground. Views to the east and south are available of farmland with mature hedgerows. The coastal promontory of Mizen Head is clearly visible to the south-east, framing the curved beach at Brittas Bay. There are also views of the coastline to the south of Mizen Head in longer-distance views. The existing offshore wind turbines associated with ABWP1 form a distinct visible element of the view to the south-east.

17.10.1.66 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB), and the minor road is designated as Prospect No. 23 by Wicklow County Council, both of which indicate a higher value. The fore- and mid-ground of the view to the south-east comprises a large field of rough pasture, and the minor road is also visible in the foreground to the west, although there are also longer-distance views to the coastline and Irish Sea. Overall, the value of the view is considered to be Medium-High.

17.10.1.67 The viewpoint is representative of views experienced by road users travelling south-east on this route. Road users are considered to be of lower susceptibility due to their attention being focussed on the road, and the presence of ABWP1 within the baseline view further reduces susceptibility by establishing this type of development as a feature of the baseline. However, some road users are likely to be residents travelling through the area surrounding their properties, who will have a greater susceptibility to change. Overall, the susceptibility is considered to be Medium.

17.10.1.68 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.69 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 9.08 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across the very northern part of the Array Area will be screened by intervening landform and vegetation. Activity throughout the rest of the Array Area will be evident.

17.10.1.70 Taking into account the Medium-High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 6 during the construction and decommissioning phases will be **Major-Moderate (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.71 During the operation and maintenance phase, the magnitude of change experienced at this viewpoint will be Medium-High. From this slightly elevated viewpoint, the Array Area will be visible across the open sea view, occupying around 94.00˚ of the view at a distance of approximately 9.08 km to the nearest WTG. It will be seen across the view from the north-east to the south, in the context of the existing ABWP1.

17.10.1.72 The view from this slightly elevated position is framed by the foreground topography, which draws the eye towards the open sea to the south-east. Eleven WTGs at the northern extent of the Array Area will be screened from view by the topography and vegetation in the foreground to the east of the viewpoint. The lower parts of two further WTGs will also be screened by the topography, with just the blade tips of one and blades and upper towers of the other being visible above the agricultural land to the east. All other WTGs within the Array Area will be visible to their full extents, positioned in the most open direction of views from this location. The WTGs will be visible on the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. However, they will be read with other man-made features to the right of the view, and the elevated position of the view and nature of the topography in the foreground of this view means that they will not appear as the tallest elements in the view.

17.10.1.73 There will be some limited stacking of WTGs throughout the horizontal extent of the Array Area, and some WTGs towards the northern extent of the layout will appear to be arranged in pairs or small groups, with associated gaps on either side. However, overall the layout will appear relatively well balanced. The WTGs will be seen alongside the WTGs within ABWP1 and the difference in scale between the two developments will be evident. The southern OSP will be theoretically visible, although likely difficult to discern due to distance, while the northern OSP will be screened by the topography and vegetation to the north-east of the viewpoint.

17.10.1.74 Looking south-east from this viewpoint the Proposed Development will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the turbines.

17.10.1.75 Taking into account the Medium-High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Tongelee 3rd Class Road during the operational & maintenance phase will be **Major-Moderate (significant).**

Viewpoint 7: Ballinvally, 3rd Class Road

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.76 This viewpoint is located on a minor road near Ballinvally, to the north of the small settlement of Barranisky, north of Arklow. It is representative of views experienced by local residents travelling on roads within the surrounding area.

17.10.1.77 Views are available from this elevated position of an expanse of farmed hills to the north which merge into a more gently undulating to relatively flat coastal farmland further south. Fields are bounded by mature hedgerows with frequent mature trees. Large tracts of woodland are dispersed throughout. The coastline and the Irish Sea are clearly visible in the distance to the east. Mizen Head is identifiable by the high sand dunes just visible in the view. The existing offshore wind turbines associated with the ABWP1 form a distinct visible element of the view.

17.10.1.78 The viewpoint is located within the South East Mountain Lowlands (AHA 3) and the route is designated as Prospect No. 35 by Wicklow County Council, both of which indicate a higher value. It occupies an elevated position and offers expansive, panoramic views over the surrounding landscape and coastline, although there are also foreground views of the minor road which detract slightly from its value. Overall, the value is considered to be High.

17.10.1.79 The viewpoint is representative of views experienced by residents travelling around the local area in proximity to their residence. Similar views will also be experienced from scattered residential properties within the surrounding landscape. Although road users are considered to be of lower susceptibility due to their attention being focussed on the road, residents in the area surrounding their properties are considered to be of higher susceptibility to changes in the surrounding view. The presence of WTGs within ABWP1 slightly reduces susceptibility by establishing this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-High.

17.10.1.80 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.81 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 13.59 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across the very southern part of the Array Area will be screened by intervening landform and vegetation. Activity throughout the rest of the Array Area will be evident.

17.10.1.82 Taking into account the High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 7 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.83 During the operation and maintenance phase, the magnitude of change experienced at this viewpoint will be Medium-High. From this elevated view the Array Area will be visible across the open sea view, at a distance of approximately 13.59 km to the nearest WTG. It will occupy a horizontal extent of approximately 75.19˚, and will extend across the majority of the seascape visible from this location. It will be seen in the context of the existing WTGs within ABWP1, and the difference in scale between the two developments will be evident.

17.10.1.84 The WTGs will be read across the horizon and set against the skyline, and their man-made appearance, upright form and movement will contrast with the horizontal appearance of the sea. However, they will be seen in the context of the existing WTGs within ABWP1, as well as man-made features to the right of the view, including coniferous forestry and the minor road. Nine WTGs at the southern extent of the Array Area will be fully screened by the topography and coniferous forestry to the east of the road, with two further WTGs heavily filtered by the forestry. One OSP will be visible at the northern extent of the Array Area, to the east, while the southern OSP will be screened by the topography.

17.10.1.85 The large scale and vertical nature of the WTGs will appear to contrast with the relatively complex, small-scale landscape which occupies the fore- to mid-ground of the view, and will increase the magnitude of change associated with them. However, the minimum distance of approximately 13.59 km between the nearest WTG and this viewpoint will slightly moderate the magnitude of change. This is a somewhat incidental viewpoint from an open, elevated location within the surrounding landscape, which otherwise tends to be relatively heavily vegetated and enclosed.

17.10.1.86 The layout of the WTGs will be relatively evenly spaced and well balanced, particularly towards the northern part of the Array Area. Towards the southern extent of the visible part of the Array Area, the WTGs will appear to be arranged in pairs, with associated gaps on either side of each pair, due to the layout of the WTGs and the angle of view towards the Array Area. This will create a slightly more uneven appearance across this part of the Array Area.

17.10.1.87 Looking east and south-east from this viewpoint the WTGs will sometimes appear backlit by the sun in the morning. In clear weather the Array Area will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.88 Taking into account the High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Ballinvally 3rd Class Road during the operational & maintenance phase will be **Major (significant).**

Viewpoint 8: Ballinaskea, 3rd Class Road

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.89 This viewpoint is located on a minor road near Ballinaskea, to the east of Ballymoyle Forest. It is representative of views experienced by local residents travelling on roads within the surrounding area.

17.10.1.90 To the east, views are available from this elevated location of an expanse of coastal farmland with abundant mature hedgerow vegetation and scattered isolated dwellings. Small clumps of mature woodland and mature trees feature in the foreground along with farm buildings. The coastline and Irish Sea are clearly visible in the distance along with high sand dunes in the vicinity of Mizen Head and further south along the coast. Low voltage overhead powerlines cross this landscape. Traffic on the M11 / N11 route is also visible between gaps in the mid-ground vegetation. Further north, the afforested hills near Castletimon are visible. The existing WTGs associated with ABWP1 form a distinct visible element of the view.

17.10.1.91 This viewpoint is not located within any designated landscapes, nor designated as a Prospect, which would indicate a higher value. However, it offers local value due to the panoramic nature of the views available. Overall, the value of the view is considered to be Medium.

17.10.1.92 The viewpoint is representative of views experienced by residents travelling around the local area in proximity to their residence. Similar views will also be experienced from scattered residential properties within the surrounding landscape. Although road users are considered to be of lower susceptibility due to their attention being focussed on the road, residents in the area surrounding their properties are considered to be of higher susceptibility to changes in the surrounding view. The presence of WTGs within ABWP1 slightly reduces susceptibility by establishing this type of development as a feature of the baseline view. This is also a relatively incidental viewpoint which offers open, longer-distance views from within this otherwise relatively enclosed, vegetated landscape. Overall, the susceptibility is considered to be Medium-High.

17.10.1.93 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.94 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 11.49 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across parts of the Array Area will be screened by intervening vegetation, although this effect will be relatively limited, and generally activity throughout the Array Area will be evident.

17.10.1.95 Taking into account the Medium-High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 8 during the construction and decommissioning phases will be **Major-Moderate (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.96 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-High. From this slightly elevated view the Proposed Development will be visible across the open sea view. It will occupy approximately 95.13˚ of the view from north-east to south-east, and will be seen in the context of the existing WTGs within ABWP1 that are visible in the centre of the baseline view. The WTGs will be seen at a minimum distance of approximately 11.49 km.

17.10.1.97 Three WTGs at the southern extent of the Array Area will be screened from view by vegetation in the foreground to the south-east of the viewpoint. There will be some further filtering of the lower parts of several WTGs within the central part of the Array Area, again by vegetation in the foreground. This effect may be somewhat reduced in winter when vegetation cover will be more limited. Beyond these areas, all WTGs will be seen to almost their full extents. The southern OSP will also be screened from view, while the northern OSP will be visible towards the left of the view.

17.10.1.98 The WTGs will be read across the horizon and set against the skyline, and their man-made appearance, upright form and movement will contrast with the horizontal appearance of the sea. The WTGs will also appear to contrast with the relatively small-scale, complex pattern of the

surrounding landscape, which will emphasise their scale. However, the WTGs will be read beyond other man-made features in the foreground of the view, including agricultural buildings. They will also be seen alongside the WTGs within ABWP1 and the difference in scale between the two developments will be apparent.

17.10.1.99 From this viewpoint, the layout across the northern part of the Array Area will appear relatively even and well balanced in terms of spacing. Across the southern part of the Array Area, the WTGs will appear to be arranged in pairs, with associated gaps in the layout on either side of each pair, due to the angle of view towards the Array Area and the layout of the WTGs. However, there will be limited stacking between the WTGs which helps to maintain a relatively balanced appearance across this southern part of the layout.

17.10.1.100 Looking east to southeast from this viewpoint the WTGs will sometimes appear backlit by the sun in the morning. In clear weather the Array Area will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.101 Taking into account the Medium-High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Ballinaskea 3rd Class Road during the operational & maintenance phase will be **Major-Moderate (significant).**

Viewpoint 9: Johnstown, N11 / M11

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.102 This viewpoint is located on the N11 / M11 route near Johnstown, north of Junction 20. It is representative of views experienced by road users travelling in both directions on this route.

17.10.1.103 Views are available to the east of relatively flat coastal farmland featuring fragmented hedgerows, shelterbelts and scattered isolated mature trees against the backdrop of the Irish Sea. A low voltage overhead line is visible crossing this landscape. The existing WTGs associated with ABWP1 form a distinct visible element of the view.

17.10.1.104 The viewpoint is not located within any designated landscapes, which would otherwise indicate a higher value. The viewpoint offers some local value due to the panoramic views available, although this is limited due to the presence of the major road. Overall, the value is considered to be Medium.

17.10.1.105 The view is experienced by road users travelling in both directions on this route. Road users are considered to have a lower susceptibility to changes in the view due to their focus on the road, particularly due to the speed at which vehicles are likely to be travelling on this route. The presence of the WTGs within ABWP1 also reduces the susceptibility of the receptors to changes associated with the Proposed Development, by establishing development of this type as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-Low.

17.10.1.106 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.107 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 11.83 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development

will be readily visible. Activity across the very northern part of the Array Area will be screened by intervening vegetation. Activity throughout the rest of the Array Area will be evident.

17.10.1.108 Taking into account the Medium sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 9 during the construction and decommissioning phases will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium-High magnitude of change, in comparison to other moderate (not significant) effects which may result from a Medium or Medium-Low magnitude of change. The relatively close proximity of the Proposed Development, at a minimum distance of 11.83 km, will also contribute to the significance of the effect.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.109 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-High. From this low-lying view, the Array Area will be visible across the open sea from north-east to south-east. It will occupy approximately 95.81° of the view, and will be seen in the context of the existing WTGs within ABWP1 which are visible in the baseline view. The WTGs will be seen at a minimum distance of approximately 11.83 km. Views towards the Array Area will be experienced at an oblique angle for road users travelling at speed on this route.

17.10.1.110 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. However, they will be seen in the context of man-made features in the mid-ground of the view, including an overhead line which will be apparent at a similar distance above the horizon. They will also be seen alongside the WTGs within ABWP1, and the difference in scale between the two developments will be apparent.

17.10.1.111 To the left of the view the northern portion of the Array Area will be positioned behind vegetation in the mid-ground of the view, reducing the visibility of WTGs in this direction. Approximately four WTGs will be fully screened, although this effect may be reduced in winter when vegetation cover will be more limited. Views towards several other WTGs will be heavily filtered. The WTGs will occupy a relatively large proportion of the seascape visible from this viewpoint.

17.10.1.112 The WTGs will appear relatively well balanced in terms of spacing. At the southern extent of the Array Area, and across a small part of the layout towards the north, there will be slightly more stacking of WTGs and the layout will appear less balanced, although this effect is only observed over a small proportion of the Array Area, with the majority of the WTGs appearing relatively evenly spaced. The southern OSP will be visible to the south-east, while the northern OSP will be screened from view by vegetation.

17.10.1.113 This is a relatively incidental, fleeting view from a part of the road with open views to the east, while other parts of the M11 / N11 route are relatively enclosed due to the presence of extensive vegetation cover. The WTGs will be read with existing man-made features in the view such as overhead lines.

17.10.1.114 Looking east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.115 Taking into account the Medium sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Johnstown, N11 / M11 during the operational & maintenance phase will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium-High magnitude of change, in comparison to other moderate (not significant) effects which may result from a Medium or Medium-Low

magnitude of change. The relatively close proximity of the Proposed Development, at a minimum distance of 11.83 km, will also contribute to the significance of the effect.

Viewpoint 10: Ferry Bank, Arklow

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.116 This viewpoint is located on a footpath along the shoreline within Arklow, within the northern part of the settlement, adjacent to Seaview Avenue. It is representative of the views experienced by recreational receptors walking along the shoreline, which forms part of the Kynoch Heritage Walk. Residents within Arklow may experience similar views.

17.10.1.117 Views are available of the Irish Sea to the east with the existing WTGs associated with the ABWP1 visible as a distinct element of the view. The views of the sea occupy a large proportion of the view with the coastline to the north and the south very much in the peripheral view. Views to the north are available of the gently curved coastline featuring vegetated sand dunes and beach areas overlooked inland by the local afforested hill at Glenteige. To the south, Arklow Harbour is clearly visible, including harbour walls and industrial buildings and structures close to the coast. The summit of Arklow Rock, near Arklow Head, is also clearly visible in the distance behind the harbour area to the right.

17.10.1.118 The viewpoint is not located within any designated landscapes which would otherwise indicate a higher value, although it is situated on the promoted Kynoch Heritage Walk. It provides local value due to the expansive and panoramic sea views. Overall, the value is considered to be Medium-High.

17.10.1.119 The view is experienced by recreational receptors walking on the Kynoch Heritage Walk and residents of Arklow, whose attention is likely to be focussed on their surroundings, which indicates a higher susceptibility to changes in the surrounding view. The presence of the WTGs within ABWP1 slightly reduces the susceptibility of the receptors to changes associated with the Proposed Development, due to the existing presence of this type of development. Overall, the susceptibility is considered to be High.

17.10.1.120 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.121 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 12.10 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be evident, with no screening by landform or vegetation. The Proposed Development will introduce a number of offshore lights in the night-time sea view during these phases.

17.10.1.122 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 10 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.123 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be High. From this low-lying view the Array Area will be visible across the open sea view, occupying around 94.88˚ of the view from north-east to south-east at a distance of approximately 12.10 km to the nearest WTG. The WTGs will be seen in the context of the existing WTGs within ABWP1 which are noticeable to the east.

17.10.1.124 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. They will be read in the context of the existing WTGs within ABWP1, although the difference in scale between the two developments will be apparent.

17.10.1.125 All WTGs within the Array Area will be visible, due to the open, expansive nature of views over the Irish Sea from this location. The Array Area will occupy the majority of the seascape visible from this location, with limited areas of open seascape seen to the north and south of the WTGs. To the south-east the WTGs will be read in the context of the built form of Arklow Harbour. Although there is existing man-made development visible in this view to the west and south within Arklow, the Array Area will extend evidence of man-made development into the view to the east, which currently represents the only open, undeveloped direction of views. Both OSPs, at the northern and southern extents of the Array Area, will be visible.

17.10.1.126 Overall, the WTGs will appear well balanced and evenly spaced throughout the full extent of the Array Area, with a limited degree of stacking of some WTGs, and a slightly more cluttered appearance across a small area at the southern extent of the Array Area.

17.10.1.127 Looking north-east to south-east from this viewpoint the WTGs will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the turbines.

17.10.1.128 Although the ZTV indicates relatively widespread visibility throughout this part of the settlement, this does not take into account the effect of screening by built form, and actual visibility will be much lower. While residents within Arklow may experience similar views as those experienced at the viewpoint, these are likely to be more limited, due to a greater distance from the Proposed Development and the effect of intervening built form. Settlement within this northern part of the town is generally focussed away from the coast, with the exception of 'The Bungalows' caravan park, although receptors within the caravan park are not considered to be permanent residents of Arklow.

17.10.1.129 Taking into account the High sensitivity and the High magnitude of change, the effect of the proposed Development on receptors at Ferry Bank, Arklow during the operational & maintenance phase will be **Major (significant).**

Viewpoint 11: Arklow Town

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.130 This viewpoint is located within Arklow, on Yellow Lane at the point at which it crosses the railway line, near Arklow train station. It is representative of the views experienced by residents within Arklow, both from within their properties and travelling around the local area.

17.10.1.131 Views are available of the built-up area of Arklow, including rooftops of residential areas, open spaces and some larger scale industrial buildings. Overhead lines attached to public lighting columns cross part of the view. The Irish Sea forms the backdrop to the view to the east. Arklow Rock is partially visible to the south behind residential areas. The existing WTGs associated with ABWP1 form a distinct visible element of the central view.

17.10.1.132 The viewpoint is not located within any designated landscapes which would otherwise indicate a higher value. It provides some local value due to the views towards the sea, although the view generally is over a built-up area. Overall, the value is considered to be Medium.

17.10.1.133 Residents within Arklow are likely to have an appreciation of views of their surroundings, which indicates a higher susceptibility to changes in the surrounding view, although existing extensive built development within the town somewhat reduces this susceptibility. Overall, the susceptibility is considered to be High.

17.10.1.134 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.135 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 13.10 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Sea-level activity across the very southern part of the Array Area will be screened by intervening landform, built form and vegetation within Arklow. Across this area, construction and decommissioning activity will be restricted to views of the WTGs as they are constructed or removed. Activity throughout the rest of the Array Area will be evident.

17.10.1.136 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 11 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.137 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be High. From this location within the settlement of Arklow, all WTGs within the Array Area will be visible to some extent across the open sea view, occupying approximately 89.31˚ of the view at a distance of 13.10 km to the nearest WTG. The WTGs will be seen in the context of the existing WTGs within ABWP1 which are visible to the east.

17.10.1.138 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. They will be seen in the seascape context to the north-east and east, as well as extending above the horizon formed by built development within Arklow to the south-east, and will appear to occupy much of the horizon visible from this viewpoint.

17.10.1.139 The WTGs will be seen beyond, and read in the context of, other man-made features within the settlement of Arklow across the entire foreground view. The large scale of the WTGs will appear somewhat contrasting with the scale of existing development within the fore- to mid-ground. Towards the south of the Array Area, the lower parts of several WTGs will be screened beyond built form and vegetation within Arklow, which will somewhat reduce visibility in this direction, although all WTGs will remain visible to some extent.

17.10.1.140 Overall the layout will appear relatively well balanced, although there will be some stacking of WTGs throughout the horizontal extent of the Array Area. Towards central to southern parts of the Array Area, several WTGs will appear to be arranged in pairs with associated gaps on either

side of each pair. One OSP at the northern extent of the Array Area will be visible, while the southern OSP will be screened by intervening topography and vegetation.

17.10.1.141 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.142 The geographic extent of effects is likely to be relatively limited. Although the ZTV indicates widespread visibility throughout this part of the settlement, actual visibility will be much lower. The viewpoint is positioned within a part of the settlement with relatively open views to the north-east; other parts of the settlement will have more limited views towards the Proposed Development due to the orientation of the streets and screening by intervening built form.

17.10.1.143 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Arklow Town during the operational & maintenance phase will be **Major (significant).**

Viewpoint 12: Moneyribbin 3rd Class Road

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.144 This viewpoint is located on a minor road near Moneyribbin, to the west of Arklow. It is representative of views experienced by local residents travelling on roads within the surrounding area.

17.10.1.145 Views are available from an elevated location of a vast expansive farmed landscape in an easterly direction with the Irish Sea in the distance. The hill summits of Glenteige and Tara Hill are visible at the extreme left and right part of the view respectively. The farmland sweeps down gently to the valley near Coolgreany in the centre of the view. Field boundaries are marked with mature hedgerow vegetation and larger linear and rectangular tracts of woodland are visible within the valley landscape. In the middle distance to the south-east, a large tract of commercial coniferous forestry occupies part of the view. The coastline is visible to the east, along with focal points such as Arklow Rock. The existing WTGs associated with ABWP1 are visible elements of the view to the left of Arklow Rock.

17.10.1.146 The viewpoint is located within the Southern Hills (AHA 2) which indicates a higher value. It also offers some local value due to the expansive views available from this elevated position. Overall, the value is considered to be Medium-High.

17.10.1.147 The viewpoint is representative of views experienced by residents travelling around the local area in proximity to their residence. Similar views will also be experienced from scattered residential properties within the surrounding landscape. Although road users are considered to be of lower susceptibility due to their attention being focussed on the road, residents in the area surrounding their properties are considered to be of higher susceptibility to changes in the surrounding view. The presence of WTGs within ABWP1 slightly reduces susceptibility by establishing this type of development as a feature of the baseline view. This is also a relatively incidental viewpoint which offers open, longer-distance views from within this otherwise relatively enclosed, vegetated landscape. Overall, the susceptibility is considered to be Medium-High.

17.10.1.148 Taking into account the judgements of value and susceptibility, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.149 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements

associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 21.19 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across the very northern part of the Array Area will be screened by intervening landform and vegetation. Activity throughout the rest of the Array Area will be evident.

17.10.1.150 Taking into account the Medium-High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 12 during the construction and decommissioning phases will be **Major-Moderate (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.151 The magnitude of change experienced at this viewpoint during the operational and maintenance phases will be Medium-High. From this elevated location the Array Area will be visible across the open sea view, occupying around 59.75˚ of the view at a distance of approximately 21.19 km to the nearest WTG. It will be seen in the context of the existing WTGs within ABWP1 which are noticeable in the centre of the existing view. The difference in scale between the two developments will be apparent.

17.10.1.152 Views towards approximately three WTGs at the northern extent of the Array Area will be heavily filtered by the landform and vegetation further along the road in the mid-ground. This effect may be more limited in winter when vegetation cover will be reduced. The northern OSP will also be screened from view by the topography. The lower parts of the towers of WTGs across the remaining Array Area will generally be backclothed against the sea beyond, due to the elevated position of this viewpoint, with the hubs and blades of the WTGs appearing above the horizon. The WTGs will be seen in the context of the generally rural view, albeit with some evidence of man-made development in the form of coniferous forestry plantation. The Array Area will be positioned in the most open direction of views towards the Irish Sea. A proportion of the view of the seascape to the south-east will remain unaffected by development.

17.10.1.153 The man-made appearance, upright form and movement of the WTGs will contrast with the horizontal appearance of the sea and be read with the complex agricultural landscape in the foreground view. There are limited other vertical reference points in the view. This will emphasise the large scale of the WTGs, despite the minimum distance of 21.19 km between this viewpoint and the nearest WTG. One OSP will be visible at the southern extent of the Array Area, although it will be difficult to discern at this distance (please note that OSPs have not been modelled into visualisations in Figure 17.30.1 due to distance of more than 20 km).

17.10.1.154 There will be some stacking of WTGs in the view. Across central to southern parts, and a short section towards the north of the Array Area, the WTGs will appear to be arranged in pairs, with associated gaps on either side of each pair. This effect is due to the layout of the WTGs and the angle of view towards the Array Area, and will extend across a relatively large horizontal extent of the layout. This will slightly increase the magnitude of change associated with the Proposed Development, in contrast to a more evenly spaced layout.

17.10.1.155 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the turbines.

17.10.1.156 Taking into account the Medium-High sensitivity and Medium-High magnitude of change, the effect of the Proposed Development on receptors at Moneyribbin 3rd Class Road during the operational and maintenance phase will be **Major-Moderate (significant).**

Viewpoint 13: Clogga Amenity Area

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.157 This viewpoint is located on a footpath above Clogga Beach, which leads between a small car park to the west and the beach to the east. It is representative of views experienced by recreational receptors visiting the coast.

17.10.1.158 The focus of views is to the east over the Irish Sea. The existing WTGs associated with ABWP1 are visible elements of the view, seen at distance on the horizon. The landform along the coast comprises low sea cliffs and rocky headlands, backed by gently undulating hills to the west. To the north, Arklow Rock is clearly visible together with holiday homes overlooking the beach along the coast. Mizen Head and Wicklow Head are visible in the distance with undulating afforested hills inland. Views to the south are focussed on the local headland at Clogga including rocky shoreline and beach, and are contained in relatively close proximity. The views of the sea occupy a large proportion of the view with the coastline to the north and the south in the peripheral part of the view. There is some degree of framing of these sea views by Mizen Head to the north and the local headland at Clogga to the south.

17.10.1.159 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB), which indicates a higher value. It is a well-used visitor attraction, and open, expansive views of the sea and surrounding coastlines are available. The overall value of the view is considered to be High.

17.10.1.160 The view is experienced by recreational receptors visiting the coast, whose attention is likely to be focussed on their surroundings. This indicates a higher susceptibility to changes in the surrounding view. The susceptibility of receptors at this viewpoint is slightly moderated by the existing presence of the ABWP1 WTGs in the view to the east, which establish this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be High.

17.10.1.161 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.162 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 11.57 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across parts towards the south of the Array Area will be screened by intervening landform and vegetation. Activity throughout the rest of the Array Area will be evident.

17.10.1.163 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 13 during the construction and decommissioning phases will be **Major (significant)**.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.164 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be High. From this location the Array Area will be visible across the open sea view, occupying around 90.63˚ of the view at a distance of 11.57 km to the nearest WTG. It will be seen in the context of the existing WTGs within ABWP1 that are visible to the north-east, and the difference in scale between the two developments will be apparent.

17.10.1.165 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea, but read with the existing WTGs that are a long established component of this view. The Array Area will occupy the majority of the open view out to sea, with only a small area of seascape to the north of the Array Area appearing undeveloped. Views of the coastline from this location are relatively contained by the headlands at Clogga and Arklow Head to the south-east and north-east respectively, although there are also longer-distance views available towards the headland of Mizen Head to the north-east. The scale of the WTGs and their relatively close proximity will appear to contrast with the somewhat contained nature of the surrounding bay and associated seascape, and will increase the magnitude of change associated with the Array Area.

17.10.1.166 A number of WTGs at the southern extent of the Array Area will be seen beyond landform at the southern extent of the bay, and partially screened by associated vegetation. Due to the greater distance between the viewpoint and northern parts of the Array Area, WTGs in this area will appear more distant and smaller in scale, while WTGs towards the central and southern parts of the Array Area will be more evident.

17.10.1.167 Due to the layout of the WTGs and the angle of view towards the Array Area, several WTGs across central to southern parts will appear to be arranged in pairs, with associated gaps on either side of each pair. These WTGs appear in closest proximity to the viewpoint, and will slightly increase the magnitude of change compared to a more evenly spaced layout. There will also be a degree of stacking across northern parts of the Array Area, although these WTGs are seen in longer-distance views. Overall, the layout will have a somewhat unbalanced appearance. One OSP at the northern extent of the Array Area will be visible, although difficult to discern at this distance, while the southern OSP will be screened by landform and vegetation.

17.10.1.168 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.169 Taking into account the High sensitivity and High magnitude of change, the effect of the Proposed Development on receptors at Clogga Amenity Area during the operational and maintenance phase will be **Major (significant).**

Viewpoint 14: Kilmichael Point

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.170 This viewpoint is located on a footpath near Kilmichael Point. It is representative of views experienced by recreational receptors visiting the coast and residents at several properties in close proximity to the viewpoint. Similar views will be experienced by receptors visiting beaches to the north and south of Kilmichael Point.

17.10.1.171 The focus of views is to the east, towards the Irish Sea. In the foreground, coastal dunes feature rough grassland and there are stone walls and remnant stone ruins. The existing WTGs associated with ABWP1 are visible as small elements in the distance. To the north, Arklow Rock is clearly visible overlooking the beach along the coast and surrounding lower lying farmland. Further northeast, Mizen Head is visible in the distance with undulating afforested hills and uplands in the hinterland further west. Views to the south are available of the local grassed headlands and coastline with stone walls and ruins and featuring an isolated large stone dwelling. The views of the sea occupy a large proportion of the view with the coastline to the north and the south in the peripheral part of the view.

17.10.1.172 The viewpoint is located within the Kilmichael Point Distinctive Landscape, as classified by Wexford County Council, which indicates a higher value. The viewpoint is situated at a well-known vantage point, and open, expansive views of the sea and surrounding coastlines are available. The overall value of the view is considered to be High.

17.10.1.173 The view is experienced by recreational receptors visiting the coast and residents at nearby properties, whose attention is likely to be focussed on their surroundings. This indicates a higher susceptibility to changes in the surrounding view. The susceptibility of receptors at this viewpoint is slightly moderated by the existing presence of the ABWP1 WTGs in the view to the east, which establish this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be High.

17.10.1.174 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.175 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 10.90 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be evident.

17.10.1.176 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 14 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.177 The magnitude of change experienced at this viewpoint during the operational and maintenance phases will be High. From this low lying viewpoint the Array Area will be visible across the open sea, occupying around 85.75˚ of the view from north-east to east. It will be seen at a distance of approximately 10.90 km to the nearest WTG, and in the context of the WTGs within the existing ABWP1 which are visible to the north-east. The difference in scale between the two developments will be apparent.

17.10.1.178 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea, although they will be read with the existing turbines that are a long-established component of this view. There are limited other man-made features or foreground elements in this view, and the Array Area will be visible in the most open, scenic direction of views from this viewpoint. Due to the open, expansive nature of views from this location, all WTGs within the Array Area will be visible to their full extents. The WTGs will occupy the majority of the seascape visible from this location.

17.10.1.179 Overall, the WTGs appear well balanced in terms of spacing, with relatively limited stacking of WTGs. There are some small gaps between groups of WTGs across northern to central parts of the Array Area. Several WTGs across central to southern parts of the Array Area will appear to be arranged in pairs, with associated gaps in spacing between each pair. These WTGs are seen in closest proximity to the viewpoint, and this uneven spacing will slightly increase the magnitude of change in comparison to a more balanced layout. Two OSPs at the northern and southern extent of the Array Area will appear visible, with the southern OSP appearing more prominent due to its closer proximity, and the northern OSP difficult to discern at this distance.

17.10.1.180 Looking north-east to east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.181 Taking into account the High sensitivity and High magnitude of change, the effect of the Proposed Development on receptors at Kilmichael Point during the operational and maintenance phase will be **Major (significant).**

Viewpoint 15: Clones Coast Road

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.182 This viewpoint is located on Clones Coast Road, between Kilpatrick Beach and Kilbegnet / Kilgorman Bay Beach, to the north-east of Clone. It is representative of residential receptors at a small number of nearby properties. Similar views will be experienced by road users on the minor road, who are likely to be residents accessing their properties, or people staying at the nearby holiday parks to the south-west.

17.10.1.183 The focus of views is to the east over the Irish Sea. The sea occupies a large proportion of the view with the coastline to the north and the south in the peripheral part of the view. To the north, the promontory associated with Kilmichael Point is clearly visible. The existing WTGs associated with ABWP1 are visible as small elements in the distance to the east of Kilmichael Point. The landform at the coast, comprised of undulating sand dunes with coastal edge featuring beaches and rocky shorelines, is clearly visible along with the flat or gently undulating hinterland further west. A number of residential properties are visible to the west of the road in views to the north and south.

17.10.1.184 The viewpoint is not located within any landscape designations, which otherwise would indicate a higher value. The viewpoint provides some local value due to the expansive nature of views of the sea. Overall, the value is considered to be Medium-High.

17.10.1.185 The view is experienced by residential receptors in close proximity to the viewpoint, whose attention is likely to be focussed on the surroundings. This indicates a higher susceptibility to changes in the surrounding view. The susceptibility of receptors at this viewpoint is slightly moderated by the existing presence of the ABWP1 WTGs seen at distance in the view to the east. Overall, the susceptibility is considered to be High.

17.10.1.186 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.187 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 11.62 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be visible, and will be particularly evident across southern parts which are located in closer proximity to the viewpoint.

17.10.1.188 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 15 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.189 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be High. From this low lying view the Proposed Development will be visible across the open sea view, occupying around 75.19˚ of the view at a distance of approximately 11.62 km to the nearest WTG. The WTGs will be seen in the context of the existing ABWP1 that is visible in the baseline view, and the difference in scale between the two developments will be apparent.

17.10.1.190 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. The WTGs will be seen in the most open, scenic direction of views, from north-east to east. There are limited foreground features in the baseline view which would otherwise moderate the magnitude of change associated with the Array Area. The WTGs will occupy a relatively large proportion of the open views out to sea, with a section of the view over the Irish Sea to the south-east remaining unaffected. However, they will be seen alongside the existing WTGs within ABWP1 which are a well-established feature of this view.

17.10.1.191 All WTGs within the Array Area will be visible to almost their full extents, and there will be no screening by topography or vegetation. WTGs at the very northern extent of the Array Area will appear well balanced, as will closer proximity WTGs within central to southern parts. WTGs at the north of the Array Area will be more difficult to discern from this viewpoint due to distance. Between central and northern parts, the layout will have a somewhat cluttered appearance, with some stacking of WTGs and associated gaps between small groups of WTGs. At the southern extent, several WTGs will be arranged in pairs or groups of three, with gaps in the layout visible on either side of each group. These WTGs will be seen in closest proximity to the viewpoint. This somewhat uneven layout will slightly increase the magnitude of change in comparison to a more balanced, evenly spaced layout. Two OSPs at the northern and southern extents of the Array Area will also be visible. The southern OSP will appear more prominent due to its greater proximity to the viewpoint while the northern OSP will be difficult to discern due to distance.

17.10.1.192 Looking north-east to east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.193 Taking into account the High sensitivity and High magnitude of change, the effect of the Proposed Development on receptors at Clones Coast Road during the operational and maintenance phase will be **Major (significant).**

Viewpoint 16: Tara Hill Minor Road

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.194 This viewpoint is located on a minor road which passes to the east of Tara Hill. It is representative of views experienced by road users travelling in both directions on this route, including local residents. Similar, more elevated views would be available from Tara Hill.

17.10.1.195 Views are available from this elevated location of farmland with mature hedgerow vegetation, seen against the backdrop of the Irish Sea to the east. Small coastal settlements, holiday parks and scattered isolated dwellings are visible dispersed throughout this farmland. Arklow Rock is clearly visible as a small element in the distance to the north along with hill and mountain landscapes further afield and inland. The existing WTGs associated with ABWP1 are visible as very small elements in the distance.

17.10.1.196 The viewpoint is located within the Tara Hill Distinctive Landscape, as designated by Wexford County Council, which indicates a higher susceptibility. The viewpoint provides local

value due to the expansive nature of views towards the coast from this elevated location. Overall, the value is considered to be High.

17.10.1.197 The view is experienced by road users travelling north and south along this route. Road users are considered to be of lower susceptibility to changes in the surrounding view due to their focus on the road. However, many of these receptors are likely to be local residents travelling along the minor road in close proximity to their properties, which would indicate a higher susceptibility to change. Existing views of WTGs within ABWP1 slightly reduce the susceptibility to changes associated with the Proposed Development due to establishing this type of development as a feature of the baseline. Overall, the susceptibility is considered to be Medium-High.

17.10.1.198 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.199 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 14.47 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be visible, and will be particularly evident across southern parts which are located in closer proximity to the viewpoint.

17.10.1.200 Taking into account the High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 16 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.201 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-High. From this elevated viewpoint, the Array Area will be visible across the open sea view from north-east to east, occupying around 60.88˚ of the view at a distance of approximately 14.47 km to the nearest WTG. The Array Area will be seen in the context of the existing WTGs within ABWP1, and the difference in scale between the two developments will be apparent.

17.10.1.202 The WTGs will be read across the horizon and largely set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. All WTGs within the Array Area will be visible from this location, with WTGs towards the south of the Array Area seen in closer proximity to the east, and therefore appearing more prominent in the view than WTGs towards the north, seen at greater distance to the north-east. The Array Area will occupy a relatively broad extent of the visible seascape, although the view over the Irish Sea to the south-east will remain unaffected.

17.10.1.203 The Array Area will be seen beyond a number of man-made features in the foreground, including overhead lines and telegraph poles, as well as the WTGs within ABWP1 at distance, which will slightly moderate the magnitude of change. However, the WTGs will appear to contrast with the relatively small-scale, complex landscape pattern across the fore- to mid-ground, which will emphasise the scale of the WTGs in the associated seascape context.

17.10.1.204 There will be some stacking of WTGs across the Array Area, including within the centre of the Array Area and towards the southern extent. Certain WTGs within the centre of the Array Area will appear to be arranged in pairs, although this effect is less pronounced than from other viewpoints. Overall, the WTGs will appear relatively well balanced and evenly spaced. Two OSPs within the Array Area will also be visible, although the northern OSP will be difficult to discern at this distance.

17.10.1.205 Although the Array Area will occupy 60.88˚ of the view, this represents only a proportion of the overall seascape visible from this location, with the seascape to the south-east remaining undeveloped. This is also a relatively incidental viewpoint, offering open, elevated views towards the Irish Sea from an otherwise relatively enclosed, vegetated route.

17.10.1.206 Looking north-east to east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.207 Taking into account the High sensitivity and Medium-High magnitude of change, the effect of the Proposed Development on receptors at Tara Hill Minor Road during the operational and maintenance phase will be **Major (significant).**

Viewpoint 17: Ballymoney Beach

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.208 This viewpoint is located on Ballymoney Beach, to the south of the small car park and Ballymoney Beach Shop. It is representative of views experienced by recreational receptors visiting the coast.

17.10.1.209 Views are available to the east of the Irish Sea. Views to the north are restricted in part by the coastal landform comprised of low undulating sand dunes clothed in grassland and scrub which descend to the rocky shoreline. To the south, the coastline features undulating topography comprised of sand dunes clothed in grassland and woody vegetation. These descend to the coastline featuring a series of small bays and small rocky promontories in the foreground. Further afield, the coastline extends as a low promontory further out to sea terminating at Cahore Point further south, in the distance. A number of individual isolated dwellings are located along the coast to the north. The existing WTGs within ABWP1 are visible to the north-east.

17.10.1.210 The viewpoint is not located within any designated landscapes, which otherwise would indicate a higher value. The viewpoint is situated at a well-known recreational point, and open, expansive views of the sea and surrounding coastlines are available. The overall value of the view is considered to be Medium-High.

17.10.1.211 The view is experienced by recreational receptors visiting the coast, whose attention is likely to be focussed on their surroundings. This indicates a higher susceptibility to changes in the surrounding view. The susceptibility of receptors at this viewpoint is slightly moderated by the existing presence of the ABWP1 WTGs in the view to the east, which establish this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be High.

17.10.1.212 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.213 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in

addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 14.34 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be visible, and will be particularly evident across southern parts which are located in closer proximity to the viewpoint.

17.10.1.214 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 17 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.215 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be High. From this low-lying location the Array Area will be visible across the open sea view, occupying around 55.94˚ of the view. This represents approximately half the seascape visible from this viewpoint. It will be seen at a distance of approximately 14.34 km to the nearest WTG in the view to the north-east. It will be visible in the context of the existing WTGs within ABWP1 which are visible to the north-east, and the difference in scale between the two developments will be apparent.

17.10.1.216 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. The northernmost WTG will be partially screened from view by the landform of Mizen Head, with the lower parts of the tower screened from view. With the exception of this WTG, the full extent of the Array Area will be seen, with the WTGs towards the southern extent appearing in closer proximity and those to the north appearing at distance. The OSP at the southern extent of the Array Area will be visible, while the northern OSP will be screened from view by the landform of Mizen Head. There are few intervening features between the viewpoint and the Array Area, and the WTGs will be seen in the most open direction of views over the Irish Sea. However, the Array Area will occupy only a proportion of these panoramic views, with views to the south-east over the sea remaining unaffected by development.

17.10.1.217 WTGs towards the south of the Array Area, in closest proximity to the viewpoint, will appear well balanced in terms of spacing. Further north, across central to northern parts, the layout will be more uneven, with WTGs appearing to be arranged in pairs or small groups, with associated gaps in the layout on either side of each group. At the very northern extent, the WTGs will also be well balanced, but difficult to discern due to the distance to the viewpoint. This somewhat uneven layout across much of the Array Area will slightly increase the magnitude of change associated with the Proposed Development, although this effect is reduced by the well balanced appearance of the WTGs in closest proximity to the viewpoint, at the southern extent of the Array Area.

17.10.1.218 Looking east from this viewpoint the Array Area will sometimes appear backlit by the sun in the early morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the turbines.

17.10.1.219 Taking into account the High sensitivity and High magnitude of change, the effect of the Proposed Development on receptors at Ballymoney Beach during the operational and maintenance phase will be **Major (significant).**

Viewpoint 18: Courtown Harbour Beach

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.220 This viewpoint is located within a small amenity area to the west of the narrow, rocky Courtown Beach, featuring footpaths and benches. It is situated within the northern part of

Courtown, between the coast and the harbour. The viewpoint is representative of views experienced by recreational receptors visiting the coast. Similar views will be experienced by receptors visiting a small beach to the north of the viewpoint, and by residents within the settlement.

17.10.1.221 Views are available of the Irish Sea to the east and the rocky shoreline at Courtown in the foreground. To the north, the coastline extends northeast in a series of sandy beaches and rocky areas. These coastal areas are backed by higher hummocky ground inland formed by sand dunes clothed in grassland and scrub. Further afield, extending out to sea, the promontory at Kilmichael Point is visible in the distance. To the south, the harbour at Courtown is visible in the foreground against a backdrop of high ground formed by sand dunes and clothed in grassland. The existing WTGs associated with ABWP1 are visible as very small elements in the distance.

17.10.1.222 The viewpoint is not located within any landscape designations, which otherwise would indicate a higher value. It offers some local value due to the expansive, open views towards the sea. Overall, the value of the view is considered to be Medium.

17.10.1.223 The view is experienced by recreational receptors visiting the coast, whose attention is likely to be focussed on their surroundings, indicating a higher susceptibility. The susceptibility of receptors at this viewpoint is slightly moderated by the existing presence of the ABWP1 WTGs in the view to the east, which establish this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-High.

17.10.1.224 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.225 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 16.41 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be visible, and will be particularly evident across southern parts which are located in closer proximity to the viewpoint.

17.10.1.226 Taking into account the Medium-High sensitivity and the Medium magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 18 during the construction and decommissioning phases will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium magnitude of change, in comparison to moderate (not significant) effects which may result from a Medium-Low magnitude of change, the relatively close proximity of the Proposed Development, at a minimum distance of 16.41 km, and the open, clear views towards construction and decommissioning activity.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.227 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium. From this low lying viewpoint the Proposed Development will be visible across the open sea view, occupying around 45.44˚ of the view at a distance of approximately 16.41 km to the nearest WTG. It will be seen in the context of the existing WTGs within ABWP1 which are visible at distance to the north-east.

17.10.1.228 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. There are no topographical features to prevent views towards the Array Area, and all WTGs will be visible. They will be seen in the most open, scenic direction of views, over the Irish Sea. However, they will only occupy a proportion of the views of the sea from this location, and the view to the south-east will remain unaffected by development. The lower towers of WTGs towards the north of the Array Area will be positioned beyond the horizon due to distance and the curvature of the earth.

17.10.1.229 The WTGs will appear well balanced in terms of spacing across central to southern parts of the Array Area, although there is some limited stacking of WTGs across this part, and several will appear to be arranged in pairs. These WTGs will be seen in closest proximity to the viewpoint. WTGs at the very northern extent of the Array Area will also appear well balanced. However, across central to northern parts, there will be stacking of several WTGs, and they will appear to be arranged in groups, with large gaps in the layout between each group emphasising this effect. However, this effect will have a limited influence on the magnitude of change due to the position of these WTGs at greater distance from the viewpoint, and the relatively well balanced appearance of the layout towards the south of the Array Area in closest proximity to the viewpoint. The southern OSP will be visible, albeit difficult to discern due to distance, while the northern OSP will be screened by the curvature of the earth.

17.10.1.230 The distance of 16.41 km between the viewpoint and the nearest WTG will somewhat moderate the magnitude of change. There are views over existing built development within Courtown to the west and south, and the flood defences provide evidence of man-made development in the view over the Irish Sea. However, the view out to sea represents an undeveloped horizon which is likely to be valued by local residents, and the WTGs will extend development into the view in this direction.

17.10.1.231 Looking north-east to east from this viewpoint the Array Area will sometimes appear backlit by the sun in the early morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.232 The geographic extent of effects is likely to be relatively limited. The ZTV indicates that visibility across this area will be somewhat intermittent, due to the effect of topographical changes. Actual visibility will also be reduced by built form and vegetation within the settlement. Residential properties are generally located away from the coastline, and the viewpoint has been positioned in an area with more open views over the coast than those areas in which residential development is located.

17.10.1.233 Taking into account the Medium-High sensitivity and Medium magnitude of change, the effect of the Proposed Development on receptors at Courtown Harbour Beach during the operational and maintenance phase will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium magnitude of change, in comparison to moderate (not significant) effects which may result from a Medium-Low magnitude of change, the relatively close proximity of the Proposed Development, at a minimum distance of 16.41 km, and the open, clear views towards the Proposed Development.

Viewpoint 19: Cahore Point

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.234 This viewpoint is located on the headland at Cahore Point, to the north of Cahore Beach and south of Cahore Pier. It is representative of views experienced by recreational receptors visiting the coast and walking along the Wexford Coast Path, on which the viewpoint is located. Similar views will be experienced by residential receptors at properties along the coast to the north and south, and recreational receptors within the holiday park to the west.

17.10.1.235 The Irish Sea occupies a large proportion of the view to the north, east and south. To the north, the coastline is visible in the foreground along with the Wexford Coast Path. This is a relatively linear section of coastline, with broad associated views. The landform descends on a steep grassed slope to the rocky shoreline at this location. Further afield, the promontory at Kilmichael Point is visible in weather conditions that afford clear visibility. The existing WTGs associated with ABWP1 are visible as very small elements in the distance to the north-east. To the south, in the distance, woody vegetation associated with the Nature Reserve (Wexford Slobs) is clearly visible as a backdrop to the beach. To the south, the coastline is visible as an extensive beach backed by the hummocky landforms associated with the sand dunes clothed in grassland. To the west, caravans within a holiday park are visible set upon the cliffs.

17.10.1.236 The viewpoint is located within the Cahore Point Distinctive Landscape, as designated by Wexford County Council, and on the promoted Wexford Coast Path, both of which indicate a higher value. It is also of local value due to the open, expansive views towards the sea. The value of the view is considered to be High.

17.10.1.237 The viewpoint is representative of views experienced by recreational receptors visiting the beach and walking on the coastal path, whose attention is likely to be focussed on their surroundings. This indicates a higher susceptibility to changes in the surrounding view. The susceptibility to changes associated with the Proposed Development is slightly moderated by the existing presence of ABWP1 WTGs, which establish development of this type as a feature of the baseline view. Overall, the susceptibility is considered to be High.

17.10.1.238 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.239 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 18.96 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be visible, although more difficult to discern, particularly towards the north of the Array Area which is located at greater distance from the viewpoint.

17.10.1.240 Taking into account the High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 19 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.241 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-High. From this slightly elevated location the Array Area will be visible across the open sea view, occupying around 26.64˚ of the view at a distance of approximately 18.96 km to the nearest WTG. The WTGs will be seen in the context of existing WTGs within ABWP1 which are visible at distance under clear conditions. The difference in scale between the two developments will be apparent.

17.10.1.242 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. There are no topographical features or vegetation within the baseline view to prevent views

towards the Array Area, and all WTGs will be visible in the view to the north-east. The lack of built development in the baseline view, as well as the expansive, long-distance views along this relatively linear stretch of coastline, will increase the magnitude of change associated with the introduction of the large-scale WTGs into the seascape context. The magnitude of change will be slightly moderated by the distance of 18.96 km to the nearest WTG, and the horizontal extent of 26.64°, although the large scale of the WTGs will still be discernible at this distance. The WTGs to the north of the Array Area are more difficult to discern due to the increased distance from the viewpoint, while the WTGs to the south are more apparent.

17.10.1.243 There is a degree of stacking in the WTG layout, which will be most apparent towards the south of the Array Area due to the greater proximity to the viewpoint, although it is also present across central and northern parts. In particular, due to the angle of view towards the Array Area, the most southerly three WTGs will appear to be somewhat separate from the majority of the WTGs due to the stacking of several WTGs across this area and the closer proximity between the viewpoint and this part of the Array Area in comparison to more northern parts. The OSP to the south of the Array Area will be visible, albeit seen at distance, while it is likely that the northern OSP will not be visible due to distance. While the Array Area will be seen in the most open, scenic direction of views, it will occupy a relatively limited extent of the overall panoramic views of the Irish Sea available from this location, and the view to the east and south-east will remain undeveloped.

17.10.1.244 Looking north-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the early morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.245 Taking into account the High sensitivity and Medium-High magnitude of change, the effect of the Proposed Development on receptors at Cahore Point during the operational and maintenance phase will be **Major (significant).**

Viewpoint 20: Curracloe Beach

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.246 This viewpoint is located on Curracloe Beach, close to a path which leads to the associated car park. It is representative of views experienced by recreational receptors to the coast. Similar views will be experienced by residents at nearby properties and visitors to caravan parks in the vicinity.

17.10.1.247 The Irish Sea is visible to the east and occupies a large proportion of the view. To the north, the coastline between the foreground and longer distance views, while the landform of the bay can be seen curving to the east. Sand dunes featuring rough grassland extend into the foreground to the north and south of the viewpoint, while in longer-distance views to the north the landform becomes more rugged and rocky. Further inland, to the north-west, the view is over a farmed landscape featuring areas of woodland and scattered properties. Existing WTGs within ABWP1 are not visible due to distance and the curvature of the earth, meaning that they are positioned beyond the horizon.

17.10.1.248 The viewpoint is not located within any designated landscapes, which would otherwise indicate a higher value. It is a well-known amenity area which offers open, expansive views over the Irish Sea. Overall, the value of the view is considered to be Medium-High.

17.10.1.249 The viewpoint is representative of views experienced by recreational receptors, whose attention is likely to be focussed on their surroundings. This indicates higher susceptibility to changes in the surrounding view. Overall, the susceptibility is considered to be Medium-High.

17.10.1.250 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.251 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-Low. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 41.24 km to the nearest WTG, some components of the construction and decommissioning of the Proposed Development will be difficult to discern. Activity will be more evident across southern parts of the Array Area which are located in closer proximity to the viewpoint, although still difficult to discern at this distance.

17.10.1.252 Taking into account the Medium-High sensitivity and the Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 20 during the construction and decommissioning phases will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered not significant in this instance due to a number of factors, primarily the distance of more than 40 km to the nearest WTG, and the extent of seascape which will remain unaffected by construction and decommissioning activity.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.253 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-Low. From this low-lying view the Array Area will be visible across the open sea view to the north-east, occupying around 9.85˚ of the view. It will be seen at a distance of approximately 41.24 km to the nearest WTG. The existing WTGs within ABWP1 are not visible from this location due to screening by the landform of the coastline to the north. However, several turbines within Ballywater Wind Farm are visible in the view to the north-east near the headland at Cahore Point.

17.10.1.254 A proportion of the WTGs will be visible in the view to the north-east, while approximately 22 WTGs will be screened beyond the coastline at Cahore Point. At this distance, the WTGs will occupy a relatively limited horizontal extent and will appear as a small element in the overall panoramic views available of the Irish Sea. The WTGs will be seen alongside the coastline at Cahore Point, and will appear to extend from the coastline into the sea. As a result, the WTGs will appear to blur the boundaries between the landscape and seascape, which will increase the magnitude of change associated with the Array Area. The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea.

17.10.1.255 The WTG towers will generally be screened beyond the horizon due to the curvature of the earth and the low-lying position of this viewpoint. There will be a relatively high degree of stacking across the layout, particularly across northern parts, as well as some gaps in the layout towards the south. However, this will have a limited influence of magnitude of change given the minimum distance of 41.24 km to the nearest WTG. The OSP at the northern extent of the Array Area will be screened by the landform, while the southern OSP may be visible but will be difficult to discern at this distance (please note that the OSPs have not been modelled into the visualisation in Figure 17.38.1 due to distance of more than 20 km).

17.10.1.256 Looking north-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the early morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.257 Taking into account the Medium-High sensitivity and Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Curracloe Beach during the operational

and maintenance phase will be **Moderate (not significant)**. Although the effect is judged to be Moderate, this is considered not significant in this instance due to a number of factors, primarily the distance of more than 40 km to the nearest WTG, and the extent of seascape which will remain unaffected by views of WTGs.

Viewpoint 21: Barnacleagh Minor Road

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.258 This viewpoint is located on a minor road near Barnacleagh, to the west of Arklow. It is representative of views experienced by local residents travelling on roads within the surrounding area.

17.10.1.259 Views are available of farmland in the foreground and middle distance to the south and east, featuring mature hedgerow vegetation, trees and areas of woodland. There are also scattered farm buildings and isolated properties throughout the surrounding landscape. The Irish Sea forms the backdrop to the south-east. Views to the north and west are screened by vegetation along the road. Arklow Rock is visible to the right of the viewer as a focal point at the coast. Arklow town is barely visible in the distance including industrial and commercial buildings as well as residential areas. The existing WTGs associated with ABWP1 are visible as very small elements in the distance.

17.10.1.260 The viewpoint is not located within any designated landscapes, which otherwise would indicate a higher value. It provides some local value due to the long-distance views to the coast. Overall, the value is considered to be Medium.

17.10.1.261 The viewpoint is representative of views experienced by residents travelling around the local area in proximity to their residence. Similar views will also be experienced from scattered residential properties within the surrounding landscape. Although road users are considered to be of lower susceptibility due to their attention being focussed on the road, residents in the area surrounding their properties are considered to be of higher susceptibility to changes in the surrounding view. The presence of WTGs within ABWP1 slightly moderates the susceptibility by establishing this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-High.

17.10.1.262 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.263 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a minimum of 17.43 km to the nearest WTG, some components of the construction and decommissioning of the Proposed Development will be visible, although more difficult to discern due to distance. Activity at the northern extent of the Array Area will be screened from view by intervening vegetation in this view.

17.10.1.264 Taking into account the Medium-High sensitivity and the Medium magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 21 during the construction and decommissioning phases will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium magnitude of change (in comparison to moderate (not significant) effects which may result from a Medium-Low magnitude of change), the relatively close proximity of the Proposed Development, at a minimum distance of 17.43 km, and the

contrast of views of construction and decommissioning activity in the seascape, in the context of the small-scale, complex agricultural landscape in the foreground.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.265 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium. From this location the Array Area will occupy approximately 65.38˚ of the view from north-east to south-east. It will be seen at a distance of approximately 17.43 km to the nearest WTG. The WTGs will be visible in the context of the existing WTGs within ABWP1 which are just noticeable to the north-east. The difference in scale between the two developments will be apparent.

17.10.1.266 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. Due to the elevated inland position of this viewpoint, the vertical extent of seascape visible will be limited. The fore- to mid-ground view is occupied by the complex, small-scale pattern of the surrounding agricultural landscape, and the scale of the WTGs will appear to contrast with this existing scale.

17.10.1.267 However, the Array Area will be read with and seen beyond other man-made features across the foreground view, including the built form of Arklow town. To the north-east, 23 WTGs within the northern part of the Array Area will be screened by vegetation alongside the road, which will moderate the magnitude of change. This effect may be more limited in winter when vegetation cover will be reduced. The lower parts of several WTGs towards the south of the Array Area will also be screened from view by intervening topography around Arklow Rock.

17.10.1.268 Overall, the layout of the WTGs appears relatively well balanced in terms of spacing throughout. There is stacking of two WTGs towards the south of the Array Area, and the slight appearance of WTGs being arranged in pairs across the visible parts of the Array Area, although this effect is less pronounced than from other viewpoints. The OSP towards the south of the Array Area is likely to be visible from this location, while the northern OSP will be screened from view by intervening landform and vegetation. Although the Array Area will be seen in the most open, scenic direction of views from this location, towards the Irish Sea, the existing man-made features in the foreground of the view, as well as the WTGs within ABWP1, will moderate the magnitude of change. This is a relatively incidental viewpoint offering open views to the east, from an area in which outward views are generally limited by vegetation cover including areas of woodland and extensive hedgerows.

17.10.1.269 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs. The southern OSP will be visible to the south-east, although it is likely to be difficult to discern at this distance.

17.10.1.270 Taking into account the Medium-High sensitivity and Medium magnitude of change, the effect of the Proposed Development on receptors at Barnacleagh Minor Road during the operational and maintenance phase will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium magnitude of change (in comparison to moderate (not significant) effects which may result from a Medium-Low magnitude of change), the distance of the Proposed Development 17.43 km from the viewpoint and the contrast of views of large-scale WTGs in the seascape, in the context of the small-scale, complex agricultural landscape in the foreground.

Viewpoint 22: Johnstown Coast Road

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.271 This viewpoint is located on the R750, Johnstown Coast Road, to the west of Johnstown Bay Beach and north-east of Arklow. It is representative of views experienced by residents at nearby properties, albeit likely somewhat filtered by existing vegetation within gardens. Similar views will be experienced by road users travelling on the R750.

17.10.1.272 Views are available through gaps in the hedgerow adjacent to the road to the east. The foreground of these views is formed by coastal farmland in pasture, which features low hedgerows. Due to the topography along the coastline, which drops down quite steeply to the east, the shore is not visible. There are however open views towards the Irish Sea in the middle distance. The existing WTGs within ABWP1 are visible as small elements in the distance.

17.10.1.273 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB), which indicates a higher value. It offers open views towards the Irish Sea, although these views are restricted to short stretches of the coastline while hedgerows along sections of the road and vegetation within gardens screen views to the east from much of the surrounding area. Overall, the value of the view is considered to be Medium-High.

17.10.1.274 The view is experienced by residential receptors within and around their residences, in close proximity to the viewpoint. Residential receptors are considered to be of higher susceptibility to changes in the surrounding view due to their attention likely being focussed on their surroundings. However, views towards the coast from residential properties near this viewpoint will generally be heavily filtered by vegetation. Views of the sea are more likely to be experienced by residential receptors travelling around the surrounding area. The susceptibility to change associated with the Proposed Development is slightly moderated by the presence of the existing ABWP1 WTGs in the view to the east. Overall, the susceptibility is considered to be Medium-High.

17.10.1.275 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.276 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 10.91 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across northern parts of the Array Area will be filtered or screened by intervening vegetation, while activity across central and southern parts will be more readily visible.

17.10.1.277 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 22 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.278 The magnitude of change experienced at this viewpoint during the operational and maintenance phases will be High. From this low lying viewpoint the Array Area will be visible across the open sea view, occupying around 100.25˚ of the view at a distance of approximately

10.91 km to the nearest WTG. It will be seen from north-east to south-east, in the context of the existing WTGs within ABWP1 which are visible to the east. The difference in scale between the two developments will be evident.

17.10.1.279 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. However, they will be seen in the context of existing man-made features in the foreground of the view. To the left of the view the northern portion of the Array Area will be positioned behind vegetation and built form in the fore- to mid-ground, reducing the visibility of WTGs in this direction. Approximately 14 WTGs will be fully screened by vegetation and built form, while several more will be partially screened or filtered.

17.10.1.280 Although some of the WTGs to the north of the Array Area will be screened from view by existing vegetation from this viewpoint, it is possible that nearby residential properties will experience more open views towards a higher proportion of the WTGs, due to more limited screening by roadside hedgerows which reduce visibility from the viewpoint itself. Although the Array Area occupies a horizontal extent of 100.25˚, this is likely to occupy the full extent of the open view over the Irish Sea from these properties.

17.10.1.281 The relatively simple landscape pattern which constitutes the foreground of the view will slightly moderate the magnitude of change associated with the introduction of the ABWP2 WTGs. However, the scale of the WTGs will be greater than the typical scale of the existing agricultural landscape, and will be emphasised by the proximity of the Array Area to the viewpoint.

17.10.1.282 Overall, the layout will appear relatively well balanced. There will be some limited stacking of WTGs, and across parts of the layout the WTGs will appear to be arranged in pairs, with associated gaps on either side of each pair, although this effect is less pronounced than from other viewpoints. The WTGs will be seen in the most open, scenic direction of views, and will likely occupy the full extent of the available view over the Irish Sea. The magnitude of change will be moderated slightly by the existing presence of the WTGs within ABWP1 which establishes development of this type as a feature of the baseline view. However, the difference in scale between the two developments will be apparent and will emphasise the large scale of the ABWP2 WTGs.

17.10.1.283 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs. The southern OSP will be visible from this location, while the northern OSP will be screened from view by vegetation.

17.10.1.284 Taking into account the Medium-High sensitivity and High magnitude of change, the effect of the Proposed Development on receptors at Johnstown Coast Road during the operational and maintenance phase will be **Major (significant).**

Viewpoint 23: Kileagh Minor Road

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.285 This viewpoint is located on a minor road near Kileagh, to the north-west of Avoca. It is representative of views experienced by road users, including local residents travelling on roads within the surrounding area.

17.10.1.286 The foreground of the view is formed by rough pasture, which slopes down towards the wooded Vale of Avoca in the middle distance. The valley floor is screened from view due to the topography, although gently undulating hill farmland can be seen on the eastern valley side in middle to longer distance views. Mature hedgerow vegetation is abundant and large tracts of woodland and forestry are present. The Irish Sea is visible beyond these hills to the east. In the distance, Arklow Rock is visible as a small element. Tara Hill is visible to the right of the viewer.

The existing WTGs associated with ABWP1 are visible as very small elements in the distance. There is evidence of human influence in the landscape through the presence of overhead lines, farming infrastructure, a small single turbine and a transmission tower.

17.10.1.287 The viewpoint is located within South East Mountain Lowlands (AHA 3) which indicates a higher value. However, the evidence of human influence in the surrounding landscape, particularly in the foreground, detracts somewhat from its overall value. The value of the view is considered to be Medium-High.

17.10.1.288 The viewpoint is representative of views experienced by road users travelling south-east along this route. This includes residential receptors travelling around the local area. However, there are limited residential properties in close proximity to the viewpoint, and local residents are therefore considered to be of lower susceptibility at this viewpoint than they would be in close proximity to their properties. Road users are considered to have a lower susceptibility to changes in the surrounding view due to their focus on the road, while residential receptors are considered to be of higher susceptibility. Taking these factors into consideration, the susceptibility is considered to be Medium.

17.10.1.289 Taking into account the judgements of value and susceptibility, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.290 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. However, due to screening by intervening landform, views of construction and decommissioning activity across the Array Area will largely be restricted to views of partially built WTGs. Sea-level construction activity may be visible across a small area at the southern extent of the Array Area. In addition, at a distance of 20.13 km to the nearest WTG, it is likely that some elements of the construction and decommissioning activity will be difficult to discern.

17.10.1.291 Taking into account the Medium-High sensitivity and the Medium magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 23 during the construction and decommissioning phases will be **Moderate (not significant)**.Although the effect is judged to be moderate, this is considered to be not significant in this instance due to a number of factors. This includes the relatively limited proportion of the view which will be influenced by construction and decommissioning activity, and the distance of more than 20 km to the nearest WTG. There are a number of vertical elements in the view which will also moderate the effect, and the activity will largely be associated with views of partially built turbines seen above the landscape, rather than in the seascape context. In addition, this is a relatively incidental viewpoint from which more open views are available, in contrast to much of the surrounding landscape and route, and the geographic extent of these effects will be limited.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.292 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium. From this elevated viewpoint the Array Area will be visible across the open sea from north-east to south-east, occupying around 64.88˚ of the view. It will be seen at a distance of approximately 20.13 km to the nearest WTG. The Array Area will

theoretically be seen in the context of ABWP1, although views towards this development are very limited due to the distance and intervening topography.

17.10.1.293 The Array Area is positioned beyond an area of elevated topography around Barranisky to the east of the Vale of Avoca, which will screen views towards parts of the Array Area. The WTGs throughout much of the Array Area will be seen rising above this elevated landform to the east, rather than in the seascape context. The lower parts of WTGs will generally be screened throughout the Array Area, with the exception of WTGs at its southern extent. In this section of the view, to the south-east, the WTGs will be seen against the horizon formed by the Irish Sea. WTGs across parts of the centre of the Array Area will be almost completely screened from view by the topography, with only small parts of the blade tips being seen above the horizon.

17.10.1.294 Overall, the layout of the WTGs will appear relatively well balanced. The OSP at the southern extent of the Array Area may be visible, although difficult to discern at this distance, while the northern OSP will be screened by topography (please note that OSPs have not been modelled into the visualisation in Figure 17.41.1 due to distance of more than 20 km). Where visible, the WTGs will be seen in the context of man-made features in the foreground of the view.

17.10.1.295 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.296 Taking into account the Medium-High sensitivity and Medium magnitude of change, the effect of the Proposed Development on receptors at Kileagh Minor Road during the operational and maintenance phase will be **Moderate (not significant).** Although the effect is judged to be moderate, this is considered to be not significant in this instance due to a number of factors. This includes the relatively limited proportion of the view which will be influenced by the WTGs, and the distance of more than 20 km to the nearest WTG. There are a number of vertical elements in the view which will also moderate the effect, and the WTGs will generally be seen above the landscape, rather than in the seascape context. In addition, this is a relatively incidental viewpoint from which more open views are available, in contrast to much of the surrounding landscape and route, and the geographic extent of these effects will be limited.

Viewpoint 24: Mizen Head

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.297 This viewpoint is located on the R750 to the north of Mizen Head, close to the southerly part of Brittas Bay. It is representative of nearby residential receptors, recreational visitors to the coast, and cyclists travelling along Scenic Route 31.

17.10.1.298 The focus of views is to the east, over the coastline and the Irish Sea. The foreground is formed by rough grassland and vegetation between the road and the shoreline. To the north, the sandy beach of Brittas Bay can be seen curving to the east, with the headland at Ballynacarrig clearly visible in longer-distance views to the north-east. Further inland, wooded hill farmland can be seen. Mizen Head is clearly visible in the foreground to the south-east. Four of the seven existing WTGs associated with ABWP1 are visible as small elements in the distance, with the remaining WTGs screened by the landform of Mizen Head.

17.10.1.299 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB), and is located along Scenic Route 31, both of which indicate a higher value. It is situated at a point which offers open, expansive views over the Irish Sea. Overall, the value of the view is considered to be High.

17.10.1.300 The viewpoint is representative of views experienced by recreational receptors visiting the coast, including cyclists on Scenic Route 31, as well as residential receptors at scattered properties along the coast. Recreational and residential receptors are considered to be of higher

susceptibility to changes in the surrounding view due to their likely focus on the surrounding environment. The susceptibility to changes associated with the Proposed Development is slightly moderated by the existing presence of WTGs within ABWP1, which establishes this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be High.

17.10.1.301 Taking into account the judgements of value and susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.302 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Activity towards the south of the Array Area will be screened or filtered by landform, vegetation and built form to the south-west of the viewpoint. There may be limited views towards partially built or deconstructed WTGs across this area. Across other parts of the Array Area, construction and decommissioning activity will be evident, with the nearest WTG at a distance of approximately 8.11 km, and all components will be readily visible.

17.10.1.303 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 24 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.304 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be High. From this low-lying viewpoint, the Array Area will be visible across the open sea view, occupying around 104.31˚ of the view at a distance of approximately 8.11 km to the nearest WTG. It will be seen in the context of several of the existing WTGs within ABWP1 which are visible to the south-east. The difference in scale between the two developments will be apparent.

17.10.1.305 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. Approximately 17 WTGs towards the south of the Array Area will be screened from view by intervening topography, vegetation and built form to the south-east of the viewpoint. Where visible, the WTGs will be seen in the most open, scenic direction of views, and will occupy a large proportion of the view over the Irish Sea from this location, although a section of the view to the north-east will remain undeveloped. Although there are long-distance views out to sea from this location, the bay to the north of Mizen Head, seen in close proximity views to the south-east, is relatively small-scale, and the view to the north is contained by the headland at Ballynacarrig at a distance of approximately 4 km. In this context, the large scale of the WTGs will be apparent and somewhat contrasting with the scale of the existing baseline view.

17.10.1.306 There will be a degree of stacking in the layout, with the blades of several WTGs appearing to overlap. However, overall the layout will appear relatively well balanced and evenly spaced. The OSP at the southern extent of the Array Area will be screened from view by the intervening topography, while the northern OSP will be visible.

17.10.1.307 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.308 Taking into account the High sensitivity and High magnitude of change, the effect of the Proposed Development on receptors at Mizen Head during the operational and maintenance phase will be **Major (significant).**

Viewpoint 25: Newcastle Beach

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.309 This viewpoint is located at Newcastle Beach, to the north-east of the former Newcastle Railway Station. It is representative of views experienced by recreational receptors visiting the coast. These receptors are likely to be walking along the coastline, rather than specifically visiting the beach for recreation, as the beach is relatively exposed and rocky.

17.10.1.310 The focus of views is to the east, over the Irish Sea, with the beach at Newcastle in the foreground, separated from the viewpoint by a strip of large boulders associated with coastal defences. A railway line passes from north to south to the immediate west of the viewpoint. To the north, the peaks of Bray Head and the Sugar Loaf mountains are visible. These peaks, along with the wider Wicklow Mountains seen to the west, form focal points in the view inland. To the south, the promontory associated with Wicklow Head is clearly visible, and the series of lighthouses on the headland can be seen against the skyline. Further inland, hill farmland can be seen, as well as the coastal town of Wicklow, situated across lower elevation on the hills to the south of the bay. The existing WTGs associated with ABWP1 are screened from view beyond Wicklow Head.

17.10.1.311 The viewpoint is located within the Northern Coastal Area (Coastal Area AONB) and along Scenic Route 7, both of which indicate a higher value. It is situated at a point which offers open, expansive views over the Irish Sea. Overall, the value of the view is considered to be Medium-High.

17.10.1.312 The viewpoint is representative of views experienced by recreational receptors visiting the coast, whose attention is likely to be focussed on their surroundings. The susceptibility is considered to be Medium-High.

17.10.1.313 Taking into account the judgements of susceptibility and value, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.314 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Activity towards the south of the Array Area will be screened or filtered by landform, vegetation and built form to the south-west of the viewpoint. There may be limited views towards partially built or deconstructed WTGs across this area. Across other parts of the Array Area, construction and decommissioning activity will be evident, although at a distance of 18.41 km to the nearest WTG, some components may be difficult to discern.

17.10.1.315 Taking into account the Medium-High sensitivity and the Medium magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 25 during the construction and decommissioning phases will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium magnitude of change (in comparison to moderate (not significant) effects which may result from a Medium-Low magnitude of change), and the position of construction and decommissioning activity in the seascape adjacent to the landform of Wicklow Head to the south, which will emphasise the scale of the emerging WTGs.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.316 The magnitude of change that will be experienced at this viewpoint during the operational and maintenance phase will be Medium. From this low-lying viewpoint, the Array Area will be visible across the open sea view to the south-east, occupying around 19.92˚ of the view at a distance of approximately 18.41 km to the nearest WTG. It will be seen in the context of the very distant, limited views of existing WTGs within ABWP1.

17.10.1.317 The WTGs will be read alongside the coastline to the south-east. Several WTGs towards the south of the Array Area will be fully or partially screened from view by the landform at Wicklow Head. 15 WTGs will be fully screened from view, while a further 12 will appear only as blade tips. Some of these will be difficult to discern at this distance.

17.10.1.318 The WTGs that are fully visible will be read on the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. The WTGs will be seen alongside and beyond the coastline at Wicklow Head, and will appear to extend from the coastline into the sea. As a result, the WTGs will appear to blur the boundaries between the landscape and seascape, which will increase the magnitude of change associated with the Array Area. The scale of the WTGs will also appear to contrast with the existing scale of the landscape. This will be particularly apparent where the WTGs are seen beyond and appearing above the headland at Wicklow Head, given that they will be larger than this landform.

17.10.1.319 Across central parts of the Array Area, the layout will appear relatively unbalanced, with several WTGs appearing to be arranged in groups with associated gaps on either side, giving the layout in this area a cluttered appearance. Towards the northern part of the Array Area, in closer proximity to the viewpoint, the layout will be more balanced and evenly spaced.

17.10.1.320 The WTGs will be seen in the most open, scenic direction of views, although they will occupy only a small proportion of the panoramic views over the Irish Sea available from this viewpoint, and the seascape to the east and north-east will remain undeveloped. The OSP at the northern extent of the Array Area will be theoretically visible, while the southern OSP will be screened from view by the landform. The Array Area will be seen in the context of man-made development to the south, including the flood defences, railway line and Wicklow town.

17.10.1.321 Looking south-east, the WTGs will sometimes appear backlit by the sun in the morning.

17.10.1.322 Taking into account the Medium-High sensitivity and Medium magnitude of change, the effect of the Proposed Development on receptors at Newcastle Beach during the operational and maintenance phase will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium magnitude of change (in comparison to moderate (not significant) effects which may result from a Medium-Low magnitude of change), and the position of the Proposed Development in the seascape adjacent to the landform of Wicklow Head to the south, which will emphasise the scale of the WTGs.

Viewpoint 26: Scarr Mountain

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.323 This viewpoint is located at the summit of Scarr Mountain, within the southern part of the WMNP. It is representative of views experienced by recreational receptors walking within the surrounding landscape.

17.10.1.324 From this elevated location, views are available towards the Irish Sea with the mountain moorland landscape of the Wicklow Mountains in the foreground. Further afield, undulating wooded farmlands are visible in the distance. The distinctive peak of Great Sugar Loaf is clearly visible to the north. The waterbody associated with the Vartry Reservoir is clearly visible in the

distance. The existing offshore WTGs within ABWP1 are visible as very small elements in the distance.

17.10.1.325 The viewpoint is located within the nationally-designated WMNP, as well as the Mountain and Lakeshore AONB. This indicates it is a landscape of national importance, and is therefore of High value.

17.10.1.326 The viewpoint is representative of views experienced by recreational receptors visiting the National Park, whose attention is likely to be focussed on the surrounding views. The presence of the existing WTGs within ABWP1 slightly moderates the susceptibility to changes associated with the Proposed Development by establishing this type of development as a feature of the baseline. Overall, the susceptibility is considered to be Medium-High.

17.10.1.327 Taking into account the value of the view and the receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.328 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-Low. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. However, at a distance of 29.45 km to the nearest WTG, it is likely that some elements of the construction and decommissioning activity will be difficult to discern. Due to the elevated position of this viewpoint, sea-level activity will likely be backclothed against the sea beyond. It is likely that effects will primarily arise from views of partially built or deconstructed WTGs.

17.10.1.329 Taking into account the High sensitivity and the Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 26 during the construction and decommissioning phases will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered not significant in this instance, due to a number of factors, including primarily the distance of almost 30 km, and the large-scale, simple nature of the surrounding landscape, within which construction and decommissioning activity will form a relatively limited feature.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.330 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-Low. From this elevated viewpoint the Array Area will be visible across the open sea view to the south-east, occupying around 33.56˚ of the view at a distance of approximately 29.45 km to the nearest WTG. The WTGs will be seen in the context of the existing WTGs within ABWP1, and the difference in scale between the two developments will be apparent.

17.10.1.331 The WTGs will be read across the horizon, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. Due to the elevated position of this viewpoint the WTGs will largely be seen backclothed against the sea beyond. The hubs of several WTGs towards the southern extent of the Array Area will be seen against the skyline, as well as the blade tips of WTGs throughout the layout. Intervening topography will screen the lower parts of several WTGs, although all WTGs within the Array Area will be visible to some extent. The relatively simple pattern of the mid-ground landscape, featuring large areas of coniferous

woodland, will moderate the magnitude of change associated with the introduction of the WTGs into the view.

17.10.1.332 Overall, the layout appears well balanced in terms of spacing throughout. There will be some grouping of WTGs, with associated gaps in the layout, but this will have a limited influence on the balance of the overall layout. The Array Area will occupy a relatively limited extent of the panoramic views available from this elevated viewpoint. The Array Area will appear in the lowest-lying, most open direction of view over the Irish Sea, towards which the eye is likely to be drawn. However, sections of the sea view to the north of the Array Area will remain undeveloped. The two OSPs are unlikely to be visible from this location due to distance and screening by intervening topography (please note that the OSPs have not been modelled into the visualisation in Figure 17.44.1 due to distance of more than 20 km).

17.10.1.333 Looking south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the turbines.

17.10.1.334 Taking into account the High sensitivity and the Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Scarr Mountain during the operational and maintenance phase will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered not significant in this instance, due to a number of factors. This includes the distance of almost 30 km, and the relatively large scale, simple landscape featuring conifer woodland, which is better able to accommodate the scale of the WTGs. The WTGs will occupy a relatively limited extent of the panoramic views available from this viewpoint. On balance, effects are not considered to be significant.

Viewpoint 27: Tara Hill Track

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.335 This viewpoint is located on a track on the eastern side of Tara Hill. It is representative of recreational receptors visiting Tara Hill, including walkers and cyclists.

17.10.1.336 From this elevated location close to the summit of Tara Hill, views are available to the east over an expanse of farmland against the backdrop of the Irish Sea. Small coastal settlements, holiday parks and scattered isolated dwellings are visible dispersed throughout this farmland. Mature hedgerow vegetation defines the field pattern. Tracts of woodland feature randomly in this landscape. Promontories along the coast at Wicklow Head, Mizen Head and Arklow Rock are clearly visible as small elements in the distance. The existing WTGs associated with ABWP1 are visible as very small elements in the distance.

17.10.1.337 This viewpoint is located within the Tara Hill Distinctive Landscape, as designated by Wicklow County Council, which indicates a higher value. It is a well-known amenity area which offers open, expansive views over the Irish Sea. Overall, the value of the view is considered to be High.

17.10.1.338 The viewpoint represents views experienced by recreational receptors, primarily walkers visiting the summit of Tara Hill. Their attention is likely to be focussed on their surroundings, indicating a higher susceptibility to changes in the surrounding view. The susceptibility to the Proposed Development is slightly moderated by the presence of the existing WTGs within ABWP1, which establishes development of this type as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-High.

17.10.1.339 Taking into account the judgements of value and susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.340 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 14.97 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be visible, and will be particularly evident across southern parts which are located in closer proximity to the viewpoint.

17.10.1.341 Taking into account the High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 27 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.342 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-High. From this elevated viewpoint the Array Area will be visible across the open sea view, occupying around 60.22˚ of the view from north-east to east. The nearest WTG will be seen at a distance of approximately 14.97 km. The WTGs will be seen in the context of the existing WTGs within ABWP1, and the difference in scale between the two developments will be apparent.

17.10.1.343 From this elevated viewpoint the WTGs will be read across the horizon and set partially against the skyline, with the lower parts of the WTG towers backclothed against the sea beyond. The man-made appearance, upright form and movement of the WTGs will contrast with the horizontal appearance of the sea. There is no intervening topography or vegetation which would prevent views towards the Array Area, and all WTGs will be visible. The large scale of the WTGs will appear to contrast with the relatively small-scale landscape pattern seen in the fore- to mid-ground of the view. The Array Area will be seen to the north-east, and a proportion of the seascape to the south-east will remain unaffected by development.

17.10.1.344 There will be some gaps between WTGs in the layout, particularly across northern parts of the Array Area, as well as at the southern extent. However, the layout will generally appear well balanced in terms of spacing, particularly across central to southern parts of the Array Area. Two OSPs at the northern and southern extent of the Array Area will be theoretically visible, although it is likely that the northern OSP will be difficult to discern at this distance. The WTGs will be seen in the context of man-made features in the mid-ground of the view, albeit that this generally comprises rural settlement.

17.10.1.345 Looking north-east to east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.10.1.346 Taking into account the High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Tara Hill Track during the operational and maintenance phase will be **Major (significant).**

Viewpoint 28: Greystones Cliff Walk

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.347 This viewpoint is located on a footpath along the Cliff Walk between Bray and Greystones, to the north of Greystones. It is representative of views experienced by recreational receptors walking along the coastal route.

17.10.1.348 Views are available to the east of the Irish Sea with cliffs in the foreground featuring coastal grassland and scrub vegetation. To the south, views of the coast are available. The coastal town of Greystones is visible as a small element in the distance along with the coastline further south. In the far distance, Wicklow Head can be seen as a very small element under weather conditions which afford clear visibility. The majority of the existing WTGs associated with ABWP1 are screened from view by the coastline to the south, with the majority of one WTG and the blade tips of three further WTGs theoretically visible to the south, beyond the headland.

17.10.1.349 This viewpoint is located within the Northern Coastal Area (Coastal Area AONB), as well as on Scenic Route 7, both of which indicate a higher value. It is situated on a promoted walking route, along part of the coast which offers open, expansive views over the Irish Sea. Overall, the value of the view is considered to be High.

17.10.1.350 The viewpoint represents views experienced by recreational receptors, primarily walkers on the coastal route. Their attention is likely to be focussed on their surroundings, indicating a higher susceptibility to changes in the surrounding view. Overall, the susceptibility is considered to be Medium-High.

17.10.1.351 Taking into account the judgements of value and susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.352 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-Low. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Activity towards the south of the Array Area will be screened or filtered by landform, vegetation and built form. There may be limited views towards partially built or deconstructed WTGs across this area. Across other parts of the Array Area, construction and decommissioning activity will be apparent, although at a distance of 30.52 km to the nearest WTG, this will likely be difficult to discern. Effects will primarily arise from visibility of partially built or deconstructed WTGs.

17.10.1.353 Taking into account the High sensitivity and the Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 28 during the construction and decommissioning phases will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered not significant in this instance due to a number of factors. The position of the Proposed Development to the south-east is oblique to the main view over the Irish Sea to the east, and the majority of the panoramic views over the seascape will remain unaltered by construction activity. The distance of more than 30 km to the nearest WTG also moderates the effect, and due to distance, the apparent scale of the WTGs and associated construction activity is reduced. In addition, the effect will be experienced over a relatively limited geographic area, with the majority of views from Greystones and other parts of the cliff walk remaining unaffected.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.354 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-Low. From this elevated viewpoint, the Array Area will be visible across the open sea view, occupying around 13.66˚ of the view to the south-east. The nearest WTG will be seen at a distance of approximately 30.52 km.

17.10.1.355 The WTGs will be read against the coastline around Greystones. Approximately 20 WTGs at the southern extent of the Array Area will be screened from view by intervening topography and vegetation. Several more will be partially screened by the landform at Wicklow Head, with just the hubs and blade appearing above the headland. The WTGs will be read on the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea.

17.10.1.356 The Array Area will be seen beyond the built form of the Greystones area. Although this will slightly moderate its magnitude of change given the existing presence of man-made development, the position of the WTGs beyond the landform will cause them to appear to extend from the coastline into the sea. As a result, the WTGs will appear to blur the boundaries between the landscape and seascape, which will increase the magnitude of change associated with the Array Area. The scale of the WTGs will also appear to contrast with the existing scale of the landscape, including built form within Greystones. This effect will be particularly apparent where the WTGs are seen beyond and appearing above the headland at Wicklow Head, given that they will be larger than this landform.

17.10.1.357 The WTGs within the central part of the Array Area will be relatively unbalanced, with several WTGs appearing in groups, and associated gaps on either side of each group. Towards the north, in closer proximity to the viewpoint, the WTGs will be more evenly spaced. This will have a limited influence on magnitude of change at this viewpoint due to the minimum distance of 30.52 km to the nearest WTG. Although one OSP at the northern extent of the Array Area will be theoretically visible, actual visibility is likely to be limited at this distance of more than 30 km (please note that OSPs have not been modelled into the visualisation in Figure 17.46.1 due to distance of more than 20 km).

17.10.1.358 Looking south-east, the Array Area will sometimes appear backlit by the sun in the morning.

17.10.1.359 Taking into account the High sensitivity and the Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Greystones Cliff Walk during the operational and maintenance phase will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered not significant in this instance due to a number of factors. The position of the Proposed Development to the south-east is oblique to the main view over the Irish Sea to the east, and the majority of the panoramic views over the seascape will remain unaltered. The distance of more than 30 km to the nearest WTG also moderates the effect, and due to distance, the apparent scale of the WTGs is reduced. In addition, the effect will be experienced over a relatively limited geographic area, with the majority of views from Greystones and other parts of the cliff walk remaining unaffected.

Viewpoint 29: Sorrento Park

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.360 This viewpoint is located at Sorrento Park within Dalkey, to the south-east of the centre of Dublin. It is representative of views experienced by recreational receptors visiting the viewpoint within the park.

17.10.1.361 Views are available of the Irish Sea to the east and south, and the coastline of Killiney Bay is visible to the south-west. The cliff coastline, beach and wooded hills associated with the suburban areas of Dalkey and Killiney are visible in the foreground. Further afield, the distinctive

skyline associated with Great Sugar Loaf, Little Sugar Loaf and Bray Head, which stretch broadly west to east near the coast at Bray, provide a backdrop to the view. The foothills and some of the mountains within Wicklow are visible further inland in the distance. The coastline further south, beyond Bray Head is visible as a very small element under weather conditions which afford clear visibility. The seven existing WTGs associated with ABWP1 are screened from view.

17.10.1.362 This viewpoint is within a well-known amenity area which offers open, expansive views over the Irish Sea. Overall, the value of the view is considered to be High.

17.10.1.363 The viewpoint represents views experienced by recreational receptors visiting the viewpoint at the summit of the hill on which the park is situated. This viewpoint constitutes the only open space within the park, which otherwise comprises trails to the summit and dense vegetation. It is therefore likely that visitors to the park and visiting it specifically to experience the view, which indicates a higher susceptibility to changes in the surrounding view. Overall, the susceptibility is considered to be Medium-High.

17.10.1.364 Taking into account the judgements of value and susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.365 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Low. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Activity towards the south of the Array Area will be screened or filtered by landform, vegetation and built form. There may be limited views towards partially built or deconstructed WTGs across this area. Across other parts of the Array Area, construction and decommissioning activity will be apparent, although at a distance of 40.99 km to the nearest WTG, this will likely be difficult to discern. Effects will primarily arise from visibility of partially built or deconstructed WTGs.

17.10.1.366 Taking into account the High sensitivity and the Low magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 29 during the construction and decommissioning phases will be **Moderate-Minor (not significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.367 The magnitude of change experienced during the operational and maintenance phase will be Low. The Array Area will be visible across the open sea view, occupying around 9.40˚ of the view to the south-east. The nearest WTG will be seen at a distance of approximately 40.99 km.

17.10.1.368 Twelve WTGs at the southern extent of the Array Area will be screened from view by the intervening landform and vegetation, while several more will be partially screened from view, with the just the blade tips appearing above the headland at Wicklow Head. Although theoretically visible, these blade tips are likely to be difficult to discern at this distance in all but the clearest visibility. The WTGs that are visible will be read on the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. Although the northern OSP will be theoretically visible, there is unlikely to be actual visibility of this feature due to distance (please note that OSPs have not been modelled into the visualisation shown in Figure 17.47.1 due to distance of more than 20 km).

17.10.1.369 The WTGs will be read against the coastline and inland hills and mountains. The position of the WTGs beyond the distant landform of Wicklow Head will cause them to appear to extend

from the coastline into the sea. As a result, the WTGs will appear to blur the boundaries between the landscape and seascape, which will increase the magnitude of change associated with the Array Area. The scale of the WTGs will also appear to contrast with the existing scale of the landscape, in particular where the WTGs are seen beyond and appearing above the headland at Wicklow Head. The layout appears relatively well balanced, with some grouping of WTGs towards the centre of the Array Area, although at this distance, spacing of the WTGs will have a limited influence on magnitude of change.

17.10.1.370 The WTGs will occupy a relatively limited extent of the panoramic views available from this natural viewpoint, at a distance of more than 40 km. This distance and the contained nature of the view towards the Array Area will moderate the magnitude of change associated with it.

17.10.1.371 Looking south-east, the WTGs will sometimes appear backlit by the sun in the morning.

17.10.1.372 Taking into account the High sensitivity and the Low magnitude of change, the effect of the Proposed Development on receptors at Sorrento Park during the operational and maintenance phase will be **Moderate-Minor (not significant).**

R750

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.373 This route passes between Wicklow in the north and Arklow in the south. It broadly follows the coastline, generally passing within approximately 1 km of the coast.

17.10.1.374 Between Wicklow and Magherabeg, the route is located between approximately 200m to 1.2 km from the coast. At its northern extent, it passes generally west to east from Rathnew through the centre of Wicklow. The route then turns to the south, and is positioned further inland at Wicklow Head, through a generally agricultural landscape. Further south, it passes closer to the coast again, near the small settlement of Blainroe, before turning west near Magheramore, where there is a junction with the L1102 to the north.

17.10.1.375 Outward views from the route along this section are generally limited, including by built form within Wicklow and by hedgerows and roadside vegetation along other sections. There are some small stretches of the route which have the opportunity for open views towards the Irish Sea, including from a stretch to the south of Dunbur, available when travelling south; from a stretch of the route near Silver Strand Caravan Park; and along the southern stretch near Magheramore where field gates offer gaps in roadside vegetation.

17.10.1.376 The attention of receptors is likely to be at least somewhat focussed on their surroundings, due to the relatively scenic nature of this route, although enclosure provided by vegetation along the route reduces the susceptibility. Receptors are likely to be travelling at speed. Overall, susceptibility is considered to be Medium-Low susceptibility. The value of views is considered to be Medium, given the opportunity for glimpsed views towards the Irish Sea, and the surrounding coastal farmland. Overall, the sensitivity of receptors along this section of the route between Wicklow and Magherabeg is considered to be Medium-Low.

17.10.1.377 Between Magherabeg and Mizen Head, the R750 passes in relatively close proximity to the coast. At its most distant points, it is positioned approximately 1.2 km from the coast at Magherabeg, and 700m at Potters Point. However, along most of this stretch, the road is located within approximately 500m of the coastline. At Magherabeg, the route passes directly south towards Ballynacarrig, where it turns slightly south-west in alignment with the coastline, before passing to the south again between Cornagower and Mizen Head.

17.10.1.378 Along the northern section of this route, outward views towards the Array Area are screened by the relatively wooded landscape around Magherabeg and Furzeditch, as well as by vegetation along the route. To the south of this, where the route passes in closer proximity to the coast, there is more opportunity for views towards the Irish Sea. These are generally glimpsed

views, seen beyond roadside vegetation. Further south, near Ballynacarrig, views open up more to the east, due to the steeper topography down to the coast and the proximity of the route to the coastline, although views of the Irish Sea are generally still restricted to glimpsed views due to screening by roadside vegetation. To the south of Ballynacarrig, views are once again more limited, and sand dunes to the west of Brittas Bay beach begin to play a role in limiting views to the east. Where the route passes close to the coast, north of Mizen Head, views open up over the Irish Sea. These views are panoramic in nature.

17.10.1.379 The attention of receptors along this stretch of the route is likely to be at least somewhat focussed on their surroundings, due to its relatively scenic nature and the opportunity for open views along a short stretch of the route at its southern extent, as well as the recreational attractions along this section, including Brittas Bay beach. Receptors are likely to be travelling at speed. Overall, the susceptibility is considered to be Medium. The value of views is considered to be Medium, given the opportunity for panoramic views towards the Irish Sea along limited sections, as well as wooded areas to the north. Overall, the sensitivity of receptors along this section of the route between Magherabeg and Mizen Head is considered to be Medium.

17.10.1.380 Between Mizen Head and Arklow, the R750 passes within approximately 1 km of the coast at its greatest extent, as well as within less than 100 m. It passes generally north-east to south-west, in alignment with the coastline.

17.10.1.381 Along the northern part of this section of the route, there are open views towards the Irish Sea to the east from a relatively open part of the landscape near Ardanary. Further south, the R750 continues away from the coast, and views towards the sea are obscured. Vegetation within the European Club golf course also limits views to the east from this stretch. To the south-west of the golf course, Buckroney Dunes restrict views towards the sea. South of this, the route passes close to the coast and there are open, panoramic views over the Irish Sea, available to receptors travelling in both directions. This visibility extends along a stretch of approximately 800m. Beyond this, the route passes away from the coast again and intervening vegetation and dunes limit views. Near Ennereilly Beach, views open up over a short section of the route to the south-east over the Irish Sea. These views are primarily available to road users travelling south, although there are also some more limited views available to those travelling north. Further south, vegetation again obscures views to the east, before they open up along short sections near Johnstown Bay Beach. Beyond this, on the approach towards Arklow, views to the east are generally restricted, although there are some views of the Irish Sea available from a stretch of the route south of Seabank.

17.10.1.382 The attention of receptors along this stretch of the route is likely to be at least somewhat focussed on their surroundings, due to its relatively scenic nature and the opportunity for open views along short stretches of the route, as well as the recreational attractions along this section, including Ennereilly Beach. Receptors are likely to be travelling at speed. Overall, the susceptibility is considered to be Medium. The value of views is considered to be Medium, given the opportunity for glimpsed views towards the Irish Sea. Overall, the sensitivity of receptors along this section of the route between Mizen Head and Arklow is considered to be Medium.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.383 During the construction and decommissioning phases, the magnitude of change experienced between Wicklow and Magherabeg will be no higher than Low. Between Magherabeg and Mizen Head, and Mizen Head and Arklow, the magnitude of change along parts of the route experiencing visibility of the construction and decommissioning activity will range from Medium-High to Medium.

17.10.1.384 The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development,

with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Visibility of the construction and decommissioning activity will vary along the route, with frequent filtering of the activity by landform and vegetation alongside the road. Where visible, it will be seen at distances of up to approximately 12 km. Along parts of the route, there will be open views towards construction and decommissioning activity throughout the Array Area.

17.10.1.385 Taking into account the Medium-Low sensitivity of receptors travelling on the route between Wicklow and Magherabeg, and the Low magnitude of change across this area, the effect of the Proposed Development on receptors travelling along this part of the route during the construction and decommissioning phase will be **Minor (not significant)**. Taking into account the Medium sensitivity of receptors travelling on parts of the route between Magherabeg and Arklow, and the Medium-High to Medium magnitude of change across this area, the effect of the Proposed Development on receptors travelling along this part of the route during the construction and decommissioning phase will range from **Moderate (significant)** where a Medium-High magnitude of change is identified to **Moderate (not significant)**, where a Medium magnitude of change is identified. Across much of the route, there will be no visibility of construction or decommissioning activity due to screening by adjacent landform and vegetation, and there will be no change and no effect.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.386 Between Wicklow and Magherabeg, the magnitude of change will be no higher than Low. The ZTV in Appendix 17.5, Figure 17.11.1i indicates that there will be no theoretical visibility along the stretch of the R750 through Wicklow. To the south of this, visibility ranging from low-level to high-level is indicated. However, actual visibility of the Proposed Development will be very limited, primarily due to screening by roadside vegetation. Where views are available over the Irish Sea, these are generally directly east, while the Proposed Development is located to the south-east. There may be glimpsed views towards the northern WTGs within the Proposed Development where field gates and gaps in roadside vegetation allow open views to the east from southern parts of the route. These changes will be experienced by road users likely travelling at speeds of up to 80 km per hour. Overall, the magnitude of change along sections of the route with actual visibility of the Proposed Development is considered to be Low. Elsewhere, there will be zero change. Taking into account the Medium sensitivity and the Low magnitude of change, the effect of the Proposed Development on receptors travelling on the R750 between Wicklow and Magherabeg during the operational and maintenance phase will be **Minor (not significant)** along short sections, reducing to no change and no effect along most of the route.

17.10.1.387 Between Magherabeg and Mizen Head, the magnitude of change will range from Medium-High to zero. For receptors travelling in both directions along the section of the route to the north of Mizen Head, who will experience oblique, open views towards the Proposed Development to the east, the magnitude of change will be Medium-High. These views will be oblique to direct, experienced by receptors travelling in both directions on the route, over a short distance. There will be a Medium magnitude of change experienced by receptors travelling along sections of the route around Ballynacarrig, from where glimpsed views of the Proposed Development will be available. This will be fleeting, oblique views experienced by road users travelling at speed in both directions. Overall, effects ranging from **Moderate (significant)** to **Moderate (not significant)** will be experienced along short sections of this stretch of the route, at Mizen Head and Ballynacarrig respectively. These effects will range from Moderate (significant) to Moderate (not significant) in response to the Medium-High to Medium magnitude of change. Elsewhere, there will be no change as a result of the Proposed Development.

17.10.1.388 Between Mizen Head and Arklow, the magnitude of change will range from Medium-High to zero. For receptors travelling in both directions along sections of the route south of Buckroney

Dunes, there will be oblique views towards the Proposed Development, which will occupy much of the available open view out to sea, and the magnitude of change will be Medium-High. Along sections of the route near Ennereilly Beach, Johnstown Bay Beach and Seabank, receptors will experience visibility of WTGs within the Proposed Development over short distances. These views will generally be oblique to the east, although there will be some more direct views for road users travelling north. The associated magnitude of change will be Medium. From a stretch of the route near Ardanary, there are likely to be views towards the Proposed Development along a short stretch of the route for road users travelling north. The magnitude of change will be Medium-High. Overall, effects ranging from **Moderate (significant)** to **Moderate (not significant)** will be experienced along short sections of this part of the route, where visibility is experienced by road users travelling at speed. These effects will range from Moderate (significant) to Moderate (not significant) in response to the range of Medium-High to Medium magnitude of change. Elsewhere, there will be no change as a result of the Proposed Development.

Dublin – Cherbourg Ferry

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.389 This ferry route passes between Dublin and Cherbourg, travelling east out of Dublin before passing to the south, parallel to the eastern coast of Ireland. It then passes to the south-west around the south-western coast of England, before turning to the east and travelling to Cherbourg.

17.10.1.390 Within the Study Area, it passes broadly south, and comes within approximately 11.52 km of the nearest WTG at its closest point. Due to the close proximity of the Array Area to the route of the ferry, there is the potential for significant effects to occur. However, only those parts of the route within the Study Area are considered within the assessment, due to the very limited potential for significant effects beyond this area.

17.10.1.391 There will are views from the majority of the route. Views are available both over the Irish Sea to the east, as well as towards the eastern coastline of Ireland to the west. The attention of receptors is likely to be at least somewhat focussed on their surroundings, due to the relatively scenic nature of views and the opportunity for open views. Overall, the susceptibility is considered to be Medium-High. The value of views is considered to be Medium-high, given the opportunity for panoramic views over the Irish Sea and the coastline of Ireland, which will be seen at distances of approximately 20 km from parts of the route. Overall, the sensitivity of receptors travelling on this route is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.392 During the construction and decommissioning phases, the magnitude of change experienced on this route will range from High to Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Construction and decommissioning activity will be evident at a minimum distance of approximately 11 km, where the ferry route passes in closest proximity to the east of the Array Area. Along parts of the route within approximately 11 km to 15 km, the magnitude of change will be High, as all components of the construction and decommissioning activity will be evident. Further north and south, at distances of beyond approximately 15 km to 25 km, this will reduce to Medium-High, as construction activity becomes more difficult to discern.

17.10.1.393 Taking into account the Medium-High sensitivity and the High to Medium-High magnitude of change, the effect of the Proposed Development on receptors travelling on the ferry route between Dublin and Cherbourg during the construction and decommissioning phases will range

from **Major (significant)** at distances of up to approximately 15 km, to **Major-Moderate (significant)**, at distances of up to approximately 20 km.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.394 The ZTV indicates varying levels of visibility of the Proposed Development. As the ferry passes out of or into Dublin Harbour, views towards the Array Area will be screened by the landform to the south, and there will be no visibility. Visibility will also be limited due to distance and the curvature of the earth as the ferry passes beyond around 45 km to the south of the Array Area. However, between these two areas, there will be widespread visibility of the Array Area from the ferry route as it passes through the rest of the Study Area.

17.10.1.395 In particular, passengers travelling on the ferry will have close-proximity views of the WTGs as it passes to the east of the Array Area, coming within approximately 11 km of the WTGs at the closest point of the route. All WTGs will be visible, and will be seen in front of the view towards the Irish Coast. Across this area, between around 11 km and 15 km of the WTGs, a large horizontal extent of the view will be occupied by the Array Area. Where this is the case, the magnitude of change will be High.

17.10.1.396 Further north and south, at distances of approximately 15 km to 25 km, where the WTGs will be visible, but seen occupying a more limited horizontal extent due to the angle of view between the ferry and the Array Area, and where the effect of the WTGs obscuring views towards the Irish Coast will be more limited, the magnitude of change will be Medium-High.

17.10.1.397 Overall, effects ranging from **Major (significant)** to **Major-Moderate (significant)** will be experienced by passengers travelling along this route where visibility occurs within the Study Area.

Railway between Greystones and Wicklow

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.398 The Dublin – Rosslare Main Line railway line passes along the east coast of Ireland, from Dublin in the north to Rosslare Harbour in the south. It is within the Study Area along its whole length, and passes within approximately 11 km of the Array Area at its closest point. From Dublin, it passes alongside the coastline to Wicklow, where the route turns inland through Rathdrum and Avoca. At this point it turns south-east and travels closer to the coast again, passing through Arklow, before again turning inland and passing through Gorey and Enniscorthy to Wexford and Rosslare Harbour. As described within the preliminary assessment (Volume III, Appendix 17.2), only a limited part of the route has the potential to undergo significant effects as a result of the Proposed Development. This comprises the section of the route between Greystones and Wicklow.

17.10.1.399 Between Greystones and Newcastle, the route passes broadly south and south-east, in very close proximity to the coastline. Where the route passes through Greystones itself, outward views are very limited due to screening by built form within the settlement. Further south, there are more open views to the east over the Irish Sea along almost the full extent of the route, with the exception of a short stretch to the south of Kilcoole railway station, where woodland to the east of the railway line prevents outward views.

17.10.1.400 Between Newcastle and Wicklow, the route passes to the south-west, again following the coastline at close proximity. Open views to the east over the Irish Sea are available along the full extent of this route, with the exception of at its southern extent as the railway line enters Wicklow, where built form begins to obscure views to the east and the railway line turns away from the coast.

17.10.1.401 Along both sections of route, the attention of receptors is likely to be at least somewhat focussed on their surroundings, due to the relatively scenic nature of views and the opportunity for open views along most of the route. Overall, the susceptibility is considered to be Medium. The value of views is considered to be Medium-high, given the opportunity for panoramic views towards the Irish Sea. Overall, the sensitivity of receptors along both these sections of the route, between Greystones and Newcastle, and Newcastle and Wicklow, is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.1.402 During the construction and decommissioning phases, the magnitude of change experienced on this route will range from Medium to Low. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Construction and decommissioning activity will be evident at distances of between approximately 10 km to 30 km. Due to the orientation of the railway, travelling north to south with views generally orientated east to west, and the position of the Array Area to the south-east, direct views towards construction and decommissioning activity will be limited. Activity will be most evident across parts with highest visibility of the Array Area, as indicated by the ZTV. The magnitude of change will range from Medium across parts of the route with higher-level visibility, to Low across parts with lower-level visibility. However, higher level visibility is generally restricted to areas beyond approximately 15 km, at which distance some components of the construction and decommissioning activity will be more difficult to discern, and it is likely that effects will primarily arise from visibility of the partially built or deconstructed WTGs. Where visibility is available in closer proximity, construction and decommissioning activity will be more evident, although likely only visible across a small proportion of the Array Area, due to screening by the landform.

17.10.1.403 Taking into account the Medium-High sensitivity and the Medium to Low magnitude of change, the effect of the Proposed Development on receptors travelling on the railway between Greystones and Wicklow during the construction and decommissioning phases will range from **Moderate (significant)** where there is clear visibility of construction and decommissioning activity to **Moderate-Minor (not significant)** where visibility is more restricted. The Moderate effect is considered to be significant due to the minimum distance of approximately 10 km and the higher-level visibility of construction and decommissioning activity, as indicated by the ZTV.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.1.404 Between Greystones and Newcastle, the ZTV (Volume III, Appendix 17.5, Figure 17.11.1i) indicates that there will be high-level visibility of the Proposed Development along several short sections of the route. This includes a section to the north of Greystones, close to Viewpoint 28. However, the railway line passes underground along this section, and actual visibility is considered to be restricted. Further south, a small section of high-level visibility is indicated to the south-east of Delgany. Along this section of approximately 2km, passengers may experience visibility of the Proposed Development. However, due to the orientation of the railway, with views available to the east and west as the train travels north and south, and the position of the Proposed Development to the south-east, it is likely that actual views will be more limited than that indicated by the ZTV. The overall magnitude of change along this section is considered to be Medium. Further south, the ZTV indicates that visibility will be lower-level, with between 34 – 44 of the 56 WTGs visible. Again, actual visibility is likely to be more limited than this due to the orientation of the railway in relation to the Proposed Development. These effects will occur at a

minimum distance of approximately 11.6 km. The overall magnitude of change along this section is considered to be Medium-Low. Overall, effects ranging from **Moderate (significant)** to **Moderate (not significant)** will be experienced along this part of the route, where visibility is experienced by passengers travelling south at speed. These effects are considered to be significant or not significant in response to the Medium to Medium-Low magnitude of change.

17.10.1.405 Between Newcastle and Wicklow, the ZTV indicates varying levels of visibility of the Proposed Development. This is due to screening by Wicklow Head to the south, which prevents views towards southern parts of the Array Area from areas nearby. Visibility is therefore higher-level towards the north of this section of the railway line, decreasing with proximity to Wicklow. Again, visibility will be lower than that indicated by the ZTV due to the orientation of the train in relation to the Proposed Development. Where the ZTV indicates highest-level visibility for this section, the magnitude of change will be Medium. This decreases further south, reducing to Low where between 1 – 11 of the WTGs will be visible north of Wicklow. Within Wicklow, Overall, effects ranging from **Moderate (not significant)** to **Moderate-Minor (not significant)** will be experienced along this part of the route, where visibility is experienced by passengers travelling south at speed. The Moderate effect is considered to be not significant due to the screening of parts of the Array Area by landform at Wicklow Head, and the associated reduction in magnitude of change.

Assessment of night-time lighting

17.10.1.406 As described in Section 17.6 and 17.7 above, an assessment of the visual effects of night-time lighting associated with the Proposed Development is undertaken from four representative viewpoints. For each viewpoint, the baseline and sensitivity to change is described and an assessment of the effects of night-time lighting during the operational phase is provided. This involves two lighting scenarios, summarised below and described in full in the LMP:

- 2000 cd white aviation warning lights: In accordance with the International Civil Aviation Organisation Annex 14 standards and the Irish Aviation Authority (IAA, 2015), 2000 cd white aviation warning lights on all Significant Peripheral Structures (SPS) (see Figure 4.3 of the LMP and Figure 17.14.1 and 17.14.2). Light fittings baffled so that practically no light will be emitted below the horizontal, and yellow marine navigational lighting at the base of SPS (see Figure.
- 2000cd red aviation warning lights: IAA have indicated during consultation that there are potential intentions to align with the approach taken in the wider EU or in the UK (within which Air Navigation Order 2016 and MGN 654 (MCA, 2021) apply), assessment is also provided of 2000cd red aviation warning lights at hub height on all WTGs within the array. Yellow marine navigational lighting are assumed at the base of SPS (see Figure 4.3 of the LMP). If visibility in all directions from every WTG is more than 5 km the light intensity may be reduced to not less than 10% of the minimum peak intensity specified for a light of this type (i.e. not less than 200cd).

VIEWPOINT 4: BALLYNACARRIG PUBLIC HOUSE

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.407 The existing night-time view from Ballynacarrig Public House is shown in Figure 17.22.1(j-k). The baseline has several sources of existing lighting, particularly associated with Ballynacarrig Public House and the entrance to Potters Point Holiday Park beyond the R750 to the east. In addition, passing cars on the R750 are an intermittent source of bright lights.

17.10.1.408 The view to the south-east is over agricultural land towards the Irish Sea. The seascape section of the view is relatively dark but includes visible night-time lighting on two of the ABWP1 WTGs, cardinal marks and transient lights on boats in the inshore waters. Marine navigation

lighting of the existing ABWP1 WTGs is faintly visible in the view at night, comprising yellow marine navigational lighting at platform level of two WTGs at the northern and southern extents of the development (SPS), forming small points of distant yellow light on the horizon between the dark sea below and dark sky above. White aviation lighting is also mounted on the nacelle roof of the existing ABWP1 WTGs #1 and #7 (SPS).. These aviation light fittings are fully cut off so that practically no light is emitted below the horizontal. Overall, this view is influenced by several sources of lighting at relatively close proximity, although there are darker views towards the Irish Sea to the south-east.

17.10.1.409 The value of the view is assessed to be Medium-Low at night-time, since it is not a location that people visit to experience a dark landscape or dark skies, and there are several sources of close-proximity lighting in the view. The susceptibility of road users is considered to be Medium at night-time, as their focus will be on the road, and their activity will introduce further light into the view, thereby limiting the ability of receptors to perceive the intensity of lights out to sea.

17.10.1.410 Overall, the sensitivity at night is considered to be Medium, reflecting that the view has Medium-Low value at night-time and the receptors experiencing the view have a Medium susceptibility to change.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT

2000CD RED AVIATION WARNING LIGHTS

17.10.1.411 The predicted view of the red aviation lights at 2,000cd is shown in the photomontage in Figure 17.22.1(l - m).

17.10.1.412 Aviation and marine navigation lighting of the proposed ABWP2 WTGs will be visible in the view at night, from 7.52 km to the closest WTG, including both the red medium intensity lighting at nacelle height on all WTGs and yellow marine navigational lighting at platform level of the SPS WTGs. The aviation lights will introduce multiple points of red light into the night-time view, and the marine navigation lights will extend the existing array of small yellow lights across a greater part of the sea view, between the dark sea below and dark sky above.

17.10.1.413 The lighting of the ABWP2 WTGs will be seen in a baseline view which features other lighting in closer proximity, including lighting at Ballynacarrig Public House, Potters Point Holiday Park and on the R750, albeit seen in different sectors of the view. However, it will extend the lateral spread of offshore WTG lighting over a wider portion of the view, extending more lighting into the relatively darker south-eastern sector of the view, and extending further lighting into the dark seascape context. Although the aviation and marine navigation lighting of the ABWP2 WTGs will be viewed in the context of existing offshore WTG lighting, it will introduce red aviation lighting into the view, which is not currently present. A section of the seascape to the south of the Array Area will be retained with no WTG lighting, and the lighting on the southern WTGs, seen at greater distances, will be more difficult to discern at lower intensity due to the increased distance.

17.10.1.414 The aviation lights will be seen above the horizon and backdropped by dark sky, however the aviation lights are relatively low to the horizon and do not extend high into the sky above the viewpoint, thus limiting the amount of the night-sky that is impeded. The stars will continue to be visible in the skies above. The aviation lights are not expected to result in obtrusive light that impedes the wider expanse of night sky, which can be experienced readily above the aviation lights, nor result in brightening of the night sky (skyglow) or glare on to the sea surface and will therefore not be of detriment to the overall experience of the night skies and seascape in this view.

17.10.1.415 As a result of these factors, the magnitude of change on the night-time view as a result of the aviation lights operating at 2,000cd is assessed as Medium-High and when combined with the Medium sensitivity of the viewpoint, this results in a **Moderate (significant)** visual effect,

occurring primarily due to the extended spread of visible lighting into the relatively darker seascape to the south-east of the viewpoint, at a minimum distance of 7.52 km. This will be experienced from a viewpoint that has baseline lighting in close proximity, including lighting associated with cars on the R750, and experienced by receptors travelling on the road. The operation of aviation lights at the lower intensity of 200cd when visibility from every WTG is >5 km will provide further mitigation and reduction in the perceived intensity of the visible lighting (Figure 17.22n-o).

2000CD WHITE AVIATION WARNING LIGHTS

17.10.1.416 The predicted view of the white aviation lights at 2,000cd is shown in the photomontage in Figure 17.22.1(n - o). This represents a theoretical maximum visibility when the lights are visible, however it is predicted that the white lights at nacelle height are unlikely to be readily visible from this viewpoint (at 44m AoD), due to the light fittings being fully cut off, so that practically no light is emitted below the horizontal plane of the light (at nacelle height), in line with IAA guidance.

17.10.1.417 Aviation and marine navigation lighting of the proposed WTGs may be visible in the view at night, from 7.52 km to the closest WTG, including both the white medium intensity flashing lighting at nacelle height and steady yellow marine navigational lighting at platform level, both seen only on the 14 SPS WTGs. The aviation lights may, if visible, introduce multiple points of white light into the night-time view out to sea, and the marine navigational lights will extend the existing array of small yellow lights across a greater part of the sea view, between the dark sea below and dark sky above.

17.10.1.418 The lighting of the ABWP2 WTGs will be seen in a baseline view which features other lighting in closer proximity, albeit seen in different sectors of the view. However, it will extend the lateral spread of lighting over a wider portion of the view, extending more lighting into the relatively darker south-eastern sector of the view, and extending further lighting into the dark seascape context. Although the aviation and marine navigation lighting of the ABWP2 WTGs will be viewed in the context of existing offshore WTG lighting, it will introduce more extensive aviation lighting into the view. A section of the seascape to the south of the Array Area will be retained with no WTG lighting, and the lighting on the southern WTGs, seen at greater distances, will be more difficult to discern at lower intensity due to the greater distance.

17.10.1.419 The aviation lights may be seen above the horizon and backdropped by dark sky, however the aviation lights are relatively low to the horizon and do not extend high into the sky above the viewpoint, thus limiting the amount of the night-sky that is impeded. The stars will continue to be visible in the skies above. The aviation lights are not expected to result in obtrusive light that impedes the wider expanse of night sky, which can be experienced readily above the aviation lights, nor result in brightening of the night sky (skyglow) or glare on to the sea surface and will therefore not be of detriment to the overall experience of the night skies and seascape in this view.

17.10.1.420 As a result of these factors, the magnitude of change on the night-time view as a result of the aviation lights operating at 2,000cd is assessed as Medium-Low and when combined with the Medium sensitivity of the viewpoint, this results in a **Moderate-Minor (not significant)** visual effect, occurring primarily due to the extended spread of visible lighting into the relatively darker seascape to the south-east of the viewpoint, at a minimum distance of 7.52 km. This will be experienced from a viewpoint that has baseline lighting in close proximity, including lighting associated with cars on the R750, and experienced by receptors travelling on the road. The assessment presented represents the theoretical maximum visibility for the white aviation lights, however lighting is likely to be more difficult to discern or practically not visible at this viewpoint, if the aviation lights are fully cut off such that practically no light is emitted below the horizontal, in accordance with IAA (2015) guidance.

VIEWPOINT 10: FERRY BANK, ARKLOW

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.421 The existing night-time view from Ferry Bank, Arklow is shown in Figure 17.28.1(k-l). Sources of lighting in the baseline view are generally focused to the west, within Arklow. This includes street lighting, lighting within residential and commercial properties, and lighting associated with vehicles on the road network within the town.

17.10.1.422 In contrast, the view to the east over the Irish Sea is darker, and there are limited sources of existing lighting in this direction. In the view over the Irish Sea, existing lighting comprises limited point sources of lighting, including transient lights on boats in the inshore waters; an intermittent bright red light on the end of Arklow Pier; and night-time lighting on the ABWP1 WTGs. Lighting of the existing ABWP1 WTGs is faintly visible in the view at night, comprising yellow marine navigational lighting at platform level of two WTGs at the northern and southern extents of the development (SPS), forming small points of distant yellow light on the horizon between the dark sea below and dark sky above. This lighting is contained within a relatively limited horizontal extent. Although aviation light fittings are fully cut off so that practically no light is emitted below the horizontal, the white aviation lighting mounted on the nacelle roof of the existing ABWP1 WTGs #1 and #7 (SPS) were observed during site surveys and can be seen in the baseline photograph in Figure 17.28.1j. Overall, the view direction represents a darker sector of the view from this viewpoint, in contrast to the brighter view over more widespread artificial lighting within Arklow to the west. Red aviation lights are visible on the Raheenleagh onshore wind turbines located inland, beyond the settlement of Arklow.

17.10.1.423 The value of the view is assessed to be Medium at night-time. Although it is unlikely to be a location that people visit to experience a dark landscape, due to the close proximity of several sources of lighting within Arklow to the west, the view to the east over the Irish Sea represents a darker direction of view. It is however, likely to be valued by local people as a location from which darker seascape can be viewed, albeit in close proximity to brighter urban lighting. The viewpoint is representative of views experienced by recreational receptors walking along the shoreline. Although recreational receptors are unlikely to be walking along the shoreline throughout the hours of darkness, there may be similar views at dusk, when there are likely to be more receptors experiencing the view. Similar, albeit brighter and more distant views, will be available to residents in Arklow. The susceptibility of these receptors is considered to be Medium-high, as their focus is likely to be on their surroundings.

17.10.1.424 Overall, taking into account the Medium value and Medium-High susceptibility, the sensitivity of the viewpoint at night is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT

2000CD RED AVIATION WARNING LIGHTS

17.10.1.425 The predicted view of the red aviation lights at 2,000cd is shown in the photomontage in Figure 17.28(m-n).

17.10.1.426 Aviation and marine navigation lighting of the proposed ABWP2 WTGs will be visible in the view at night, from 12.10 km to the closest WTG, including both the red medium intensity lighting at nacelle height on all WTGs and yellow marine navigational lighting at platform level of the 14 SPS WTGs. These aviation lights will introduce multiple points of red light into the night-time view, and the marine navigational lights will extend the existing array of small yellow lights extending across part of the sea view, between the dark sea below and dark sky above.

17.10.1.427 The lighting of the ABWP2 WTGs will be seen in a baseline view which features other lighting in closer proximity, albeit seen in different sectors of the view. However, it will extend the

lateral spread of lighting over a wider portion of the view, extending more lighting into the relatively darker eastern seascape sector of the view, and extending further lighting into the dark seascape context.

17.10.1.428 Although the aviation and marine navigation lighting of the ABWP2 WTGs will be viewed in the context of existing offshore WTG lighting, it will introduce red aviation lighting into the view, which is not currently present. A small section of the seascape to the north of the Array Area will be retained with no WTG lighting, however the majority of the horizontal extent of the sea view would be influence by the WTG lighting. The lighting associated with the Proposed Development will extend lighting throughout the majority of the seascape, and artificial lighting will therefore be seen in all sectors of this view.

17.10.1.429 The aviation lights will be seen above the horizon and backdropped by dark sky, however they are relatively low to the horizon and do not extend high into the sky above the viewpoint, thus limiting the amount of the night-sky that is impeded. The stars will continue to be visible in the skies above. The aviation lights are not expected to result in obtrusive light that impedes the wider expanse of night sky, which can be experienced readily above the aviation lights, nor result in brightening of the night sky (skyglow) or glare on to the sea surface and will therefore not be of detriment to the overall experience of the night skies and seascape in this view.

17.10.1.430 The magnitude of change on the night-time view as a result of the aviation lights operating at 2,000 cd is assessed as Medium-High, occurring primarily due to the extended spread of visible lighting throughout the darkest sector of the view, over the Irish Sea to the east. The magnitude of change will be experienced from a viewpoint that has baseline lighting at close proximity, albeit seen in a different sector of the view. The lighting on the ABWP2 WTGs will therefore result in all sectors of this view being influenced by lighting.

17.10.1.431 When combined with the Medium-High sensitivity of the viewpoint, the Medium-High magnitude of change results in a **Major-Moderate (significant)** visual effect, occurring primarily due to the extended spread of visible lighting throughout the darkest sector of the view, over the Irish Sea to the east. The operation of aviation lights at the lower intensity of 200cd when visibility from every WTG is >5 km will provide further mitigation and reduction in the perceived intensity of the visible lighting (Figure 17.28o-p).

2000CD WHITE AVIATION WARNING LIGHTS

17.10.1.432 The predicted view of the white aviation lights at 2,000cd is shown in the photomontage in Figure 17.28(q-r). This represents the theoretical maximum visibility when the lights are visible, however it is predicted that the white lights at nacelle height are unlikely to be readily visible from this viewpoint (5.2m AoD), due to the light fittings being fully cut off, so that practically no light is emitted below the horizontal plane of the light, in accordance with IAA guidance.

17.10.1.433 Aviation and marine navigation lighting of ABWP2 WTGs may be visible in the view at night, from 12.10 km to the closest WTG, including both the white flashing medium intensity lighting at nacelle height and yellow steady marine navigational lighting at platform level, both seen only on the 14 SPS WTGs. The aviation lights may, if visible, introduce multiple points of flashing white light into the night-time view out to sea, and the marine navigational lights will extend the existing array of small yellow lights extending across part of the sea view, between the dark sea below and dark sky above.

17.10.1.434 The lighting of the ABWP2 WTGs will be seen in a baseline view which features other lighting in closer proximity, albeit seen in different sectors of the view. However, it will extend the lateral spread of lighting over a wider portion of the view, extending more lighting into the relatively darker eastern sector of the view, and extending further lighting into the dark seascape context.

17.10.1.435 Although the aviation and marine navigation lighting of the ABWP2 WTGs will be viewed in the context of existing offshore WTG lighting, it will extend lighting across the majority of the

seascape section of the view, although there are clear views between the SPS to the dark seascape and sky beyond, such that sections of the seascape between SPS be retained with no visible WTG lighting.

17.10.1.436 The aviation lights will be seen above the horizon and backdropped by dark sky, however they are relatively low to the horizon and do not extend high into the sky above the viewpoint, thus limiting the amount of the night-sky that is impeded. The stars will continue to be visible in the skies above. The aviation lights are not expected to result in obtrusive light that impedes the wider expanse of night sky, which can be experienced readily above the aviation lights, nor result in brightening of the night sky (skyglow) or glare on to the sea surface and will therefore not be of detriment to the overall experience of the night skies and seascape in this view.

17.10.1.437 The magnitude of change on the night-time view as a result of the aviation lights operating at 2,000 cd is assessed as Medium, occurring primarily due to the extended spread of visible lighting throughout the darkest sector of the view, over the Irish Sea to the east. The magnitude of change will be experienced from a viewpoint that has baseline lighting at close proximity, albeit seen in a different sector of the view. The lighting on the ABWP2 WTGs will therefore result in all sectors of this view being influenced by lighting.

17.10.1.438 When combined with the Medium-High sensitivity of the viewpoint, the Medium magnitude of change results in a **Moderate (significant)** visual effect, occurring primarily due to the extended spread of visible lighting throughout the darkest sector of the view, over the Irish Sea to the east. The assessment presented represents the theoretical maximum visibility for the white aviation lights, however lighting is likely to be more difficult to discern or practically not visible from this viewpoint, if the aviation lights are cut off such that practically no light is emitted below the horizontal, in accordance with IAA (2015) guidance.

VIEWPOINT 13: CLOGGA AMENITY AREA

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.439 The existing night-time view from Clogga Amenity Area is shown in Figure 17.31.1(j-k). There are limited sources of lighting in the baseline view. Existing lighting comprises limited point sources, including transient lights in boats in the inshore waters, and night-time lighting on the ABWP1 WTGs. Marine navigational lighting of the existing ABWP1 WTGs is faintly visible in the view at night, comprising yellow marine navigational lighting at platform level of two WTGs at the northern and southern extents of the development (SPS), forming small points of distant yellow light on the horizon between the dark sea below and dark sky above. This lighting is contained within a relatively limited horizontal extent. White aviation lighting mounted on the nacelle roof of the existing ABWP1 WTGs #1 and #7 (SPS) were not observed during site surveys and are not captured in the baseline photographs (Figure 17.31.1h-i). These aviation light fittings are fully cut off so that practically no light is emitted below the horizontal. There is also limited lighting visible along the coast to the north, associated with the holiday park and farmhouse at Askintinny. This viewpoint represents a relatively dark baseline view.

17.10.1.440 The value of the view is assessed to be High at night-time. Although it is not identified as a specific location for experiencing dark skies, it may be a location that people visit to experience a dark landscape, and there are limited existing sources of lighting in the view. It is likely to be valued by local people as a location from which dark skies and the dark seascape can be viewed.

17.10.1.441 The viewpoint is representative of views experienced by recreational receptors walking along the shoreline. Although recreational receptors are unlikely to be walking along the shoreline throughout the hours of darkness, there may be similar views at dusk, when there are likely to be more receptors experiencing the view. The susceptibility of these receptors is considered to be Medium-high, as their focus is likely to be on their surroundings.

17.10.1.442 Overall, taking into account the High value and Medium-High susceptibility, the sensitivity of the viewpoint at night is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT

2000CD RED AVIATION WARNING LIGHTS

17.10.1.443 The predicted view of the red aviation lights at 2,000 cd is shown in the photomontage in Figure 17.31.1(l-m).

17.10.1.444 Aviation and marine navigation lighting of the proposed ABWP2 WTGs will be visible in the view at night, from 11.57 km to the closest WTG, including both the red medium intensity lighting at nacelle height on all WTGs and yellow marine navigational lighting at platform level of the 14 SPS WTGs. The aviation lighting will introduce multiple points of red light into the night-time view, and the marine navigational lighting extend the existing array of small yellow lights across part of the sea view, between the dark sea below and dark sky above.

17.10.1.445 The aviation and marine navigation lighting of the ABWP2 WTGs will be seen in a baseline view which features limited existing lighting. Although it will be viewed in the context of existing offshore WTG lighting, it will introduce red aviation lighting into the view, which is not currently present. A small section of the seascape to the north of the Array Area will be retained with no visible WTG lighting. However, the lighting associated with ABWP2 will extend lighting throughout the majority of the seascape, covering a much greater horizontal extent than the existing ABWP1 WTG lighting.

17.10.1.446 The aviation lights will be seen above the horizon and backdropped by dark sky, however they are relatively low to the horizon and do not extend high into the sky above the viewpoint, thus limiting the amount of the night-sky that is impeded. The stars will continue to be visible in the skies above. The aviation lights are not expected to result in obtrusive light that impedes the wider expanse of night sky, which can be experienced readily above the aviation lights, nor result in brightening of the night sky (skyglow) or glare on to the sea surface and will therefore not be of detriment to the overall experience of the night skies and seascape in this view.

17.10.1.447 The magnitude of change on the night-time view as a result of the aviation lights operating at 2,000 cd is assessed as High, occurring primarily due to the extended spread of visible lighting throughout the dark view, over the Irish Sea to the east. The magnitude of change will be experienced from a viewpoint that has limited baseline lighting. The lighting on the ABWP2 WTGs will therefore introduce night time lighting into a much greater extent of the view than is currently influenced by lights.

17.10.1.448 When combined with the Medium-High sensitivity of the viewpoint, the Medium-High magnitude of change results in a **Major (significant)** visual effect, occurring primarily due to the introduction of visible lighting across a wide horizontal extent throughout this relatively dark view. The operation of aviation lights at the lower intensity of 200cd when visibility from every WTG is >5 km will provide further mitigation and reduction in the perceived intensity of the visible lighting (Figure 17.31n-o).

2000CD WHITE AVIATION WARNING LIGHTS

17.10.1.449 The predicted view of the white aviation lights at 2,000 cd is shown in the photomontage in Figure 17.31.1(p-q). This represents the theoretical maximum visibility when the lights are visible, however it is predicted that the white lights at nacelle height are unlikely to be readily visible from this viewpoint (at 16.9m AoD), due to the light fittings being fully cut off, so that practically no light is emitted below the horizontal plane of the light (at nacelle height), in accordance with IAA guidance.

17.10.1.450 Aviation and marine navigation lighting of the proposed ABWP2 WTGs may be visible in the view at night, from 11.57 km to the closest WTG, including both the flashing white medium intensity lighting at nacelle height and yellow marine navigational lighting at platform level, both present only on the 14 SPS WTGs. The aviation lights may, if visible, introduce multiple points of flashing white light into the night-time view out to sea, and the marine navigational lights will extend the existing array of small yellow lights across part of the sea view, between the dark sea below and dark sky above.

17.10.1.451 The aviation and marine navigation lighting of the ABWP2 WTGs will be seen in a baseline view which features limited existing lighting. Although it will be viewed in the context of limited existing offshore WTG lighting, it will extend lighting throughout the majority of the seascape, covering a much greater horizontal extent than the existing ABWP1 WTG lighting. There are clear views retained between lighting on SPS to the dark seascape and sky beyond, such that sections of the seascape between SPS be retained with no visible WTG lighting..

17.10.1.452 The aviation lights may be seen above the horizon and backdropped by dark sky, however they are relatively low to the horizon and do not extend high into the sky above the viewpoint, thus limiting the amount of the night-sky that is impeded. The stars will continue to be visible in the skies above. The aviation lights are not expected to result in obtrusive light that impedes the wider expanse of night sky, which can be experienced readily above the aviation lights, nor result in brightening of the night sky (skyglow) or glare on to the sea surface and will therefore not be of detriment to the overall experience of the night skies and seascape in this view.

17.10.1.453 The magnitude of change on the night-time view as a result of the aviation lights operating at 2,000 cd is assessed as Medium, occurring primarily due to the extended spread of visible lighting throughout the dark view, over the Irish Sea to the east. The magnitude of change will be experienced from a viewpoint that has limited baseline lighting. The lighting on the ABWP2 WTGs will therefore introduce night time lighting into a much greater extent of the view than is currently influenced by lights.

17.10.1.454 When combined with the Medium-High sensitivity of the viewpoint, the Medium magnitude of change results in a **Moderate (significant)** visual effect, occurring primarily due to the introduction of visible lighting across a wide horizontal extent throughout this relatively dark view. The assessment presented represents the maximum visibility scenario for the white aviation lights, however lighting is likely to be more difficult to discern or practically not visible from this viewpoint if the aviation lights are fully cut off such that practically no light is emitted below the horizontal, in line with IAA (2015) guidance.

VIEWPOINT 24: MIZEN HEAD

BASELINE AND SENSITIVITY TO CHANGE

17.10.1.455 The existing night-time view from Mizen Head is shown in Figure 17.42.1(n-p). This is a relatively dark view, with limited sources of baseline lighting, particularly over the Irish Sea to the east. Existing lighting in this direction comprises limited point sources, including transient lights in boats in the inshore waters, and night-time lighting on the ABWP1 WTGs. Marine navigation lighting of the existing ABWP1 WTGs is faintly visible in the view at night, comprising yellow marine navigational lighting at platform level of two WTGs at the northern and southern extents of the development (SPS), forming small points of distant yellow light on the horizon between the dark sea below and dark sky above. This lighting occupies a relatively limited horizontal extent. White aviation lighting mounted on the nacelle roof of the existing ABWP1 WTGs #1 and #7 (SPS) were not observed during site surveys and are not captured in the baseline photographs (Figure 17.42.1n-p). These aviation light fittings are fully cut off so that practically no light is emitted below the horizontal. The view along the coast is slightly brighter, and features several sources of lighting, including that associated with two residential properties to the north-west and south

respectively, and lights on vehicles travelling on the R750. Overall, this viewpoint represents a relatively dark baseline view, with the view over the Irish Sea being the darkest sector.

17.10.1.456 The value of the view is assessed as High at night-time. Although it is not identified as a specific location for experiencing dark skies, it may be a location that people visit to experience a dark landscape, and there are limited existing sources of lighting in the view. It is likely to be valued by local people as a location from which dark skies and the dark seascape can be viewed.

17.10.1.457 The viewpoint is representative of views experienced by recreational receptors visiting the coast. Although recreational receptors are unlikely to be walking along the coast throughout the hours of darkness, there may be similar views at dusk, when there are likely to be more receptors experiencing the view. The susceptibility of these receptors is considered to be Medium-high, as their focus is likely to be on their surroundings. Similar views will also be experienced by residential receptors.

17.10.1.458 Overall, taking into account the Medium-High value and Medium-High susceptibility, the sensitivity of the viewpoint at night is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT

2000CD RED AVIATION WARNING LIGHTS

17.10.1.459 The predicted view of the red aviation lights at 2,000 cd is shown in the photomontage in Figure 17.42.1(q-s).

17.10.1.460 Aviation and marine navigation lighting of the proposed ABWP2 WTGs will be visible in the view at night, from 8.12 km to the closest WTG, including both the steady red medium intensity lighting at nacelle height on all WTGs and yellow marine navigational lighting at platform level of all WTGs. This will introduce multiple points of red light into the night-time view, and extend the existing array of small yellow lights across part of the sea view, between the dark sea below and dark sky above.

17.10.1.461 The aviation and marine navigation lighting of the ABWP2 WTGs will be seen in a baseline view which features limited existing lighting, albeit with some limited sources of lighting along the coast to the south and north-west. Although it will be viewed in the context of existing offshore WTG lighting at ABWP1, it will introduce red aviation lighting into the view, which is not currently present. A small section of the seascape to the north of the Array Area will remain unlit. However, the lighting associated with ABWP2 will extend lighting throughout the majority of the seascape, covering a much greater horizontal extent than the existing ABWP1 WTG lighting.

17.10.1.462 The aviation lights will be seen above the horizon and backdropped by dark sky, however they are relatively low to the horizon and do not extend high into the sky above the viewpoint, thus limiting the amount of the night-sky that is impeded. The stars will continue to be visible in the skies above. The aviation lights are not expected to result in obtrusive light that impedes the wider expanse of night sky, which can be experienced readily above the aviation lights, nor result in brightening of the night sky (skyglow) or glare on to the sea surface and will therefore not be of detriment to the overall experience of the night skies and seascape in this view.

17.10.1.463 The magnitude of change on the night-time view as a result of the aviation lights operating at 2,000 cd is assessed as High, occurring primarily due to the extended spread of visible lighting throughout the dark view, over the Irish Sea to the east. The magnitude of change will be experienced from a viewpoint that has relatively limited baseline lighting, and the lighting associated with the ABWP2 WTGs will introduce lighting into an extensive expanse of the darkest sector of the view.

17.10.1.464 When combined with the Medium-High sensitivity of the viewpoint, the High magnitude of change results in a **Major (significant)** visual effect, occurring primarily due to the introduction

of visible lighting across a wide horizontal extent throughout this relatively dark view. The operation of aviation lights at the lower intensity of 200cd when visibility from every WTG is >5 km will provide further mitigation and reduction in the perceived intensity of the visible lighting (Figure 17.42t-u).

2000CD WHITE AVIATION WARNING LIGHTS

17.10.1.465 The predicted view of the white aviation lights at 2,000 cd is shown in the photomontage in Figure 17.42.1(w-y). This represents the theoretical maximum visibility when the lights are visible, however it is predicted that the white lights at nacelle height are unlikely to be readily visible from this viewpoint (at 11.7m AoD), due to the light fittings being fully cut off, so that practically no light is emitted below the horizontal plane of the light, in accordance with IAA guidance.

17.10.1.466 Aviation and marine navigation lighting of the proposed ABWP2 WTGs may be visible in the view at night, from 8.12 km to the closest WTG, including both the flashing white medium intensity lighting at nacelle height and yellow marine navigational lighting at platform level, both seen only on the 14 SPS WTGs. The aviation lights may, if visible, introduce multiple points of white light into the night-time view, and the marine navigation lighting will extend the existing array of small yellow lights across part of the sea view, between the dark sea below and dark sky above.

17.10.1.467 The aviation and marine navigation lighting of the ABWP2 WTGs will be seen in a baseline view which features limited existing lighting, albeit with some limited sources of lighting along the coast to the south and north-west. Although it will be viewed in the context of existing offshore WTG lighting at ABWP1, it will introduce white aviation lighting into the view, which is not currently present. A small section of the seascape to the north of the Array Area will remain unlit. However, the lighting associated with ABWP2 will extend lighting throughout the majority of the seascape, covering a much greater horizontal extent than the existing ABWP1 WTG lighting.

17.10.1.468 The aviation lights may be seen above the horizon and backdropped by dark sky, however they are relatively low to the horizon and do not extend high into the sky above the viewpoint, thus limiting the amount of the night-sky that is impeded. The stars will continue to be visible in the skies above. The aviation lights are not expected to result in obtrusive light that impedes the wider expanse of night sky, which can be experienced readily above the aviation lights, nor result in brightening of the night sky (skyglow) or glare on to the sea surface and will therefore not be of detriment to the overall experience of the night skies and seascape in this view.

17.10.1.469 The magnitude of change on the night-time view as a result of the aviation lights operating at 2,000 cd is assessed as Medium, occurring primarily due to the extended spread of visible lighting throughout the dark view, over the Irish Sea to the east. The magnitude of change will be experienced from a viewpoint that has relatively limited baseline lighting, and the lighting associated with the ABWP2 WTGs will introduce lighting into an extensive expanse of the darkest sector of the view.

17.10.1.470 When combined with the Medium-High sensitivity of the viewpoint, the Medium magnitude of change results in a **Moderate (significant)** visual effect, occurring primarily due to the introduction of visible lighting across a wide horizontal extent throughout this relatively dark view. The assessment presented represents the maximum visibility for the white aviation lights, however lighting is likely to be more difficult to discern or practically not visible at this viewpoint, if the lights are fully cut off, such that practically no light is emitted below the horizontal, in accordance with IAA (2015) guidance.

17.10.2 Impact 2 – Seascape Effects

RSCA 13: South East Irish Sea

BASELINE AND SENSITIVITY TO CHANGE

17.10.2.1 The Array Area is located within RSCA 13: South East Irish Sea. This RSCA comprises coastline between Wicklow Head in the north to Carnsore Point in the south, and extends to 12 nautical miles offshore. It comprises parts of the coastline within Wicklow and Wexford Counties. The RSCA is made up of a number of SCTs, comprising SCT 7: Broad estuarine bays and complex low plateau and cliff coastline; SCT 8: Low lying and estuarine coastal plain with long, narrow sandy beaches; and offshore SCT 12: Shallow offshore waters.

17.10.2.2 The coastline within this RSCA generally comprises a mixture of "*broad, moderate scale bays and estuaries*" which feature relatively long, sandy beaches. These are punctuated by prominent headlands, including Carnsore Point, Cahore Point, Kilmichael Point and Wicklow Head. The elevation is generally low-lying, even at the headlands along the coastline. The exception to this is at Tara Hill, which forms the only notable elevated feature within the otherwise low-lying coastal plain. Further inland, the land cover generally comprises agricultural land. Settlement within the RSCA includes the town of Arklow, and there is increasing settlement associated with the recreational use of the beaches, including holiday homes and caravan parks focussed around Curracloe and Courtown. There are minor roads throughout the inland area, and a large quarry to the south of the settlement of Arklow forms a prominent man-made influence.

17.10.2.3 The headlands along the coast frame views out to sea from parts of this RSCA, for example from Kilmichael Point to Raven Point. There are a limited number of islands within the RSCA, and visual reference points are therefore provided by the headlands, as well as by WTGs within ABWP1 As the elevation increases towards the north of the RSCA, views become increasingly panoramic, for example at Wicklow Head at the northern extent of the RSCA. The Wicklow Mountains provide a prominent backdrop to the coastal areas within the north of the RSCA, particularly around the settlement of Arklow.

17.10.2.4 The key characteristics of the RSCA are described as:

- *"This SCA includes the most southeasterly point in Ireland at Carnsore Point and forms the juncture between the Celtic and Irish Sea.*
- *Ireland's most southeasterly island Tuskar Rock is within this SCA.*
- *Coastal form comprises broad, medium scale bays and estuaries.*
- *The SCA is renowned for its long sandy beaches and its well established coastal resorts such as Courtown.*
- *Long established historical towns that retain a fishing function including Arklow and Wexford. These are active, busy settlements with strong connections to the sea.*
- *Dynamic coastline that has seen considerable effects of erosion and deposition associated with Wexford Harbour as at Rosslare Island.*
- *Views vary from south to north, with low headlands framing those in the south, as the land rises further north, the mountains provide a montane setting to the coastal areas from Arklow onwards."*

17.10.2.5 There are no landscape designations across the majority of this RSCA, which otherwise would indicate a higher value. The coastline of the northern part of the RSCA is classified as part of the Coastal Areas AONB, as determined by Wicklow County Council, which indicates the county-level importance of this coastline. Overall, the value is considered to be Medium-High.

17.10.2.6 This area is formed of a generally medium-scale seascape, with long, straight sections of sandy beach punctuated by rocky headlands, which form more prominent sections along the coastline, and frame views out to sea. The coastline features relatively extensive settlement and a rural,

farmed character away from more concentrated areas of settlement. Settlement, transport corridors and the large quarry to the south of Arklow, as well as the WTGs within the operational ABWP1, provide evidence of man-made influence within the RSCA, and moderate the susceptibility to change associated with the Proposed Development. However, the Proposed Development is located within this RSCA, which increases the susceptibility to change. Taking these factors into account, the susceptibility of the seascape to the type of development proposed is considered to be High.

17.10.2.7 Overall, taking account of the judgements of susceptibility and value, the sensitivity to change arising from the Proposed Development is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.2.8 There will be direct effects on the seascape of this RSCA as a result of the construction and decommissioning of the Proposed Development. However, the key characteristics of the RSCA generally relate to the coastline of the area, and the perceptual characteristics of the sea as experienced from the coast, as opposed to the physical characteristics of the seascape. Direct effects will therefore generally be limited to the physical influence of construction and decommissioning activity, including the presence of partially built WTGs.

17.10.2.9 Indirect effects will include visibility of this activity as experienced from the coastline. Visibility of construction activity will be widespread and high-level, both throughout the seascape and from along the coast. In particular, between Wicklow Head at the northern extent of the RSCA and Cahore Point towards the south, there will visibility of construction and decommissioning activity throughout the full extent of the Array Area. To the south of Cahore Point, visibility along the coastline will be slightly restricted due to the angle of view towards the Array Area and screening by intervening landform. The Array Area will result in indirect effects on the key characteristics of the coastline, adding man-made activity to the often panoramic views available over the coast. This activity will be temporary and short-term, and generally restricted to movement of boats and associated infrastructure in the sea, and views of partially built WTGs. Overall, the magnitude of change to the perceptual character of the seascape will be High.

17.10.2.10 Taking into account the High sensitivity and High magnitude of change, the effect of the Proposed Development on the South East Irish Sea RSCA 13 during the construction and decommissioning phases will be **Major (significant)** across parts of the RSCA with visibility of the Proposed Development within approximately 20 km of the Array Area. The effect of the Proposed Development on RSCA 13 is assessed as reducing to Medium magnitude and **Major-Moderate (significant)** to the south of Cahore Point, during construction and decommissioning, where the influence of the Proposed Development diminishes with distance and the orientation of the coastline between Cahore Point and Raven Point is aligned to the south-east (oblique to the Proposed Development).

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.2.11 This RSCA extends up to 12 nautical miles offshore, and the Array Area is located within these extents. There will therefore be direct effects on the seascape of this RSCA as a result of the Proposed Development. However, the key characteristics of the RSCA generally relate to the coastline of the area, and the perceptual characteristics of the sea as experienced from the coast, as opposed to the physical characteristics of the seascape.

17.10.2.12 Indirect effects will result from the visibility of the Array Area on the perceived character of the seascape, as experienced mainly from the coastline of the RSCA. Visibility of the WTGs will be widespread and high-level, both throughout the seascape and from along the coast. In particular, between Wicklow Head at the northern extent of the RSCA and Cahore Point towards

the south, there will be widespread visibility of the full extent of the WTGs within the Array Area. To the south of Cahore Point, visibility along the coastline will be slightly restricted due to the angle of view towards the Array Area and screening by intervening landform. The Array Area will result in indirect effects on the key characteristics of the coastline, providing evidence of man-made activity in the often panoramic views available over the coast. However, the WTGs will be seen in the context of the existing WTGs within ABWP1 which will reduce the magnitude of change associated with the Proposed Development. Overall, the magnitude of change to the physical fabric and the perceptual character of the seascape will be High.

17.10.2.13 Taking into account the High sensitivity and High magnitude of change, the effect of the Proposed Development on the South East Irish Sea RSCA during the operational and maintenance phase will be **Major (significant)** across parts of the RSCA with visibility of the Proposed Development. These effects will be direct, long-term and reversible. Due to the lateral spread, apparent scale and influence on the perceived character of the seascape during its operational phase, the Proposed Development is likely to result in the creation of a new 'with windfarm' seascape character area within the northern part of RSCA 13, where the presence of offshore wind turbines of large apparent scale over a relatively wide north-south spread, will become the key characteristic of the seascape. This change in seascape character is assessed as being likely to occur in the seascape of a RSCA 13 around Arklow Bank, Kilmichael Point and Glassgorman Banks, to the north of Courtown and extend to the boundary of RSCA 14 to the north and is assessed as **Major (significant).**

17.10.2.14 The effect of the Proposed Development on RSCA 13 is assessed as reducing to Medium magnitude and **Major-Moderate (significant)** to the south of Cahore Point, where the influence of the Proposed Development diminishes with distance and the orientation of the coastline between Cahore Point and Raven Point is aligned to the south-east, oblique to the Proposed Development and therefore the baseline characteristics of the seascape and coastal character will continue to define its key characteristics.

RSCA 14: Irish Sea, Sandbanks and broad bays

BASELINE AND SENSITIVITY TO CHANGE

17.10.2.15 This RSCA is located towards the north of the SLVIA Study Area, approximately 3.65 km to the north-west of the Array Area at its closest point. It extends from Wicklow Head in the south, to the north of Bray Head in the north. The shallow India and Codling Banks are located offshore within this RSCA. This area is differentiated from the RSCA 13: South East Irish Sea to the south by its increased elevation and increasing evidence of man-made influence along the coastline, due to its proximity to Dublin. It is made up of two SCTs, comprising SCT 7: Broad estuarine bay and complex low plateau and cliff coastline; and SCT 11: Shallow offshore waters.

17.10.2.16 The RSCA comprises broad sandy bays which feature popular seaside resorts, including Killiney Bay and Wicklow Bay. These bays are contained by prominent headlands, most notably at Bray Head and Wicklow Head. Although the topography is slightly more elevated than RSCA 13 to the south, it remains relatively low-lying, with features at Wicklow Head, the adjacent hills, and Collan Hill forming the only notable elevated features. Settlement is evident throughout the RSCA, including at Wicklow, Greystones and Bray. Transport corridors including Dublin Area Rapid Transport (DART) pass through the RSCA, while the N11 passes in close proximity and exerts an influence on the RSCA . The land cover inland is formed by agriculture and forestry. As well as long stretches of sandy beaches, the coastline also features long stretches of man-made shingle bar that were constructed to facilitate the railway line and function as a flood defence.

17.10.2.17 There are panoramic views from this RSCA, particularly from the more elevated headlands, which otherwise frame views of the Irish Sea from remaining parts of the coastline. In particular, the coastal path between Greystones and Bray offers long-distance, panoramic views along the bays and out to sea. There are also views towards the Wicklow Mountains which form a montane

backdrop to the RSCA. Great Sugar Loaf Mountain also forms a notable feature in views from the northern part of the RSCA in particular.

17.10.2.18 The key characteristics of the RSCA are described as:

- *"A busy and active SCA with long history of navigation and human settlement.*
- *The busy towns of Wicklow, Greystones and Bray nowadays within the commuter zone but retain a strong link to the sea with the former the most significant fishing port in the SCA.*
- *Bray, well established seaside resort. The railway has afforded easy access to the town.*
- *The increasing presence of the Wicklow Mountains and rising topography creates a highly scenic landscape in parts with long views and panoramas afforded from Bray to Greystones and Wicklow Head Cliff Walks.*
- *Longest coastal wetlands at the Murroughs created due to the construction of the shingle bar to facilitate the railway line.*
- *Increasingly urbanised towards the north, the hinterland comprises primarily agriculture and forestry."*

17.10.2.19 There are no landscape designations across this RSCA, which otherwise would indicate a higher value. A section of the coastline between Wicklow and Greystones is classified as part of the Coastal Areas AONB, as determined by Wicklow County Council, which indicates the county-level importance of this coastline. Overall, the value is considered to be Medium-High.

17.10.2.20 This area is formed of a generally medium-scale seascape, with long, straight sections of sandy beach, often featuring the shingle bar associated with the adjacent railway line. It is punctuated by rocky headlands, which form more prominent sections along the coastline, and offer longer-distance views out to sea, as well as framing views from other parts of the coastline. There is relatively extensive settlement throughout the RSCA, as well as a character influenced by agriculture and forestry further inland. Settlement and transport corridors including the railway line provide evidence of man-made influence within the RSCA, and moderate the susceptibility to change associated with the Proposed Development. Taking this into account, the susceptibility of the seascape to the type of development proposed is considered to be Medium.

17.10.2.21 Overall, taking account of the judgements of susceptibility and value, the sensitivity to change arising from the Proposed Development is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.2.22 The Proposed Development is not located within this RSCA, and there will be no direct effects on the seascape within the RSCA as a result of construction and decommissioning activity. Any effects will therefore be indirect. Changes will only occur to the visual aspects of the perceived seascape character as a result of construction and decommissioning activity associated with the Proposed Development outside the RSCA, in the wider seascape context.

17.10.2.23 Indirect effects will include visibility of this activity as experienced from the coastline. Visibility of activity including the movement of boats and associated infrastructure, and partially built WTGs, will be widespread and high-level, particularly throughout the seascape itself. Along the coastline, visibility will be more restricted due to intervening landform, particularly to the east and north of Wicklow and around Bray. From other parts of the coast, there will be visibility of construction and decommissioning activity throughout the full extent of the Array Area, including in particular from a stretch of coastline to the east of Newcastle and Kilcoole.

17.10.2.24 The Array Area will result in indirect effects on the key characteristics of the coastline during the construction and decommissioning phases, providing evidence of man-made activity in the "*long views and panoramas*" available throughout this RSCA, although sections of coastline will experience reduced visibility due to screening by intervening landform. The key characteristics of

the RSCA identify settlement and man-made development as a feature within the RSCA which will moderate the magnitude of change arising from activity associated with construction and decommissioning of the Array Area in views beyond the RSCA. Overall, the magnitude of change to the perceptual character of the seascape will be Medium from areas of coastline and seascape experiencing high-level visibility of construction and decommissioning activity.

17.10.2.25 Taking into account the Medium-High sensitivity and Medium magnitude of change, the effect of the Proposed Development on the Irish Sea Sandbanks and Broad Bays RSCA during the operational and maintenance phase will be **Moderate (not significant)** across parts of the RSCA experiencing visibility of the Proposed Development. These effects will be indirect, short-term and reversible. This effect is considered to be not significant due to the Medium magnitude of change (in comparison to significant effects which may result from a Medium-High magnitude of change), the screening of construction activity across parts of the RSCA due to the landform, and the existing man-made development within the RSCA.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.2.26 The Proposed Development will not be located within this RSCA and there will therefore be no direct effects on the seascape within the RSCA. Any effects arising from the Proposed Development will therefore be indirect. Changes will only occur to the visual aspects of the perceived seascape character as a result of the Proposed Development outside the RSCA, in the wider seascape context.

17.10.2.27 Indirect effects will include visibility of the Array Area as experienced from the coastline. Visibility of the WTGs will be widespread and high-level, particularly throughout the seascape itself. Along the coastline, visibility will be more restricted due to intervening landform, particularly to the east and north of Wicklow and around Bray. This is due to screening of parts of the Array Area by Wicklow Head and Bray Head respectively, and the angle of view towards the WTGs from these sections of coast. From other parts of the coast, there will be visibility of the full extent of the Array Area, including in particular from a stretch of coastline to the east of Newcastle and Kilcoole.

17.10.2.28 The Array Area will result in indirect effects on the key characteristics of the coastline, providing evidence of man-made activity in the "*long views and panoramas*" available throughout this RSCA, although sections of coastline will experience reduced visibility of the Array Area due to screening by intervening landform. Visibility of the full Array Area will be restricted to between Bray and Greystones; to the east of Newcastle and Kilcoole; and around Wicklow Head.

17.10.2.29 The WTGs will be seen in the context of the existing WTGs within ABWP1 which will reduce the magnitude of change associated with the Proposed Development. The key characteristics of the RSCA identify settlement and man-made development as a feature within the RSCA which also moderates the magnitude of change associated with the introduction of the WTGs in views beyond the RSCA. Overall, the magnitude of change to the perceptual character of the seascape will be Medium from areas of coastline and seascape experiencing high-level visibility of the Array Area.

17.10.2.30 Taking into account the Medium-High sensitivity and Medium magnitude of change, the effect of the Proposed Development on the Irish Sea Sandbanks and Broad Bays RSCA during the operational and maintenance phase will be **Moderate (not significant**) across parts of the RSCA experiencing visibility of the Proposed Development. These effects will be indirect, long-term and reversible. This effect is considered to be not significant due to the Medium magnitude of change (in comparison to significant effects which may result from a Medium-High magnitude of change), the screening of the Proposed Development across parts of the RSCA due to the landform and the existing man-made development within the RSCA.

17.10.3 Impact 3 – Landscape Character Effects

The Mountain Uplands (Wicklow) LCA

BASELINE AND SENSITIVITY TO CHANGE

17.10.3.1 The Mountain Uplands LCA forms the largest LCA within Wicklow, and comprises the heart of the Wicklow Mountains. The LCA contains the highest land within Ireland. It is located approximately 25.56 km north-west of the nearest WTG. This LCA "*extends from the Dublin border in the north of the County at Kippure towards Aughrim in the south and from east of the Glen of Imaal as far as west of Roundwood Village*" (Wicklow County Council, 2016). The area is described as having a "*mountainous topography with U-shaped valleys, lakes and glacial topography*" (Wicklow County Council, 2016). The majority of the LCA is within the WMNP. Land cover generally comprises coniferous forestry across lower slopes, while higher ground within the LCA features open moorland. Mountain ranges within the LCA include Seefingan Mountain, Kippure Mountain, Mullaclevaughan, Lugnaquillla and Keadeen. The area provides an important recreational resource, and long-distance routes including the Wicklow Way and the St. Kevins Pilgrim path walks cross the area. Generally, settlement is restricted to rural areas at lower elevation within the glens. The R115 route passes north to south through the LCA connecting Dublin with Rathdown.

17.10.3.2 A large part of the LCA is within the WMNP, which indicates a high value due to the national importance of this landscape. The LCA is classified as part of the Mountain and Lakeshore AONB landscape category within the Wicklow Landscape Character Assessment, which is considered to be of higher value. Overall, the value is considered to be High. This relates to the national-level importance of the National Park designation.

17.10.3.3 There are open views towards the Array Area from this elevated landscape, although the focus of landscape character within the LCA is the mountain uplands themselves, while the seascape forms a less influential factor. Existing views towards WTGs within ABWP1 slightly moderate the susceptibility to development of this type. Taking account of the characteristics described above, and the limited influence of existing manmade features within the LCA, the susceptibility to the type of development proposed is judged to be Medium-High.

17.10.3.4 Overall, taking account of the judgements of value and susceptibility, the sensitivity to change arising from the Proposed Development is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.3.5 Changes occurring to the Mountain Uplands (Wicklow) LCA as a result of the construction and decommissioning of the Proposed Development will be restricted to indirect visual effects to its perceived character. There is a relatively limited associated between the LCA and the Irish Sea, and construction and decommissioning effects will therefore be limited. There will be views towards construction and decommissioning activity, including movement of boats and associated infrastructure, and partially built WTGs, from parts of this LCA, including eastern areas and more elevated western parts. However, this will occur at distances of more than 21.90 km, which will moderate the magnitude of change. Landscape character is generally influenced by the mountain uplands themselves, rather than the views of the Irish Sea, which will also moderate the magnitude of change.

17.10.3.6 Overall, the magnitude of change to the perceived character of the LCA as a result of the Proposed Development during the construction and decommissioning phases is assessed as Medium-Low across parts of the LCA experiencing open views towards associated activity. Elsewhere, there will be zero change where there is no visibility of construction or decommissioning activity.

17.10.3.7 Taking into account the High sensitivity and Medium-Low magnitude of change, the effect of the Proposed Development on the Mountain Uplands (Wicklow) LCA during the construction and decommissioning phases will be **Moderate (not significant)** across parts of the LCA with visibility of associated activity. These effects will be indirect, short-term and reversible. Although the effects are considered to be moderate, this is considered not significant in this instance due to a number of factors, including primarily the distance of more than 20 km between the LCA and the WTGs, and the relatively limited association between the LCA and the Irish Sea.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.3.8 The Proposed Development will result in **zero** change to the fabric of the physical landscape of the LCA. There will also be limited change to many of the main characteristics of the LCA, including its key characteristic as a "*mountainous topography with U-shaped valleys, lakes and glacial topography*" (Wicklow County Council, 2016). Changes will only occur to the visual aspects of its perceived character as a result of the Proposed Development outside the LCA, in its associate seascape context.

17.10.3.9 These changes occur to specific aesthetic / perceptual aspects, and are likely to have a limited effect on landscape character within the LCA, due to the relatively limited association between the LCA and the Irish Sea. Landscape character within the LCA is generally influenced by the character of the mountain uplands themselves, rather than by association with the Irish Sea. The magnitude of change associated with visibility of the Proposed Development will also be moderated by visibility of the existing ABWP1 WTGs, which establish development of this type as a feature of the baseline view. Intermittent sea-based activities associated with maintenance of the turbines will be difficult to perceive at distances of more than 20 km.

17.10.3.10 The Array Area will form a distinct feature at distances of more than 20 km, seen from parts of the LCA with open views to the east, generally located towards the east of the LCA, as well as across high ground further west, including at Silsean and Moanbane in the centre, and Keadean at the south of the LCA. The majority of visibility will be experienced across the highest peaks across the LCA, including Djouce, Kippure, Mullacleevaun, Glendalough and Lugnaquilla. At these distances, the Array Area will occupy a limited horizontal extent of the panoramic views available from these elevated areas. It will have a relatively limited impact on the character of this LCA, which is influenced primarily by the mountain uplands themselves.

17.10.3.11 The magnitude of change to the perceived character of the LCA as a result of the Proposed Development is assessed as Medium-Low across parts of the LCA experiencing open views towards the Array Area. Elsewhere, there will be **zero** change where there is no visibility of the Proposed Development.

17.10.3.12 Taking into account the High sensitivity and Medium-Low magnitude of change, the effect of the Proposed Development on the Mountain Uplands (Wicklow) LCA during the operational and maintenance phase will be **Moderate (not significant)** across parts of the LCA with visibility of the Proposed Development. These effects will be indirect, long-term and reversible. Although the effects are considered to be moderate, this is considered not significant in this instance due to a number of factors, including primarily the distance of more than 20 km between the LCA and the WTGs, and the relatively limited association between the LCA and the Irish Sea.

The Bray Mountains Group / Northern Hills (Wicklow) LCA

BASELINE AND SENSITIVITY TO CHANGE

17.10.3.13 The Northern Hills LCA is focussed on the hill range between Bray and Greystones, consisting of the Great Sugar Loaf, Little Sugar Loaf and Bray Head. Great Sugar Loaf is the largest of these hills, and has a distinctive cone-shaped form. The hill range extends to the north-

east, and Bray Head is located adjacent to the coast. This LCA is located approximately 27.77 km north-west of the nearest WTG. The hills are described as being "*of national geological importance and collectively form an iconic visual 'gateway' to County Wicklow. The area contains a number of features of archaeological significance and may have been the focal point of a wider ritual landscape. The area is widely used for walking and other recreational uses*" (Wicklow County Council, 2016). There is a strong topographical variety across the LCA, and each of the hills forms a distinctive peak. The N11 / M11 route passes between Great Sugar Loaf and Little Sugar Loaf. Although the LCA is focussed on the more rural, rugged peaks, the settlements of Bray and Greystones also exert an influence on the character.

17.10.3.14 Bray Head SAAO is located within the LCA, and indicates that this part of the LCA is of national-level importance in terms of the amenity value it provides. The LCA is also classified as part of the Mountain and Lakeshore AONB landscape category, which is considered to be of higher value. Overall, the value is considered to be Medium-High.

17.10.3.15 There are open views towards the Array Area from this elevated landscape, and it has a close association with the seascape due to its position on the coast. Existing views towards WTGs within ABWP1 slightly moderate the susceptibility to development of the type proposed. Taking account of the characteristics described above, and the influence of existing man-made features within and adjacent to the LCA, the susceptibility is considered to be Medium-High.

17.10.3.16 Overall, taking account of the judgements of value and susceptibility, the sensitivity to change arising from the Proposed Development is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.3.17 Changes occurring to the Bray Mountains Group / Northern Hills (Wicklow) LCA as a result of the construction and decommissioning of the Proposed Development will be restricted to indirect visual effects to its perceived character, in particular its open and exposed character, as a result of views towards construction and decommissioning activity in associate seascape context. These open views will be altered by views of the movement of boats and associated infrastructure, and partially built WTGs, from limited parts of this LCA. However, this will occur at distances of more than 27.77 km, which will moderate the magnitude of change. In all areas of the LCA with visibility of the Irish Sea, the characteristic views of the coastline will remain, there will still be open views out across the sea, and it will remain an elevated, mountainous landscape whose character is influenced by the dynamic influences of the sea and the surrounding settlements.

17.10.3.18 Overall, the magnitude of change to the perceived character of the LCA as a result of the Proposed Development during the construction and decommissioning phases is assessed as Medium across parts of the LCA experiencing open views towards associated activity. Elsewhere, there will be zero change where there is no visibility of construction or decommissioning activity.

17.10.3.19 Taking into account the Medium-High sensitivity and Medium magnitude of change, the effect of the Proposed Development on the Bray Mountains Group / Northern Hills (Wicklow) LCA during the construction and decommissioning phases will be **Moderate (not significant)** across parts of the LCA with visibility of associated activity. Although the effects are considered to be Moderate, this is considered not significant in this instance due to a number of factors, including primarily the distance of more than 25 km between the LCA and the WTGs, and the indirect nature of effects. These effects will be indirect, short-term yet reversible.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.3.20 The Proposed Development will result in **zero** change to the fabric of the physical landscape of the LCA. There will also be zero change to many of the main characteristics of the LCA, including its fundamental character as a mountainous region of recreational amenity. Changes will only occur to the visual aspects of its perceived character as a result of the Proposed Development outside the LCA, in its associate seascape context.

17.10.3.21 These changes occur to specific aesthetic / perceptual aspects, particularly its open and exposed character, as a result of further WTG development influence in its open views out across the sea to the horizon. These open views out across the sea to the horizon will be altered through a partial loss of open seascape occupied by the Array Area and the resulting change in the seascape composition from the increased influence and spread of WTGs. The Array Area will form a distinct feature at distances of more than 27.77 km. In all areas of the LCA with visibility of the Irish Sea, the characteristic views of the coastline will remain, there will still be open views out across the sea, and it will remain an elevated, mountainous landscape whose character is influenced by the dynamic influences of the sea and the surrounding settlements.

17.10.3.22 The magnitude of these changes to the perceived character of the LCA resulting from the operational and maintenance phase of the Proposed Development is assessed as Medium from the small parts of the LCA with open views of the Proposed Development to the east. Elsewhere, where there is no visibility of the Proposed Development, the magnitude of change will be **zero.**

17.10.3.23 Taking into account the Medium-High sensitivity and Medium to zero magnitude of change, the effect of the Proposed Development on the Bray Mountains Group / Northern Hills (Wicklow) LCA during the operational and maintenance phase will be **Moderate (not significant)** across parts of the LCA with visibility of the Proposed Development. Although the effects are considered to be Moderate, this is considered not significant in this instance due to a number of factors, including primarily the distance of more than 25 km between the LCA and the WTGs, and the indirect nature of effects. These effects will be indirect, long-term and reversible.

Northern Coastal Area (Wicklow) LCA

BASELINE AND SENSITIVITY TO CHANGE

17.10.3.24 This LCA is located north-west of the Array Area, approximately 12.46 km from the nearest WTG. It comprises an area of coastline between Greystones and Wicklow. The LCA citation describes this area as a "*'Coastal Plain' comprising of flat and relatively low lying lands adjacent to the seacoast*" (Wicklow County Council, 2016) and states that there are "*intermittent views of the sea from the coast road with this area being somewhat more developed than the southern coastline*" (Wicklow County Council, 2016). There is a variety of habitats across the area, including "*salt marshes, mud flats, reed beds, wet grasslands, fen and wet woodland*" (Wicklow County Council, 2016). The area is relatively rural, although there is some dispersed settlement and minor roads which cross the LCA, and the R750 coastal road forms the western boundary of the LCA. Adjacent settlements including Kilcoole and Newcastle exert an influence on the LCA, although the main focus of the LCA is on the relationship between the coastal plain and the Irish Sea, albeit that this is reduced inland by screening from mature hedgerows.

17.10.3.25 There are no landscape designations within this LCA, which otherwise would indicate a higher value. However, it is classified as part of the Coastal Areas AONB which is considered to be of higher value. Overall, the value is considered to be Medium-High.

17.10.3.26 This LCA is generally a large scale, simple, expansive, uniform, flat coastal farmland landscape with limited man-made influence except at settlements. The LCA does have some distinctive characteristics due to the visual relationship with the coast, however such characteristics diminish very rapidly further inland due to screening provided by mature

hedgerows. The landscape further away from the coast comprises a relatively uniform character with no visual relationship with the coast. There is a general lack of man-made influence, such as commercial forestry, although the LCA is locally influenced by settlements and infrastructure. Taking account of the above characteristics, the susceptibility of the LCA to the type of development proposed is judged to be Medium-High.

17.10.3.27 Overall, taking account of the judgements of susceptibility and value, the sensitivity to change associated with the Proposed Development is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.3.28 Changes occurring to the Northern Coastal Area (Wicklow) LCA as a result of the construction and decommissioning of the Proposed Development will be restricted to indirect visual effects to its perceived character, in particular the characteristic views towards the coast, as a result of construction and decommissioning activity. These open views out across the sea to the horizon will be altered by views of the movement of boats and associated infrastructure, and partially built WTGs, from parts of this LCA in close proximity to the coast, including in particular around Kilcoole. However, this will occur at distances of more than 12.46 km, which will moderate the magnitude of change. From much of the LCA, where visibility occurs, the construction activity will occupy a relatively limited horizontal extent, and from much of the LCA there will be views of a proportion of the Array Area only, due to screening by parts of the coastline. In all areas of the LCA with visibility of the Irish Sea, the characteristic views of the coastline will remain, there will still be open views out across the sea, and it will remain a low-lying landscape of varied land cover whose character is influenced by the dynamic influences of the sea and surrounding settlement.

17.10.3.29 Overall, the magnitude of change to the perceived character of the LCA as a result of the Proposed Development during the construction and decommissioning phases is assessed as Medium-High across parts of the LCA experiencing open views towards associated activity. From parts of the LCA which have more restricted visibility of construction and decommissioning activity, the magnitude of change will be Low. Elsewhere, there will be zero change where there is no visibility of construction or decommissioning activity.

17.10.3.30 Taking into account the Medium-High sensitivity and Medium-High to Low magnitude of change, the effect of the Proposed Development on the Northern Coastal Area (Wicklow) LCA during the construction and decommissioning phases will be **Major-Moderate (significant)** across parts of the LCA with widespread visibility of associated activity, reducing to **Moderate-Minor (not significant)** from parts of the LCA with restricted views. These effects will be indirect, short-term and reversible.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.3.31 The Proposed Development will result in zero change to the fabric of the physical landscape of the LCA. There will also be zero change to many of the main characteristics of the LCA, including its fundamental character as a coastal plain featuring a variety of habitats and with a relatively settled pattern of development. Changes will only occur to the visual aspects of its perceived character as a result of the Proposed Development outside the LCA, in its associate seascape context.

17.10.3.32 These changes occur to specific aesthetic / perceptual aspects, particularly the views towards the coast from this low-lying landscape, as a result of further WTG development influence in its open views out across the sea to the horizon. These open views out across the sea to the horizon will be altered through a partial loss of open seascape occupied by the Array Area and the resulting change in the seascape composition from the increased influence and spread of

WTGs. WTGs within the Array Area will form a distinct feature at a minimum distance of approximately 12.46 km, although it will generally occupy a relatively limited horizontal extent of the view, and from much of the LCA there will be views of only a proportion of the WTGs due to screening by parts of the coastline. In all areas of the LCA with visibility of the Irish Sea, the characteristic views of the coastline will remain, there will still be open views out across the sea, and it will remain a low-lying landscape of varied land cover whose character is influenced by the dynamic influences of the sea and surrounding settlement.

17.10.3.33 The magnitude of these changes to the perceived character of the LCA resulting from the operational and maintenance phase of the Proposed Development is assessed as Medium-High from parts of the LCA with open views of the Proposed Development to the south-east. This will generally be restricted to parts of the LCA in close proximity to the coast, including particularly around Kilcoole. From parts of the LCA with restricted views towards the Proposed Development, the magnitude of change will be Low. Elsewhere, where there is no visibility of the Proposed Development, the magnitude of change will be **zero.**

17.10.3.34 Taking into account the Medium-High sensitivity and Medium-High to Low magnitude of change, the effect of the Proposed Development on the Northern Coastal Area (Wicklow) LCA during the operational and maintenance phase will be **Major-Moderate (significant)** across parts of the LCA with widespread visibility of the Proposed Development, reducing to **Moderate-Minor (not significant)** from parts of the LCA with restricted views towards the Proposed Development. These effects will be indirect, long-term and reversible.

Southern Coastal Area (Wicklow) LCA

BASELINE AND SENSITIVITY TO CHANGE

17.10.3.35 This LCA comprises two units, a larger unit which extends along the coast between Wicklow and Arklow, and a smaller unit located to the south of Arklow. The closest part is located approximately 6.05 km west of the nearest WTG. It comprises "*low boulder clay headlands interspersed with small shingly coves and extensive sandy beaches and dunes*" (Wicklow County Council, 2016), as well as "*rocky cliffs at Wicklow, Mizen and Arklow Heads*" (Wicklow County Council, 2016). The relationship between the LCA and the Irish Sea is an important feature, and there is a "*continuous prospect and numerous views from the coast road out to sea*" (Wicklow County Council, 2016). It is well used for recreation, and there are popular beaches at Brittas, Magheramore, Silver Strand, Ennereilly and Clogga. The landscape is generally tranquil and remote, with the exception of on busy coastal roads and near settlements. The existing WTGs within ABWP1 are visible from much of this LCA.

17.10.3.36 There are no landscape designations within this LCA, which otherwise would indicate a higher value. However, it is classified as part of the Coastal Areas AONB which is considered to be of higher value. Overall, the value is considered to be Medium-High.

17.10.3.37 This LCA is generally a large scale, simple, expansive, uniform, flat coastal farmland landscape with limited man-made influence except at settlements. The LCA has a strong visual relationship with the Irish Sea, although this diminishes somewhat inland due to screening by mature hedgerows. The landscape further away from the coast comprises a relatively uniform character with no visual relationship with the coast. The LCA is locally influenced by settlements and infrastructure, although across much of the area in proximity to the coast there is limited man-made influence. The seascape in which the Array Area is located has an association to the coastline within the LCA, which increases the susceptibility to change. Taking account of the above characteristics and the influence of existing manmade features, the susceptibility of the LCA to the type of development proposed is judged to be High.

17.10.3.38 Overall, taking account of the judgements of susceptibility and value, the sensitivity to change associated with the Proposed Development is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.3.39 Changes occurring to the Southern Coastal Area (Wicklow) LCA as a result of the construction and decommissioning of the Proposed Development will be restricted to indirect visual effects to its perceived character, in particular the characteristic views towards the coast from this relatively flat expansive landscape. These views will be altered by visibility of construction and decommissioning activity, including the movement of boats and associated infrastructure, and partially built WTGs, from parts of this LCA in close proximity to the coast. There will also likely be changes to the perceived "*tranquil and remote*" character of the LCA. Visibility will be limited beyond the immediate coastline, due to vegetation cover including woodland and hedgerows. In all areas of the LCA with visibility of the Irish Sea, the characteristic views of the coastline will remain, there will still be open views out across the sea, and it will remain a low-lying landscape of varied land cover whose character is influenced by the dynamic influences of the sea and surrounding settlement.

17.10.3.40 Overall, the magnitude of change to the perceived character of the LCA as a result of the Proposed Development during the construction and decommissioning phases is assessed as High across parts of the LCA experiencing open views towards associated activity. From parts of the LCA which have more restricted visibility of construction and decommissioning activity, the magnitude of change will be Low. Elsewhere, there will be zero change where there is no visibility of construction or decommissioning activity.

17.10.3.41 Taking into account the High sensitivity and High to Low magnitude of change, the effect of the Proposed Development on the Southern Coastal Area (Wicklow) LCA during the construction and decommissioning phases will be **Major (significant)** across parts of the LCA with widespread visibility of associated activity, reducing to **Moderate-Minor (not significant)** from parts of the LCA with restricted views. These effects will be indirect, short-term and reversible.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.3.42 The Proposed Development will result in **zero** change to the fabric of the physical landscape of the LCA. There will also be **zero** change to many of the main characteristics of the LCA, including its fundamental character as a stretch of flat coastal farmland featuring headlands, coves, beaches, dunes and rocky cliffs along the coastline. Changes will only occur to the visual aspects of its perceived character as a result of the Proposed Development outside the LCA, in its associate seascape context.

17.10.3.43 These changes occur to specific aesthetic / perceptual aspects, particularly the views towards the coast from this relatively expansive, flat landscape, as a result of further WTG development influence in its open views out across the sea to the horizon. These open views out across the sea to the horizon will be altered through a partial loss of open seascape occupied by the Array Area and the resulting change in the seascape composition from the increased influence and spread of WTGs. The Proposed Development is also likely to result in changes to the perceived "*tranquil and remote*" character of the LCA, although the existing presence of ABWP1 as well as settlement and transport networks already influence this characteristic. Beyond the immediate coastline, vegetation cover including small areas of woodland and extensive hedgerows will limit actual visibility beyond that which is shown on Figure 17.10.1.

17.10.3.44 The Array Area will form a distinct feature at distances of approximately 6 km. In all areas of the LCA with visibility of the Irish Sea, the characteristic "*continuous prospect and numerous views from the coast road out to sea*" will remain, and it will remain a flat, expansive landscape of varied land cover whose character is influenced by the dynamic influences of the sea and surrounding settlement.

17.10.3.45 The magnitude of these changes to the perceived character of the LCA resulting from the operational and maintenance phase of the Proposed Development is assessed as High from parts of the LCA with open views of the Proposed Development to the east and south-east. These areas will generally be focussed along the coastline itself, due to reduced actual visibility as a result of vegetation cover across inland areas. From parts of the LCA with restricted views towards the Proposed Development, the magnitude of change will be Low.

17.10.3.46 Taking into account the High sensitivity and High to Low magnitude of change, the effect of the Proposed Development on the Southern Coastal Area (Wicklow) LCA during the operational and maintenance phase will be **Major (significant)** across parts of the LCA with widespread visibility of the Proposed Development, reducing to **Moderate-Minor (not significant)** from parts of the LCA with restricted views towards the Proposed Development. These effects will be indirect, long-term and reversible.

Uplands (Wexford) LCA

BASELINE AND SENSITIVITY TO CHANGE

17.10.3.47 This LCA covers an area across the north of County Wexford, adjacent to the boundaries with County Wicklow and County Carlow. It is located south-west of the Array Area, approximately 16.11 km from the nearest WTG. It is characterised by "*areas of higher ground, with some variations within, and relates to the north and west of the county*" (Wexford County Council, 2022). Across higher ground, land cover generally comprises low intensity agriculture and forestry plantations, while on lower ground, "*fields are larger with low hedges and scattered smaller trees*" (Wexford County Council, 2022). The citation also highlights that "*recently constructed wind farms have become a feature in this landscape*" (Wexford County Council, 2022). There are areas of "*elevated and steeper land, ridges and skylines, which are prominent in the overall landscape*" (Wexford County Council, 2022).

17.10.3.48 There are no landscape designations within the LCA which otherwise would denote a higher value. However, areas within the LCA are noted for their landscape and scenic quality, including the unique or rare nature of the mountain skylines within the LCA such as the east facing slopes of the Blackstairs Mountains, Mount Leinster and Croghan Mountain. However, the presence of coniferous forestry plantations moderates the value of the LCA. The overall value of the LCA is considered to be Medium.

17.10.3.49 This LCA is a relatively large-scale landscape comprised of open, upland farmland. Across lower elevation field sizes are still large, but become better defined with hedgerows and scattered copses of woodland forming a sense of localised enclosure. Wind turbines and wind farms are a distinct feature within the LCA, as well as commercial coniferous forestry plantations. Taking account of the above characteristics and the influence of existing manmade features, the susceptibility of the LCA to the type of development proposed is judged to be Medium.

17.10.3.50 Overall, taking into account the judgements of value and susceptibility, the sensitivity to change associated with the Proposed Development is considered to be Medium.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.3.51 Changes occurring to the Uplands (Wexford) LCA as a result of the construction and decommissioning of the Proposed Development will be restricted to indirect visual effects to its perceived character, albeit that views towards the sea are not identified as a characteristic feature. These views will be altered by visibility of construction and decommissioning activity, including the movement of boats and associated infrastructure, and partially built WTGs, from parts of this LCA with open vies towards the coast. However, this will occur at distances of more than 16 km, which will moderate the magnitude of change. Visibility will be intermittent due to the

topography across this area, and will be further reduced beyond the theoretical visibility shown in Figure 17.10.1 by land cover including hedgerows and areas of forestry plantation.

17.10.3.52 Overall, construction and decommissioning activity will form a distinct feature at distances of more than 16 km. It will have a limited influence on the key characteristics of the LCA, which are focussed more on the landscape within the LCA itself. The magnitude of these changes to the perceived character of the LCA resulting from the construction and decommissioning phases of the Proposed Development is assessed as Medium-Low from parts of the LCA with open views to the east and south-east within closest proximity. From parts of the LCA with restricted views towards the Proposed Development, or areas of the LCA located at long distances from the Proposed Development, the magnitude of change will be Low.

17.10.3.53 Taking into account the Medium sensitivity and Medium-Low to Low magnitude of change, the effect of the Proposed Development on the Uplands (Wexford) LCA during the construction and decommissioning phases will be **Moderate-Minor (not significant)** across parts of the LCA with higher-level visibility of associated activity, reducing to **Minor (not significant)** from parts of the LCA with more restricted views. These effects will be indirect, short-term and reversible.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.3.54 The Proposed Development will result in **zero** change to the fabric of the physical landscape of the LCA. There will also be **zero** change to many of the main characteristics of the LCA, including its fundamental character as an upland area featuring land cover comprising agriculture and forestry. Changes will only occur to the visual aspects of its perceived character as a result of the Proposed Development outside the LCA, in its associate seascape context.

17.10.3.55 Views towards the coast are not identified as a key characteristic of the LCA, with the focus identified as being on the skylines provided by the upland landscape of the LCA itself. However, the Proposed Development will influence the perceptual aspects of the LCA through visibility of further WTG development influence in open views from higher ground. The open views out across the sea to the horizon will be altered through a partial loss of open seascape occupied by the Array Area and the resulting change in the seascape composition from the increased influence and spread of WTGs. Visibility of the Array Area will be intermittent due to the relatively complex topography across this area, and further reduced beyond the theoretical visibility shown in Figure 17.10.1 by land cover including hedgerows and areas of forestry plantation.

17.10.3.56 The Array Area will form a distinct feature at distances of more than 16 km. It will have a limited influence on the key characteristics of the LCA, which are focussed more on the landscape within the LCA itself. The magnitude of these changes to the perceived character of the LCA resulting from the operational and maintenance phase of the Proposed Development is assessed as Medium-Low from parts of the LCA with open views of the Proposed Development to the east and south-east within closest proximity. From parts of the LCA with restricted views towards the Proposed Development, or areas of the LCA located at long distances from the Proposed Development, the magnitude of change will be Low.

17.10.3.57 Taking into account the Medium sensitivity and Medium-Low to Low magnitude of change, the effect of the Proposed Development on the Uplands (Wexford) LCA during the operational and maintenance phase will range from **Moderate-Minor (not significant)** to **Minor (not significant)** across parts of the LCA with visibility of the Proposed Development. These effects will be indirect, long-term and reversible.

Lowlands (Wexford) LCA

BASELINE AND SENSITIVITY TO CHANGE

17.10.3.58 This LCA covers a large part of County Wexford within the SLVIA Study Area, and is located south-west of the Array Area, approximately 12.61 km from the nearest WTG. It is formed of two broad units, separated by the narrow River Valley (Wexford) LCA. It is made up of "*gently undulating lands and relates to extensive areas of the county*" with "*generally higher levels of population and more intensive agriculture*" (Wexford County Council, 2022). It has a large field pattern which is well defined by mature hedgerows and woodland. The topography is generally relatively shallow and undulating, although there are a number of prominent hills "*which provide more enclosure and 'punctuation' within the overall landscape*" (Wexford County Council, 2022). It is a relatively settled landscape and "*hosts the principal towns and major infrastructure such as the main roads and railways*" (Wexford County Council).

17.10.3.59 There are no landscape designations within the LCA which otherwise would indicate a higher value. However, there are a number of Distinctive Landscapes throughout this LCA, which indicates a higher value. Overall, the value of the LCA is considered to be Medium-High.

17.10.3.60 This LCA is a relatively large-scale agricultural landscape with fields generally well defined by mature hedgerows and trees, creating a degree of enclosure and screening of views. The LCA is generally well settled with large settlements such as Gorey and Enniscorthy locally influencing the LCA and transport corridors traversing the landscape throughout. Commercial forestry plantations are evident on more elevated slopes, forming a contrast to the surrounding agricultural landscape. Taking account of these characteristics and the influence of existing manmade features, the susceptibility of the LCA to the type of development proposed is judged to be Medium.

17.10.3.61 Overall, taking account of the judgements of value and susceptibility, the sensitivity to change associated with the Proposed Development is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.3.62 Changes occurring to the Lowlands (Wexford) LCA as a result of the construction and decommissioning of the Proposed Development will be restricted to indirect visual effects to its perceived character, albeit that views towards the sea are not identified as a characteristic feature of the LCA. These views will be altered by visibility of construction and decommissioning activity, including the movement of boats and associated infrastructure, and partially built WTGs, from parts of this LCA with open views towards the coast. However, this will occur at distances of more than 12.61 km, which will moderate the magnitude of change. Visibility will be reduced beyond the theoretical visibility shown in Figure 17.10.1 by land cover including hedgerows and relatively widespread settlement.

17.10.3.63 Overall, construction and decommissioning activity will form a distinct feature at distances of more than 12.61 km. It will have a limited influence on the key characteristics of the LCA, which are focussed more on the landscape within the LCA itself. The magnitude of these changes to the perceived character of the LCA resulting from the construction and decommissioning phases of the Proposed Development is assessed as Low.

17.10.3.64 Taking into account the Medium-High sensitivity and Low magnitude of change, the effect of the Proposed Development on the Lowlands (Wexford) LCA during the construction and decommissioning phases will be **Moderate-Minor (not significant)** across parts of the LCA with visibility of the Proposed Development. These effects will be indirect, short-term and reversible.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.3.65 The Proposed Development will result in **zero** change to the fabric of the physical landscape of the LCA. There will also be zero change to many of the main characteristics of the LCA, including its fundamental character as a gently undulating landscape featuring land cover comprising agriculture and settlement. Changes will only occur to the visual aspects of its perceived character as a result of the Proposed Development outside the LCA, in its associate seascape context.

17.10.3.66 Views towards the coast are not identified as a key characteristic of the LCA, with the focus of views identified as being over large agricultural fields. However, the Proposed Development will influence the perceptual aspects of the LCA through visibility of further WTG development influence in views over the coast to the east and north-east. Visibility of the Array Area will be reduced compared to the theoretical visibility shown on Figure 17.10.1 due to by land cover including hedgerows and relatively widespread settlement.

17.10.3.67 Where visible, the Array Area will form a distinct feature at distances of more than 12.61 km. It will have a limited influence on the key characteristics of the LCA, which are focussed more on the landscape within the LCA itself. The magnitude of these changes to the perceived character of the LCA resulting from the operational and maintenance phase of the Proposed Development is assessed as Low.

17.10.3.68 Taking into account the Medium-High sensitivity and Low magnitude of change, the effect of the Proposed Development on the Lowlands (Wexford) LCA during the operational and maintenance phase will be **Moderate-Minor (not significant)** across parts of the LCA with visibility of the Proposed Development. These effects will be indirect, long-term and reversible.

Coastal (Wexford) LCA

BASELINE AND SENSITIVITY TO CHANGE

17.10.3.69 This LCA covers the entire coast of Wexford within the SLVIA Study Area. It is located to the south-west of the Array Area, approximately 10.79 km from the nearest WTG. The area is described as having a similar character to the Lowland (Wexford) LCA, although the nearby presence of the sea contributes to these areas having a more scenic appearance. This is a large, expansive landscape of relative uniformity. The LCA features "*long, relatively straight coasts of sand or shingle backed up by low cliffs and sand dune systems*" (Wexford County Council, 2022) as well as promontories and smaller bays. Focal points at Cahore Point and Klimichael Point together with the more complex coastline at Wexford Harbour add variation and interest. The LCA is well settled, and is coming under increased tourism and residential development pressures, evidenced by a number of caravan parks, scattered single dwellings and enlargements to settlement areas adjacent to more sandy beaches throughout the LCA. The LCA has a strong intervisibility with the sea, particularly along coastal edges, however this is greatly reduced inland due to the relatively flat terrain and screening provided by vegetation.

17.10.3.70 There are no landscape designations within this LCA, although a number of areas along the coast are defined as Distinctive Landscapes, which indicates a higher value. Overall, the value of this LCA is considered to be Medium-High.

17.10.3.71 This is a relatively uniform, expansive landscape. It features a strong relationship with the Irish Sea to the east, particularly across eastern parts. There is increasing evidence of man-made development, including greater influence of settlement throughout the predominantly agricultural land cover. Taking account of these characteristics, the susceptibility of the LCA to the type of development proposed is judged to be Medium.

17.10.3.72 Overall, taking account of the judgements of susceptibility and value, the sensitivity to change associated with the Proposed Development is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.3.73 Changes occurring to the Lowlands (Wexford) LCA as a result of the construction and decommissioning of the Proposed Development will be restricted to indirect visual effects to its perceived character, including views towards the coast from this relatively large, expansive landscape. These views will be altered by visibility of construction and decommissioning activity, including the movement of boats and associated infrastructure, and partially built WTGs, from parts of this LCA with open views towards the coast. However, this will occur at distances of more than 10.79 km, which will moderate the magnitude of change. Visibility will be reduced beyond the theoretical visibility shown in Figure 17.10.1 by land cover including hedgerows and woodland.

17.10.3.74 Overall, construction and decommissioning activity will form a distinct feature at distances of more than 10.79 km. The magnitude of change to the perceived character of the LCA resulting from the construction and decommissioning phases of the Proposed Development is assessed as High from parts of the LCA with open views of the Proposed Development to the east and north-east. These areas will generally be focussed along the coastline itself, due to reduced actual visibility as a result of vegetation cover across inland areas. From parts of the LCA with restricted views towards the Proposed Development, the magnitude of change will be Low.

17.10.3.75 Taking into account the Medium-High sensitivity and High to Low magnitude of change, the effect of the Proposed Development on the Coastal (Wexford) LCA during the construction and decommissioning phases will be **Major (significant)** across parts of the LCA with widespread visibility of the Proposed Development, reducing to **Moderate-Minor (not significant)** from parts of the LCA with restricted views towards the Proposed Development. These effects will be indirect, short-term and reversible.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.3.76 The Proposed Development will result in zero change to the fabric of the physical landscape of the LCA. There will also be zero change to many of the main characteristics of the LCA, including its fundamental character as a stretch of flat coastal farmland featuring long sand or shingle beaches, promontories, low cliffs and sand dunes. Changes will only occur to the visual aspects of its perceived character as a result of the Proposed Development outside the LCA, in its associate seascape context.

17.10.3.77 These changes occur to specific aesthetic / perceptual aspects, particularly the views towards the coast from this relatively large, expansive landscape, as a result of further WTG development influence in its open views out across the sea to the horizon. These open views out across the sea to the horizon will be altered through a partial loss of open seascape occupied by the Array Area and the resulting change in the seascape composition from the increased influence and spread of WTGs. Beyond the immediate coastline, settlement and vegetation cover including extensive hedgerows and woodland will limit actual visibility beyond that which is shown on Figure 17.10.1.

17.10.3.78 The Array Area will form a distinct feature at distances of more than 10.79 km. In all areas of the LCA with visibility of the Irish Sea, the characteristic open views out to sea will remain, and it will remain a flat, expansive landscape of varied land cover whose character is influenced by the dynamic influences of the sea and surrounding settlement.

17.10.3.79 The magnitude of these changes to the perceived character of the LCA resulting from the operational and maintenance phase of the Proposed Development is assessed as High from parts of the LCA with open views of the Proposed Development to the east and north-east. These areas will generally be focussed along the coastline itself, due to reduced actual visibility as a

result of vegetation cover across inland areas. From parts of the LCA with restricted views towards the Proposed Development, the magnitude of change will be Low.

17.10.3.80 Taking into account the Medium-High sensitivity and High to Low magnitude of change, the effect of the Proposed Development on the Coastal (Wexford) LCA during the operational and maintenance phase will be **Major (significant)** across parts of the LCA with widespread visibility of the Proposed Development, reducing to **Moderate-Minor (not significant)** from parts of the LCA with restricted views towards the Proposed Development. These effects will be indirect, long-term and reversible.

17.10.4 Impact 4- Landscape Designation Effects

Wicklow Mountains National Park (WMNP)

BASELINE AND SENSITIVITY TO CHANGE

17.10.4.1 The WMNP is designated by the Government of Ireland in accordance with the criteria for National Parks published by the International Union for the Conservation of Nature (IUCN). It is managed by the National Parks & Wildlife Service within the Department of the Environment, Heritage & Local Government. There are no published special qualities for the National Park, and the most recent management plan dates from 2005 – 2009 (National Parks & Wildlife Service, 2005).

17.10.4.2 The WMNP covers a large area across the north-west of the SLVIA Study Area, almost entirely located within Wicklow County. It has a complex boundary with several different units, and comprises 23,000 ha of land (National Parks & Wildlife Service, 2023) across the Wicklow Mountains. The 2005 – 2009 Management Plan describes the National Park as an area which encompasses "*large expanses of blanket bog and heath of the Wicklow Uplands*". The principal objectives for the management of the National Park cite the importance of the "*landscape, aesthetic and other qualities in the environs of WMNP*" (National Parks & Wildlife Service, 2005).

17.10.4.3 The WMNP is largely contained within the Mountain Uplands (Wicklow) LCA, with the exception of small areas generally towards the north of the WMNP which fall within neighbouring LCAs in Wicklow, South Dublin and Dun Laoghaire Rathdown.

17.10.4.4 The WMNP generally comprises high ground across the Wicklow Mountains, although there are also areas contained within wooded river valleys. Some of the highest ground within the Wicklow Mountains, including Lugnaquilla and Mullaghcleevan, is excluded from the WMNP. Land cover predominantly comprises heathland and blanket bog. Man made development within the WMNP is limited, although agriculture including grazing is a prevalent land use. Coniferous forestry situated on lower ground around the edges of the WMNP exerts an influence on the landscape within.

17.10.4.5 Taking into account the national-level importance of the designation, as well as the characteristics identified within the Mountain Uplands (Wicklow) LCA, within which the vast majority of the WMNP is located, the value of the WMNP is considered to be High.

17.10.4.6 There are open views towards the Array Area from this elevated landscape, although the focus of landscape character within the LCA is the Wicklow Mountains themselves, while the seascape forms a less influential factor. Existing views towards WTGs within ABWP1 slightly moderate the susceptibility to development of this type. Taking account of the characteristics described above, and the limited influence of existing manmade features within the WMNP, the susceptibility to the type of development proposed is judged to be Medium-High.

17.10.4.7 Overall, taking account of the judgements of value and susceptibility, the sensitivity to change arising from the Proposed Development is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.4.8 Changes occurring to the WMNP as a result of the construction and decommissioning of the Proposed Development will be restricted to indirect visual effects to its perceived character. There is a relatively limited associated between the designated area and the Irish Sea, and construction and decommissioning effects will therefore be limited. There will be views towards construction and decommissioning activity, including movement of boats and associated infrastructure, and partially built WTGs, from parts of the WMNP with open views to the east, generally across the highest ground. Due to the complex topography, there will be a relatively intermittent pattern of visibility. At this distance, construction and decommissioning activity will occupy a limited horizontal extent of the panoramic views available from these elevated areas, and will have a limited influence on the character of the WMNP, which is influenced primarily by the mountains themselves.

17.10.4.9 Overall, the magnitude of change to the perceived character of the WMNP as a result of the Proposed Development during the construction and decommissioning phases is assessed as Medium-Low across parts of the WMNP experiencing open views towards associated activity. Elsewhere, there will be zero change where there is no visibility of construction or decommissioning activity.

17.10.4.10 Taking into account the High sensitivity and Medium-Low magnitude of change, the effect of the Proposed Development on the WMNP during the construction and decommissioning phases will be **Moderate (not significant)** across parts of the LCA with visibility of associated activity. These effects will be indirect, short-term and reversible. Although the effects are considered to be moderate, this is considered not significant in this instance due to a number of factors, including primarily the distance of more than 25 km between the WMNP and the WTGs, and the relatively limited association between the WMNP and the Irish Sea.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.4.11 The Proposed Development will result in **zero** changes to the fabric of the physical landscape of the WMNP. There will also be limited change to the characteristics of the WMNP, due to the predominant influence of the Wicklow Mountains themselves on the landscape character of the area. Changes will only occur to the visual aspects of its perceived character as a result of the Proposed Development outside the WMNP, in its associate seascape context.

17.10.4.12 These changes occur to specific aesthetic / perceptual aspects, and are likely to have a limited effect on landscape character within the WMNP, due to the relatively limited association between the designated area and the Irish Sea. Landscape character within the WMNP is generally influenced by the character of the Wicklow Mountains themselves, rather than by association with the Irish Sea. The magnitude of change associated with visibility of the Proposed Development will also be moderated by visibility of the existing ABWP1 WTGs, which establish development of this type as a feature of the baseline view.

17.10.4.13 The Array Area will form a distinct feature at distances of more than 25.56 km, seen from parts of the WMNP with open views to the east, generally located across the highest ground. Due to the complex topography across this area, there is a relatively intermittent pattern of theoretical visibility, with the highest ground experiencing theoretical visibility of all WTGs within the Array Area, while intervening topography obscures views towards a proportion of WTGs from lower ground, as seen in Figure 17.10.1.

17.10.4.14 At this distance, the Array Area will occupy a limited horizontal extent of the panoramic views available from these elevated areas. It will have a relatively limited impact on the character of the WMNP, which is influenced primarily by the mountain themselves.

17.10.4.15 The magnitude of change to the perceived character of the WMNP as a result of the Proposed Development is assessed as Medium-Low across parts of the WMNP experiencing open views towards the Array Area. Elsewhere, there will be **zero** change where there is no visibility of the Proposed Development.

17.10.4.16 Taking into account the High sensitivity and Medium-Low magnitude of change, the effect of the Proposed Development on the WMNP during the operational and maintenance phase will be **Moderate (not significant)** across parts of the WMNP with visibility of the Proposed Development. These effects will be indirect, long-term and reversible. Although the effects are considered to be moderate, this is considered not significant in this instance due to a number of factors, including primarily the distance of more than 25 km between the WMNP and the WTGs, and the relatively limited association between the WMNP and the Irish Sea.

Bray Head SAAO

BASELINE AND SENSITIVITY TO CHANGE

17.10.4.17 SAAOs are national designations which acknowledge the amenity value that areas provide. These areas are designated in order to "*protect areas that are of particularly high amenity value, which are sensitive to intense development pressure and which cannot be adequately protected by existing planning controls*". These areas are designated under the Planning and Development Act 2000, and an area may be designated for its "*outstanding natural beauty, or its special recreational value, and having regard to any benefits for nature conservation*".

17.10.4.18 The Bray Head SAAO document (Wicklow County Council, Bray Town Council and Greystones Town Council, 2007) sets out the reasons for which the area is designated, which include the natural heritage; cliff walk between Bray and Greystones; geology; soils; habitats including heathland, woodlands, sea-cliffs and driftbanks; and views and visual amenity, as described within the Wicklow County Development Plan (Wicklow County Council, 2022).

17.10.4.19 Bray Head SAAO covers an area adjacent to the coastline, situated to the south of the settlement of Bray and north of Greystones. It is a generally upland, elevated landscape, with landcover primarily comprising heathland, although there is also sparse settlement and a golf course. The railway line between Dublin and Wicklow passes along the eastern edge of the SAAO, adjacent to the coastline. The coast is generally formed of rocky cliffs. The SAAO is located primarily within the Bray Mountains Group / Northern Hills LCA. In the absence of specific special qualities relating to landscape character within the SAAO, the special qualities of this LCA, as outlined in Section 17.10.3, are considered to be representative of the character of the Bray Head SAAO.

17.10.4.20 Taking into account the national-level importance of the designation, as well as the characteristics identified within the Bray Mountains Group / Northern Hills LCA, the value of the Bray Head SAAO is considered to be High.

17.10.4.21 There are open views towards the Array Area from this elevated landscape, and it has a close association with the seascape due to its position on the coast. Existing views towards WTGs within ABWP1 slightly moderate the susceptibility to development of the type proposed. Taking account of the characteristics described above, and the influence of existing man-made features within and adjacent to the LCA, the susceptibility is considered to be Medium-High.

17.10.4.22 Overall, taking account of the judgements of value and susceptibility, the sensitivity to change arising from the Proposed Development is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.10.4.23 Changes occurring to the Bray Head SAAO as a result of the construction and decommissioning of the Proposed Development will be restricted to indirect visual effects to its perceived character, in particular its open and exposed character, as a result of views towards construction and decommissioning activity in associate seascape context. These open views will be altered by views of the movement of boats and associated infrastructure, and partially built WTGs, from limited parts of this designated landscape, as indicated by the ZTV in Figure 17.10.1a. However, this will occur at distances of more than 28.54 km, which will moderate the magnitude of change. In all areas of the SAAO with visibility of the Irish Sea, the characteristic views of the coastline will remain, there will still be open views out across the sea, and it will remain an elevated, upland landscape whose character is influenced by the dynamic influences of the sea and the surrounding settlements.

17.10.4.24 Overall, the magnitude of change to the perceived character of the SAAO as a result of the Proposed Development during the construction and decommissioning phases is assessed as Medium across limited parts of the LCA experiencing open views towards associated activity. Elsewhere, there will be **zero** change where there is no visibility of construction or decommissioning activity.

17.10.4.25 Taking into account the High sensitivity and Medium magnitude of change, the effect of the Proposed Development on the Bray Head SAAO during the construction and decommissioning phases will be **Major-Moderate (significant)** across parts of the SAAO with visibility of associated activity, which will be restricted to a relatively small proportion of the overall SAAO. Elsewhere, there will be no change and no effect. These effects will be indirect, short-term and reversible.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.10.4.26 The Proposed Development will result in **zero** change to the fabric of the physical landscape of the SAAO. There will also be zero change to many of the main characteristics of the SAAO, as set out in the Bray Head SAAO document, including its fundamental character as an upland region of recreational amenity, and its geology, soils, habitats and travel routes, including the railway and cliff walk. Changes will only occur to the visual aspects of its perceived character as a result of the Proposed Development outside the SAAO, in its associate seascape context.

17.10.4.27 These changes occur to specific aesthetic / perceptual aspects, as described for the Bray Mountains Group / Northern Hills LCA, within which the SAAO is located, particularly its open and exposed character, as a result of further WTG development influence in its open views out across the sea to the horizon. These open views out across the sea to the horizon will be altered through a partial loss of open seascape occupied by the Array Area and the resulting change in the seascape composition from the increased influence and spread of WTGs. The Array Area will form a distinct feature at distances of more than 28.54 km. In all areas of the SAAO with visibility of the Irish Sea, the characteristic views of the coastline will remain, there will still be open views out across the sea, and it will remain an elevated, upland landscape whose character is influenced by the dynamic influences of the sea and the surrounding settlements.

17.10.4.28 The magnitude of these changes to the perceived character of the SAAO resulting from the operational and maintenance phase of the Proposed Development is assessed as Medium from the relatively limited parts of the SAAO with open views of the Proposed Development to the south-east. Elsewhere, where there is no visibility of the Proposed Development, the magnitude of change will be **zero.**

17.10.4.29 Taking into account the High sensitivity and Medium to zero magnitude of change, the effect of the Proposed Development on the Bray Head SAAO during the operational and

maintenance phase will be **Major-Moderate (significant)** across parts of the SAAO with visibility of associated activity, which will be restricted to a relatively small proportion of the overall SAAO. Elsewhere, there will be no change and no effect. These effects will be indirect, long-term and reversible.

17.11 Assessment of Project Design Option 2

17.11.1 Impact 1 – Visual Effects

Viewpoint 1: Wicklow Head

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.1 This viewpoint is located on a footpath at Wicklow Head. It is located to the south of the 'Rear Lighthouse' and south-west of the 'Front Lighthouse'. The active Wicklow Head Lighthouse is located further east. The viewpoint is representative of views experienced by recreational receptors visiting Wicklow Head.

17.11.1.2 To the east, views are available of the coastline and the Irish Sea, with the headland at Wicklow Head in the foreground. The headland is clothed in rough grassland and bracken and features rocky outcrops, stone walls and isolated clumps of woody vegetation. The operational lighthouse is screened from view by the topography of the headland, although the disused 'Front Lighthouse' can be seen to the north-east.

17.11.1.3 Views are also available over the Irish Sea to the south, and the coastline is clearly visible including the nearby headlands at Ardmore Point and Ballynacarrig together with coastal farmland featuring mature hedgerow vegetation. Further inland the afforested hills at Castletimon are visible in the distance. Mizen Head is visible further south. The existing WTGs associated with ABWP1 form a distinct visible element of the view to the south-east.

17.11.1.4 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB) which indicates a higher value. It is a well-known amenity area and open, expansive views of the sea and surrounding coastlines are available. Overall, the value of the view is considered to be High.

17.11.1.5 This viewpoint is representative of views experienced by recreational receptors at this visitor attraction, who are likely to have an appreciation of their surroundings. Existing views of ABWP1 reduce the susceptibility to the Proposed Development by establishing development of this type as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-High.

17.11.1.6 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.7 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 7.68 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible, with activity towards the north of the Array Area particularly evident due to its closer proximity to the viewpoint.

17.11.1.8 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 1 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.9 During the operation and maintenance phase, the magnitude of change experienced at this viewpoint will be High. The full extent of the WTGs and OSPs within the Array Area will be visible across the open sea view to the south-east, at a distance of approximately 7.68 km to the nearest WTG. They will occupy a horizontal extent of approximately 48.78°.

17.11.1.10 The WTGs will be seen in front of the more distant, smaller scale WTGs within ABWP1. The ABWP1 WTGs will appear beyond WTGs within central to southern parts of the Array Area. The difference in scale will be apparent. The WTGs will be visible on the horizon and set against the skyline. Their man-made appearance, upright form and movement will contrast with the horizontal appearance of the sea.

17.11.1.11 The layout will appear relatively unbalanced, with stacking of WTGs towards the south of the Array Area, and several WTGs across central to northern parts appearing to be arranged in groups, with associated gaps on either side of each group. The WTGs will occupy a large proportion of the available views of the seascape from this viewpoint, and the large scale of the WTGs will appear to contrast with the existing landscape and seascape context visible in the view.

17.11.1.12 Looking south-east, the Array Area will sometimes appear backlit by the sun in the morning. The OSPs will be visible at the northern and southern extents of the Array Area, to the left and right of the horizontal spread of the WTGs, although the southern OSP will be difficult to discern due to distance.

17.11.1.13 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Wicklow Head during the operational & maintenance phase will be **Major (significant).**

Viewpoint 2: Blainroe Golf Club

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.14 This viewpoint is located at Blainroe Golf Club, to the north-east of the clubhouse on higher ground above a small sandy bay. The viewpoint is representative of the views experienced by recreational receptors at the golf course. Similar views are likely to be experienced by residential receptors within the settlement of Blainroe and Kilpoole to the west.

17.11.1.15 Views are available to the east and south of the coastline and the Irish Sea with the landscape of the golf course in the foreground. The landform of the golf course is relatively flat, and features fairways and putting greens along with tracts of woodland and scrub and copses of trees, many of which are coniferous. The topography slopes down steeply beyond the edge of the golf course towards the sea to the east. There are views towards a small bay to the south-east, contained by rocky, roughly vegetated land to the south. Several WTGs within ABWP1 are visible to the south-east, although a number are screened from view by the coastline to the south of the small bay.

17.11.1.16 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB) which indicates a higher value. Open views of the sea are available, although these are relatively contained in nature. Overall, the value of the view is considered to be High.

17.11.1.17 This viewpoint is representative of views experienced by recreational receptors at the golf course. These receptors are likely to have an appreciation of their surroundings, although the

appreciation of views over the surrounding landscape and seascape are not the primary focus of their activities. Existing views of WTGs within ABWP1 reduce the susceptibility to the Proposed Development by establishing development of this type as a feature of the baseline view. Overall, the susceptibility is considered to be Medium.

17.11.1.18 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.19 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 7.17 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible, with activity towards the north of the Array Area particularly evident due to its closer proximity to the viewpoint.

17.11.1.20 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 2 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.21 During the operational and maintenance phase, the magnitude of change experienced at this viewpoint will be High. The WTGs will be located at a minimum distance of approximately 7.17 km, and will occupy a horizontal extent of approximately 60.66°. There will be some screening of WTGs towards the south of the Array Area by the landform of the coastline to the south-east and vegetation within the golf course. Approximately 16 WTGs at the southern extent of the Array Area will be fully or heavily screened by coniferous woodland within the golf course. The lower towers of several more WTGs will be screened by the landform.

17.11.1.22 The WTGs will be seen closer to the viewpoint than the smaller scale WTGs within ABWP1, the lower towers of which are screened below the landform of the golf course. WTGs towards the south of the Array Area will be situated in front of these smaller operational WTGs. The difference in scale between the two developments will be apparent. The WTGs will be visible on the horizon and set against the skyline. Their man-made appearance, upright form and movement will contrast with the horizontal appearance of the sea. The existing landscape and seascape context visible from this viewpoint to the east and south-east is relatively small-scale, with outward views contained by the small rugged bay to the south-east. The scale of the WTGs will be appear to contrast with this context. An area of seascape visible to the north-east will remain undeveloped.

17.11.1.23 The layout appears somewhat unbalanced, with stacking of WTGs within the central and southern parts of the Array Area. There are also large gaps between several of the WTGs, creating the appearance of several distinct groups of WTGs, rather than one continuous array. WTGs towards the north of the Array Area, in closest proximity to the viewpoint, are more balanced in terms of spacing.

17.11.1.24 Looking south-east, the Array Area will sometimes appear backlit by the sun in the morning. The OSP at the northern extent of the Array Area will be visible, while the OSP to the south will be screened by the coastline and vegetation cover to the south-east.

17.11.1.25 These effects will occur over a relatively limited geographical extent. The ZTV indicates that theoretical visibility will extend throughout the surrounding landscape to a distance of approximately 1.5 km west of the viewpoint, and further north and south. However, the settlements of Kilpoole and Blainroe, located to the west of the viewpoint, are likely to experience more limited visibility of the Proposed Development due to intervening vegetation within the surrounding landscape. In particular, extensive vegetation along the R750 near Blainroe will screen views to the east, and there will also be screening as a result of built form within the settlements. Overall, the effects of the Proposed Development are considered to be relatively localised to the area around the viewpoint and along the neighbouring coastline.

17.11.1.26 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Blainroe Golf Club during the operational & maintenance phase will be **Major (significant).**

Viewpoint 3: Ballynacarrig 3rd Class Road

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.27 This viewpoint is located on a minor road to the west of the small settlement of Ballynacarrig. It is representative of views experienced by local residents travelling on roads within the surrounding area. Similar views may be experienced by residents within the settlement.

17.11.1.28 Views are available to the south-east from a slightly elevated location of undulating coastal farmland with mature hedgerows and mature trees. Scattered isolated individual dwellings are dispersed throughout. In longer-distance views, the Irish Sea is clearly visible. The existing WTGs associated with ABWP1 form a distinct visible element of the view.

17.11.1.29 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB) and the route is designated as Prospect No. 53 by Wicklow County Council, both of which indicate a higher value. Relatively contained views are available towards the coast, although these are seen at longer distance, and the relationship with the coast is more limited than in other parts of the AONB. Overall, the value of the view is considered to be Medium-High.

17.11.1.30 The viewpoint is representative of views experienced by residents travelling around the local area in proximity to their residence. Similar views will also be experienced from scattered residential properties within the surrounding landscape. Although road users are considered to be of lower susceptibility due to their attention being focussed on the road, residents in the area surrounding their properties are considered to be of higher susceptibility to changes in the surrounding view. The presence of WTGs within ABWP1 slightly reduces susceptibility by establishing this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-High.

17.11.1.31 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.32 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 8.50 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible, with activity across northern parts of the Array Area particularly evident due to its closer proximity to the viewpoint. Some activity will be screened from view by vegetation at this viewpoint.

17.11.1.33 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 3 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.34 During the operation and maintenance phase, the magnitude of change experienced at this viewpoint will be High. The WTGs will be located at a minimum distance of approximately 8.50 km, and will occupy a horizontal extent of approximately 86.63°. There will be some screening of WTGs towards the north of the Array Area by the landform to the east of the viewpoint and vegetation throughout the surrounding landscape and alongside the road. Three WTGs will be fully screened, with a further two being heavily filtered. This screening effect may be somewhat reduced in winter, when vegetation is likely to be less extensive.

17.11.1.35 The WTGs will be seen in front of the smaller scale WTGs within ABWP1 and the difference in scale between the two developments will be apparent. The WTGs will be visible on the horizon and set against the skyline in the most open direction of view. The Array Area will occupy almost the full horizontal extent of the seascape visible from this location. This more open direction of view is framed by the surrounding undulating, farmed landscape, which will draw the eye towards the Array Area. The man-made appearance of the WTGs, their upright form and their movement will contrast with the horizontal appearance of the sea. The scale of the WTGs will also contrast with the relatively small-scale, complex landscape pattern visible in the fore- to mid-ground of the view.

17.11.1.36 Overall, the WTGs will appear well balanced and relatively evenly spaced, with some limited stacking across central parts of the Array Area, where the blades of some WTGs will appear to overlap. In particular, WTGs at the northern extent, in closest proximity to the viewpoint, and at the southern extent, will be well balanced.

17.11.1.37 Looking south-east, the Array Area will sometimes appear backlit by the sun in the morning. The OSP at the northern extent of the Array Area will be screened from view by the intervening landform and vegetation, while the OSP to the south will be visible at the far right of the Array Area, albeit at distance.

17.11.1.38 The geographic extent of the effects is likely to be somewhat widespread. Some residents within the settlement of Ballynacarrig are also likely to experience visibility of the Proposed Development from within and around their properties, at a distance of approximately 7 km. Views from within the settlement will likely be more limited than those experienced at the viewpoint, due to screening by surrounding vegetation and the effect of topographical changes between the viewpoint and the settlement.

17.11.1.39 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Array Area on receptors at Ballynacarrig 3rd Class Road during the operational & maintenance phase will be **Major (significant).**

Viewpoint 4: Ballynacarrig Public House

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.40 This viewpoint is located at the junction between the R750 and a minor road, near Ballynacarrig Public House. The viewpoint is representative of road users on the R750. Similar views will be experienced by residential receptors within the small settlements of Brittas and Cornagower which are positioned along the R750 close to this viewpoint.

17.11.1.41 Views are available to the south-east over the R750, with associated road signage forming a feature of the foreground. The entrance to the Potters Point Holiday Park forms a notable

feature visible in relatively close proximity to the east. Beyond the road, land cover comprises coastal farmland with hedgerows, some of which feature mature trees. The Irish Sea forms the backdrop in longer distance views. To the south, the coastline at Mizen Head is visible in the distance. The existing WTGs associated with the ABWP1 form a distinct visible element of the view to the south-east.

17.11.1.42 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB) and at the junction between two roads which are designated as Prospect No. 31 and Prospect No. 53 by Wicklow County Council, both of which indicate a higher value. The foreground of the view comprises a busy road with associated signage, although there are longer-distance views to the coastline and Irish Sea. Overall, the value of the view is considered to be Medium-High.

17.11.1.43 The viewpoint is representative of views experienced by road users travelling in both directions on this route. Road users are considered to be of lower susceptibility due to their attention being focussed on the road, and the presence of ABWP1 within the baseline view further reduces susceptibility by establishing this type of development as a feature of the baseline. Overall, the susceptibility is considered to be Medium-Low.

17.11.1.44 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.45 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 7.52 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity towards the north of the Array Area will be screened from view by intervening vegetation, while activity across southern parts of the Array Area will be more evident.

17.11.1.46 Taking into account the Medium sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 4 during the construction and decommissioning phases will be **Major-Moderate (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION & MAINTENANCE

17.11.1.47 During the operation and maintenance phase, the magnitude of change experienced at this viewpoint will be High. The WTGs will be located at a minimum distance of approximately 7.52 km, and will occupy a horizontal extent of approximately 90.00°. 13 WTGs at the northern extent of the Array Area, in closest proximity to the viewpoint, will be fully screened by vegetation around the entrance to Potters Point to the east. The Array Area will therefore occupy a smaller horizontal extent of the seascape and at greater distance than that indicated by the wirelines in Figure 17.22.2.

17.11.1.48 Where visible, the WTGs will be seen in front of the smaller scale WTGs within ABWP1 and the difference in scale between the two developments will be apparent. The WTGs will be visible on the horizon and set against the skyline in the most open direction of view. The Array Area will occupy a large proportion of the seascape visible from this location, with a section of the seascape to the south of the Array Area remaining undeveloped. This more open direction of view is framed by the surrounding undulating farmed landscape, which will draw the eye towards the Array Area, and road users travelling along the minor road will experience direct views in this direction. For road users travelling along the R750, views towards the Array Area will be oblique.

17.11.1.49 The man-made appearance of the WTGs, their upright form and their movement will contrast with the horizontal appearance of the sea, although they will be seen in the context of road signage along the R750 which will slightly moderate the magnitude of change. The large scale of the WTGs will be apparent and will appear to contrast with the scale of the existing landscape and seascape context.

17.11.1.50 There will be a degree of stacking visible across the WTGs, with the blades of a number of WTGs appearing to overlap, and some gaps between groups of WTGs, due to the angle of view towards the Array Area and the layout of the WTGs. However, overall the WTGs will appear relatively well balanced, particularly towards the north of the visible section of the Array Area. WTGs within the southern part of the Array Area will appear most uneven.

17.11.1.51 Looking south-east, the Array Area will sometimes appear backlit by the sun in the morning. The OSP at the northern extent of the Array Area will be screened from view by the intervening vegetation, while the OSP to the south will be visible at the far right of the Array Area, albeit at distance.

17.11.1.52 The geographic extent of the effects is likely to be relatively contained. Within the nearby settlements of Brittas and Cornagower, visibility of the Proposed Development will be reduced compared to that experienced at the viewpoint. This is due to screening by intervening vegetation along the R750 and in the surroundings of properties, and the position of the viewpoint in a particularly open part of the landscape. Towards Cornagower, sand dunes along the coast will also prevent views to the east towards the Proposed Development.

17.11.1.53 Taking into account the Medium sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Ballynacarrig Public House during the operational & maintenance phase will be **Major-Moderate (significant).**

Viewpoint 5: Brittas Bay Beach

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.54 This viewpoint is located on the beach at Brittas Bay, close to the path which leads between the beach and the Brittas Bay North car park. Views are representative of those experienced by recreational receptors visiting the beach.

17.11.1.55 From this point near the centre of the bay, panoramic views are available to the north-east, east and south-east. Views are available of the Irish Sea with the expansive beach at Brittas Bay in the foreground. The coastal promontory associated with Ballynacarrig is clearly visible to the north. Mizen Head is clearly visible to the south of the viewpoint. The existing WTGs associated with the ABWP1 form a distinct visible element of the view to the south-east.

17.11.1.56 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB), which indicates a higher value. It is a well-used visitor attraction, and open, expansive views of the sea and surrounding coastlines are available. The overall value of the view is considered to be High.

17.11.1.57 The viewpoint is representative of views experienced by recreational receptors, whose attention is likely to be focussed on their surroundings. This indicates a higher susceptibility, although the existing influence of ABWP1 in the baseline somewhat reduces susceptibility to development of this type. Overall, the susceptibility is considered to be High.

17.11.1.58 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.59 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 7.73 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity will be visible throughout the Array Area, although it will be particularly evident towards the north due to the closer proximity of this part of the Array Area.

17.11.1.60 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 5 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.61 During the operation and maintenance phase, the magnitude of change experienced at this viewpoint will be High. The WTGs will be located at a minimum distance of approximately 7.73 km, and will occupy a horizontal extent of approximately 98.94°. They will occupy a large proportion of the view of the Irish Sea available to recreational visitors to the beach, being seen across the view from the north-east to the south. Due to the open, expansive views available from this location, all WTGs within the Array Area will be visible to their full extents. The two OSPs, at the northern and southern extents of the Array Area, will also be visible, with the northern OSP apparent in closer proximity and the southern OSP appearing at greater distance.

17.11.1.62 The WTGs will be visible on the horizon and set against the skyline in the most open direction of view. The man-made appearance of the WTGs, their upright form and their movement will contrast with the horizontal appearance of the sea, and will interrupt the open, panoramic views available from this location. The Array Area will occupy the central frame of the seascape visible from this location, while small sections of the seascape to the north and south of the Array Area will remain undeveloped. There are limited vertical visual reference points in this view, although the smaller-scale WTGs within ABWP1 are visible along the horizon to the south-east. The WTGs within the Array Area will be seen in front of the WTGs within ABWP1 and the difference in scale between the developments will be apparent.

17.11.1.63 There will be some limited stacking focussed towards northern and central parts of the Array Area, where the blades of several WTGs will appear to overlap. However, this is relatively limited and overall the WTGs will appear well spaced and evenly balanced, particularly towards the northern and southern parts of the Array Area.

17.11.1.64 Looking south-east, the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the turbines.

17.11.1.65 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Brittas Bay Beach during the operational & maintenance phase will be **Major (significant).**

Viewpoint 6: Tongelee 3rd Class Road

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.66 This viewpoint is located on a minor road near Tongelee, to the west of Brittas Bay. It is representative of views experienced by road users travelling south-east along this route.

17.11.1.67 To the east and south-east. views are available of undulating coastal farmland in the foreground, in use as pasture. The coastline and Irish Sea are clearly visible in the distance. To the north, an isolated dwelling and associated grounds is visible in the foreground. Views to the east and south are available of farmland with mature hedgerows. The coastal promontory of Mizen Head is clearly visible to the south-east, framing the curved beach at Brittas Bay. There are also views of the coastline to the south of Mizen Head in longer-distance views. The existing offshore wind turbines associated with ABWP1 form a distinct visible element of the view to the south-east.

17.11.1.68 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB), and the minor road is designated as Prospect No. 23 by Wicklow County Council, both of which indicate a higher value. The fore- and mid-ground of the view to the south-east comprises a large field of rough pasture, and the minor road is also visible in the foreground to the west, although there are also longer-distance views to the coastline and Irish Sea. Overall, the value of the view is considered to be Medium-High.

17.11.1.69 The viewpoint is representative of views experienced by road users travelling south-east on this route. Road users are considered to be of lower susceptibility due to their attention being focussed on the road, and the presence of ABWP1 within the baseline view further reduces susceptibility by establishing this type of development as a feature of the baseline. However, some road users are likely to be residents travelling through the area surrounding their properties, who will have a greater susceptibility to change. Overall, the susceptibility is considered to be Medium.

17.11.1.70 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.71 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 9.08 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across the very northern part of the Array Area will be screened by intervening landform and vegetation. Activity throughout the rest of the Array Area will be evident.

17.11.1.72 Taking into account the Medium sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 6 during the construction and decommissioning phases will be **Major-Moderate (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.73 During the operation and maintenance phase, the magnitude of change experienced at this viewpoint will be Medium-High. From this slightly elevated viewpoint, the Array Area will be visible across the open sea view, occupying around 92.44˚ of the view at a distance of approximately 9.08 km to the nearest WTG. It will be seen across the view from the north-east to the south, in the context of the existing ABWP1.

17.11.1.74 The view from this slightly elevated position is framed by the foreground topography, which draws the eye towards the open sea to the south-east. Seven WTGs at the northern extent of the Array Area will be screened from view by the topography and vegetation in the foreground to the

east of the viewpoint. The lower parts of three further WTGs will also be screened by the topography, with just the blade tips of two and blades and upper tower of the other being visible above the agricultural land to the east. All other WTGs within the Array Area will be visible to their full extents, positioned in the most open direction of views from this location. The WTGs will be visible on the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. However, they will be read with other man-made features to the right of the view, and the elevated position of the view and nature of the topography in the foreground of this view means that they will not appear as the tallest elements in the view.

17.11.1.75 There will be some limited stacking of WTGs throughout the horizontal extent of the Array Area. Some WTGs towards the northern extent of the layout, in closest proximity to the viewpoint, will appear to be arranged in pairs or small groups, with associated gaps on either side. However, overall the layout will appear relatively well balanced. The WTGs will be seen alongside the WTGs within ABWP1 and the difference in scale between the two developments will be evident. The southern OSP will be visible, although difficult to discern at this distance, while the northern OSP will be screened by the topography and vegetation to the north-east of the viewpoint.

17.11.1.76 Looking south-east from this viewpoint the Proposed Development will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the turbines.

17.11.1.77 Taking into account the Medium-High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Tongelee 3rd Class Road during the operational & maintenance phase will be **Major-Moderate (significant).**

Viewpoint 7: Ballinvally, 3rd Class Road

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.78 This viewpoint is located on a minor road near Ballinvally, to the north of the small settlement of Barranisky, north of Arklow. It is representative of views experienced by local residents travelling on roads within the surrounding area.

17.11.1.79 Views are available from this elevated position of an expanse of farmed hills to the north which merge into a more gently undulating to relatively flat coastal farmland further south. Fields are bounded by mature hedgerows with frequent mature trees. Large tracts of woodland are dispersed throughout. The coastline and the Irish Sea are clearly visible in the distance to the east. Mizen Head is identifiable by the high sand dunes just visible in the view. The existing offshore wind turbines associated with the ABWP1 form a distinct visible element of the view.

17.11.1.80 The viewpoint is located within the South East Mountain Lowlands (AHA 3) and the route is designated as Prospect No. 35 by Wicklow County Council, both of which indicate a higher value. It occupies an elevated position and offers expansive, panoramic views over the surrounding landscape and coastline, although there are also foreground views of the minor road which detract slightly from its value. Overall, the value is considered to be High.

17.11.1.81 The viewpoint is representative of views experienced by residents travelling around the local area in proximity to their residence. Similar views will also be experienced from scattered residential properties within the surrounding landscape. Although road users are considered to be of lower susceptibility due to their attention being focussed on the road, residents in the area surrounding their properties are considered to be of higher susceptibility to changes in the surrounding view. The presence of WTGs within ABWP1 slightly reduces susceptibility by establishing this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-High.

17.11.1.82 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.83 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 13.65 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across the very southern part of the Array Area will be screened by intervening landform and vegetation. Activity throughout the rest of the Array Area will be evident.

17.11.1.84 Taking into account the High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 7 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.85 During the operation and maintenance phase, the magnitude of change experienced at this viewpoint will be Medium-High. From this elevated view the Array Area will be visible across the open sea view, at a distance of approximately 13.65 km to the nearest WTG. It will occupy a horizontal extent of approximately 73.88˚, and will extend across the majority of the seascape visible from this location. It will be seen in the context of the existing WTGs within ABWP1, and the difference in scale between the two developments will be evident.

17.11.1.86 The WTGs will be read across the horizon and set against the skyline, and their man-made appearance, upright form and movement will contrast with the horizontal appearance of the sea. However, they will be seen in the context of the existing WTGs within ABWP1, as well as man-made features to the right of the view, including coniferous forestry and the minor road. Thirteen WTGs at the southern extent of the Array Area will be fully screened by the topography and coniferous forestry to the east of the road, with two further WTGs heavily filtered by the forestry. One OSP will be visible at the northern extent of the Array Area, to the east, while the southern OSP will be screened by the topography.

17.11.1.87 The large scale and vertical nature of the WTGs will appear to contrast with the relatively complex, small-scale landscape which occupies the fore- to mid-ground of the view, and will increase the magnitude of change associated with them. However, the minimum distance of approximately 13.65 km between the nearest WTG and this viewpoint will slightly moderate the magnitude of change. This is a somewhat incidental viewpoint from an open, elevated location within the surrounding landscape, which otherwise tends to be relatively heavily vegetated and enclosed.

17.11.1.88 The layout of the WTGs will be well balanced, with some limited stacking at the northern extent. Towards the central and southern sections of the visible part of the Array Area, the WTGs will be evenly spaced and well balanced.

17.11.1.89 Looking east and south-east from this viewpoint the WTGs will sometimes appear backlit by the sun in the morning. In clear weather the Array Area will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.90 Taking into account the High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Ballinvally 3rd Class Road during the operational & maintenance phase will be **Major (significant).**

Viewpoint 8: Ballinaskea, 3rd Class Road

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.91 This viewpoint is located on a minor road near Ballinaskea, to the east of Ballymoyle Forest. It is representative of views experienced by local residents travelling on roads within the surrounding area.

17.11.1.92 To the east, views are available from this elevated location of an expanse of coastal farmland with abundant mature hedgerow vegetation and scattered isolated dwellings. Small clumps of mature woodland and mature trees feature in the foreground along with farm buildings. The coastline and Irish Sea are clearly visible in the distance along with high sand dunes in the vicinity of Mizen Head and further south along the coast. Low voltage overhead powerlines cross this landscape. Traffic on the M11 / N11 route is also visible between gaps in the mid-ground vegetation. Further north, the afforested hills near Castletimon are visible. The existing WTGs associated with ABWP1 form a distinct visible element of the view.

17.11.1.93 This viewpoint is not located within any designated landscapes, nor designated as a Prospect, which would indicate a higher value. However, it offers local value due to the panoramic nature of the views available. Overall, the value of the view is considered to be Medium.

17.11.1.94 The viewpoint is representative of views experienced by residents travelling around the local area in proximity to their residence. Similar views will also be experienced from scattered residential properties within the surrounding landscape. Although road users are considered to be of lower susceptibility due to their attention being focussed on the road, residents in the area surrounding their properties are considered to be of higher susceptibility to changes in the surrounding view. The presence of WTGs within ABWP1 slightly reduces susceptibility by establishing this type of development as a feature of the baseline view. This is also a relatively incidental viewpoint which offers open, longer-distance views from within this otherwise relatively enclosed, vegetated landscape. Overall, the susceptibility is considered to be Medium-High.

17.11.1.95 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.96 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 11.63 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across parts of the Array Area will be screened by intervening vegetation, although this effect will be relatively limited, and generally activity throughout the Array Area will be evident.

17.11.1.97 Taking into account the Medium-High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 8 during the construction and decommissioning phases will be **Major-Moderate (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.98 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-High. From this slightly elevated view the Proposed Development will be visible across the open sea view. It will occupy approximately 93.31˚ of the view from north-east to south-east, and will be seen in the context of the existing WTGs within ABWP1 that are visible in the centre of the baseline view. The WTGs will be seen at a minimum distance of approximately 11.63 km.

17.11.1.99 Three WTGs at the southern extent of the Array Area will be screened from view by vegetation in the foreground to the south-east of the viewpoint. There will be some further filtering of the lower parts of several WTGs within the central part of the Array Area, again by vegetation in the foreground. This effect may be somewhat reduced in winter when vegetation cover will be more limited. Beyond these areas, all WTGs will be seen to almost their full extents. The southern OSP will also be screened from view, while the northern OSP will be visible towards the left of the view.

17.11.1.100 The WTGs will be read across the horizon and set against the skyline, and their man-made appearance, upright form and movement will contrast with the horizontal appearance of the sea. The WTGs will also appear to contrast with the relatively small-scale, complex pattern of the surrounding landscape, which will emphasise their scale. However, the WTGs will be read beyond other man-made features in the foreground of the view, including agricultural buildings. They will also be seen alongside the WTGs within ABWP1 and the difference in scale between the two developments will be apparent.

17.11.1.101 The layout of the WTGs will be well balanced, with some limited stacking at the northern extent. Towards the central and southern sections of the visible part of the Array Area, the WTGs will be evenly spaced and well balanced.

17.11.1.102 Looking east to southeast from this viewpoint the WTGs will sometimes appear backlit by the sun in the morning. In clear weather the Array Area will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.103 Taking into account the Medium-High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Ballinaskea 3rd Class Road during the operational & maintenance phase will be **Major-Moderate (significant).**

Viewpoint 9: Johnstown, N11 / M11

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.104 This viewpoint is located on the N11 / M11 route near Johnstown, north of Junction 20. It is representative of views experienced by road users travelling in both directions on this route.

17.11.1.105 Views are available to the east of relatively flat coastal farmland featuring fragmented hedgerows, shelterbelts and scattered isolated mature trees against the backdrop of the Irish Sea. A low voltage overhead line is visible crossing this landscape. The existing WTGs associated with ABWP1 form a distinct visible element of the view.

17.11.1.106 The viewpoint is not located within any designated landscapes, which would otherwise indicate a higher value. The viewpoint offers some local value due to the panoramic views available, although this is limited due to the presence of the major road. Overall, the value is considered to be Medium.

17.11.1.107 The view is experienced by road users travelling in both directions on this route. Road users are considered to have a lower susceptibility to changes in the view due to their focus on the road, particularly due to the speed at which vehicles are likely to be travelling on this route. The presence of the WTGs within ABWP1 also reduces the susceptibility of the receptors to

changes associated with the Proposed Development, by establishing development of this type as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-Low.

17.11.1.108 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.109 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 12.16 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across the very northern part of the Array Area will be screened by intervening vegetation. Activity throughout the rest of the Array Area will be evident.

17.11.1.110 Taking into account the Medium sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 9 during the construction and decommissioning phases will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium-High magnitude of change, in comparison to other moderate (not significant) effects which may result from a Medium or Medium-Low magnitude of change. The distance of the Proposed Development at 12.16 km from the viewpoint, will influence the apparent scale of the WTGs, which contributes to the significance of the effect.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.111 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-High. From this low-lying view, the Array Area will be visible across the open sea from north-east to south-east. It will occupy approximately 94.25° of the view, and will be seen in the context of the existing WTGs within ABWP1 which are visible in the baseline view. The WTGs will be seen at a minimum distance of approximately 12.16 km. Views towards the Array Area will be experienced at an oblique angle for road users travelling at speed on this route.

17.11.1.112 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. However, they will be seen in the context of man-made features in the mid-ground of the view, including an overhead line which will be apparent at a similar distance above the horizon. They will also be seen alongside the WTGs within ABWP1, and the difference in scale between the two developments will be apparent.

17.11.1.113 To the left of the view northern parts of the Array Area will be positioned behind vegetation in the mid-ground of the view, reducing the visibility of WTGs in this direction. Three WTGs will be fully screened, although this effect may be reduced in winter when vegetation cover will be more limited. Views towards several other WTGs will be heavily filtered. The WTGs will occupy a relatively large proportion of the seascape visible from this viewpoint.

17.11.1.114 The WTGs will appear relatively well balanced in terms of spacing. Across central parts of the Array Area, several WTGs will appear to be arranged in pairs, with associated gaps on either side of each group. There will also be some limited stacking across the northern part of the visible section of the Array Area. WTGs across the southern part of the Array Area will be well balanced.

The southern OSP will be visible to the south-east, while the northern OSP will be screened from view by vegetation.

17.11.1.115 This is a relatively incidental, fleeting view from a part of the road with open views to the east, while other parts of the M11 / N11 route are relatively enclosed due to the presence of extensive vegetation cover. The WTGs will be read with existing man-made features in the view such as overhead lines.

17.11.1.116 Looking east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.117 Taking into account the Medium sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Johnstown, N11 / M11 during the operational & maintenance phase will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium-High magnitude of change, in comparison to other moderate (not significant) effects which may result from a Medium or Medium-Low magnitude of change. The distance of the Proposed Development at 12.16 km from the viewpoint will influence the apparent scale of the WTGs, which will contributes to the significance of the effect.

Viewpoint 10: Ferry Bank, Arklow

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.118 This viewpoint is located on a footpath along the shoreline within Arklow, within the northern part of the settlement, adjacent to Seaview Avenue. It is representative of the views experienced by recreational receptors walking along the shoreline, which forms part of the Kynoch Heritage Walk. Residents within Arklow may experience similar views.

17.11.1.119 Views are available of the Irish Sea to the east with the existing WTGs associated with the ABWP1 visible as a distinct element of the view. The views of the sea occupy a large proportion of the view with the coastline to the north and the south very much in the peripheral view. Views to the north are available of the gently curved coastline featuring vegetated sand dunes and beach areas overlooked inland by the local afforested hill at Glenteige. To the south, Arklow Harbour is clearly visible, including harbour walls and industrial buildings and structures close to the coast. The summit of Arklow Rock, near Arklow Head, is also clearly visible in the distance behind the harbour area to the right.

17.11.1.120 The viewpoint is not located within any designated landscapes which would otherwise indicate a higher value, although it is situated on the promoted Kynoch Heritage Walk. It provides local value due to the expansive and panoramic sea views. Overall, the value is considered to be Medium-High.

17.11.1.121 The view is experienced by recreational receptors walking on the Kynoch Heritage Walk and residents of Arklow, whose attention is likely to be focussed on their surroundings, which indicates a higher susceptibility to changes in the surrounding view. The presence of the WTGs within ABWP1 slightly reduces the susceptibility of the receptors to changes associated with the Proposed Development, due to the existing presence of this type of development. Overall, the susceptibility is considered to be High.

17.11.1.122 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.123 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 12.11 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be evident, with no screening by landform or vegetation.

17.11.1.124 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 10 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.125 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be High. From this low-lying view the Array Area will be visible across the open sea view, occupying around 93.56˚ of the view from north-east to south-east, at a distance of approximately 12.11 km to the nearest WTG. The WTGs will be seen in the context of the existing WTGs within ABWP1 which are noticeable to the east.

17.11.1.126 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. They will be read in the context of the existing WTGs within ABWP1, although the difference in scale between the two developments will be apparent.

17.11.1.127 All WTGs within the Array Area will be visible, due to the open, expansive nature of views over the Irish Sea from this location. The Array Area will occupy the majority of the seascape visible from this location, with limited areas of open seascape seen to the north and south of the WTGs. To the south-east the WTGs will be read in the context of the built form of Arklow Harbour. Although there is existing man-made development visible in this view to the west and south within Arklow, the Array Area will extend evidence of man-made development into the view to the east, which currently represents the only open, undeveloped direction of views. Both OSPs, at the northern and southern extents of the Array Area, will be visible, with the southern OSP seen at slightly closer proximity.

17.11.1.128 There will be some stacking of WTGs in the view, particularly across central parts of the Array Area, in closest proximity to the viewpoint. WTGs throughout central to southern parts of the Array Area will appear to be arranged in pairs or small groups, with associated gaps on either side of each group, giving a somewhat cluttered appearance to the layout across this area. WTGs at the northern extent will be well balanced and evenly spaced.

17.11.1.129 Looking north-east to south-east from this viewpoint the WTGs will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the turbines.

17.11.1.130 Although the ZTV indicates relatively widespread visibility throughout this part of the settlement, this does not take into account the effect of screening by built form, and actual visibility will be much lower. While residents within Arklow may experience similar views as those experienced at the viewpoint, these are likely to be more limited, due to a greater distance from the Proposed Development and the effect of intervening built form. Settlement within this northern part of the town is generally focussed away from the coast, with the exception of ‘The Bungalows’

caravan park, although receptors within the caravan park are not considered to be permanent residents of Arklow.

17.11.1.131 Taking into account the High sensitivity and the High magnitude of change, the effect of the proposed Development on receptors at Ferry Bank, Arklow during the operational & maintenance phase will be **Major (significant).**

Viewpoint 11: Arklow Town

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.132 This viewpoint is located within Arklow, on Yellow Lane at the point at which it crosses the railway line, near Arklow train station. It is representative of the views experienced by residents within Arklow, both from within their properties and travelling around the local area.

17.11.1.133 Views are available of the built-up area of Arklow, including rooftops of residential areas, open spaces and some larger scale industrial buildings. Overhead lines attached to public lighting columns cross part of the view. The Irish Sea forms the backdrop to the view to the east. Arklow Rock is partially visible to the south behind residential areas. The existing WTGs associated with ABWP1 form a distinct visible element of the central view.

17.11.1.134 The viewpoint is not located within any designated landscapes which would otherwise indicate a higher value. It provides some local value due to the views towards the sea, although the view generally is over a built-up area. Overall, the value is considered to be Medium.

17.11.1.135 Residents within Arklow are likely to have an appreciation of views of their surroundings, which indicates a higher susceptibility to changes in the surrounding view, although existing extensive built development within the town somewhat reduces this susceptibility. Overall, the susceptibility is considered to be High.

17.11.1.136 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.137 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 13.13 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Sea-level activity across the very southern part of the Array Area will be screened by intervening landform, built form and vegetation within Arklow. Across this area, construction and decommissioning activity will be restricted to views of the WTGs as they are constructed or removed. Activity throughout the rest of the Array Area will be evident.

17.11.1.138 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 11 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.139 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be High. From this location within the settlement of Arklow, all WTGs within the Array Area will be visible to some extent across the open sea view, occupying

approximately 88.19˚ of the view at a distance of 13.13 km to the nearest WTG. The WTGs will be seen in the context of the existing WTGs within ABWP1 which are visible to the east.

17.11.1.140 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. They will be seen in the seascape context to the north-east and east, as well as extending above the horizon formed by built development within Arklow to the south-east, and will appear to occupy much of the horizon visible from this viewpoint.

17.11.1.141 The WTGs will be seen beyond, and read in the context of, other man-made features within the settlement of Arklow across the entire foreground view. The large scale of the WTGs will appear somewhat constrasting with the scale of existing development within the fore- to mid-ground. Towards the south of the Array Area, the lower parts of several WTGs will be screened beyond built form and vegetation within Arklow, which will somewhat reduce visibility in this direction, although all WTGs will remain visible to some extent.

17.11.1.142 There will be some stacking of WTGs, particularly towards the southern part of the Array Area, and WTGs across central to southern parts will appear to be arranged in pairs, with associated gaps on either side of each pair. Across the northern half of the Array Area, seen to the north-east, the WTGs will appear well balanced and evenly spaced. Towards central to southern parts of the Array Area, several WTGs will appear to be arranged in pairs, due to the angle of view towards the Array Area and the layout of WTGs. The northern OSP will be theoretically visible, albeit seen at distance, while the southern OSP will be screened from view by intervening topography and vegetation.

17.11.1.143 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.144 The geographic extent of effects is likely to be relatively limited. Although the ZTV indicates widespread visibility throughout this part of the settlement, actual visibility will be much lower. The viewpoint is positioned within a part of the settlement with relatively open views to the north-east; other parts of the settlement will have more limited views towards the Proposed Development due to the orientation of the streets and screening by intervening built form.

17.11.1.145 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Arklow Town during the operational & maintenance phase will be **Major (significant).**

Viewpoint 12: Moneyribbin 3rd Class Road

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.146 This viewpoint is located on a minor road near Moneyribbin, to the west of Arklow. It is representative of views experienced by local residents travelling on roads within the surrounding area.

17.11.1.147 Views are available from an elevated location of a vast expansive farmed landscape in an easterly direction with the Irish Sea in the distance. The hill summits of Glenteige and Tara Hill are visible at the extreme left and right part of the view respectively. The farmland sweeps down gently to the valley near Coolgreany in the centre of the view. Field boundaries are marked with mature hedgerow vegetation and larger linear and rectangular tracts of woodland are visible within the valley landscape. In the middle distance to the south-east, a large tract of commercial coniferous forestry occupies part of the view. The coastline is visible to the east, along with focal points such as Arklow Rock. The existing WTGs associated with ABWP1 are visible elements of the view to the left of Arklow Rock.

17.11.1.148 The viewpoint is located within the Southern Hills (AHA 2) which indicates a higher value. It also offers some local value due to the expansive views available from this elevated position. Overall, the value is considered to be Medium-High.

17.11.1.149 The viewpoint is representative of views experienced by residents travelling around the local area in proximity to their residence. Similar views will also be experienced from scattered residential properties within the surrounding landscape. Although road users are considered to be of lower susceptibility due to their attention being focussed on the road, residents in the area surrounding their properties are considered to be of higher susceptibility to changes in the surrounding view. The presence of WTGs within ABWP1 slightly reduces susceptibility by establishing this type of development as a feature of the baseline view. This is also a relatively incidental viewpoint which offers open, longer-distance views from within this otherwise relatively enclosed, vegetated landscape. Overall, the susceptibility is considered to be Medium-High.

17.11.1.150 Taking into account the judgements of value and susceptibility, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.151 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 21.14 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across the very northern part of the Array Area will be screened by intervening landform and vegetation. Activity throughout the rest of the Array Area will be evident.

17.11.1.152 Taking into account the Medium-High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 12 during the construction and decommissioning phases will be **Major-Moderate (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.153 The magnitude of change experienced at this viewpoint during the operational and maintenance phases will be Medium-High. From this elevated location the Array Area will be visible across the open sea view, occupying around 60.22˚ of the view, at a distance of approximately 21.14 km to the nearest WTG. It will be seen in the context of the existing WTGs within ABWP1 which are noticeable in the centre of the view. The difference in scale between the two developments will be apparent.

17.11.1.154 Views towards approximately three WTGs at the northern extent of the Array Area will be heavily filtered by the vegetation further along the road in the mid-ground. This effect may be more limited in winter when vegetation cover will be reduced. The lower parts of a further WTG will be screened from view by the topography, with just the hub and blade tips being seen. The northern OSP will also be screened from view by the topography. The lower parts of the towers of WTGs across the remaining Array Area will generally be backclothed against the sea beyond, due to the elevated position of this viewpoint, with the hubs and blades of the WTGs appearing above the horizon. The WTGs will be seen in the context of the generally rural view, albeit with some evidence of man-made development in the form of coniferous forestry plantation. The Array Area will be positioned in the most open direction of views towards the Irish Sea. A proportion of the view of the seascape to the south-east will remain unaffected by development.

17.11.1.155 The man-made appearance, upright form and movement of the WTGs will contrast with the horizontal appearance of the sea and be read with the complex agricultural landscape in the foreground view. There are limited other vertical reference points in the view. This will emphasise the large scale of the WTGs, despite the minimum distance of 21.14 km between this viewpoint and the nearest WTG. One OSP will be theoretically visible at the southern extent of the Array Area, although actual visibility is likely to be limited (please note that the OSPs have not been modelled in the visualisations shown in Figure 17.30.2 due to distance of more than 20 km).

17.11.1.156 Across central to southern parts of the Array Area, the WTGs will appear to be arranged in pairs, with associated gaps on either side of each pair. However, this effect is less pronounced than at other viewpoints, and the limited stacking across this area also reduces its influence. Towards the north of the Array Area, at greater distance from the viewpoint, there will be more stacking of WTGs, creating a somewhat uneven appearance across this part of the Array Area.

17.11.1.157 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the turbines.

17.11.1.158 Taking into account the Medium-High sensitivity and Medium-High magnitude of change, the effect of the Proposed Development on receptors at Moneyribbin 3rd Class Road during the operational and maintenance phase will be **Major-Moderate (significant).**

Viewpoint 13: Clogga Amenity Area

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.159 This viewpoint is located on a footpath above Clogga Beach, which leads between a small car park to the west and the beach to the east. It is representative of views experienced by recreational receptors visiting the coast.

17.11.1.160 The focus of views is to the east over the Irish Sea. The existing WTGs associated with ABWP1 are visible elements of the view, seen at distance on the horizon. The landform along the coast comprises low sea cliffs and rocky headlands, backed by gently undulating hills to the west . To the north, Arklow Rock is clearly visible together with holiday homes overlooking the beach along the coast. Mizen Head and Wicklow Head are visible in the distance with undulating afforested hills inland. Views to the south are focussed on the local headland at Clogga including rocky shoreline and beach, and are contained in relatively close proximity. The views of the sea occupy a large proportion of the view with the coastline to the north and the south in the peripheral part of the view. There is some degree of framing of these sea views by Mizen Head to the north and the local headland at Clogga to the south.

17.11.1.161 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB), which indicates a higher value. It is a well-used visitor attraction, and open, expansive views of the sea and surrounding coastlines are available. The overall value of the view is considered to be High.

17.11.1.162 The view is experienced by recreational receptors visiting the coast, whose attention is likely to be focussed on their surroundings. This indicates a higher susceptibility to changes in the surrounding view. The susceptibility of receptors at this viewpoint is slightly moderated by the existing presence of the ABWP1 WTGs in the view to the east, which establish this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be High.

17.11.1.163 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.164 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 11.57 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across parts towards the south of the Array Area will be screened by intervening landform and vegetation. Activity throughout the rest of the Array Area will be evident.

17.11.1.165 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 13 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.166 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be High. From this location the Array Area will be visible across the open sea view, occupying around 89.75˚ of the view at a distance of 11.57 km to the nearest WTG. It will be seen in the context of the existing WTGs within ABWP1 that are visible to the north-east, and the difference in scale between the two developments will be apparent.

17.11.1.167 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea, but read with the existing WTGs that are a long established component of this view. The Array Area will occupy the majority of the open view out to sea, with only a small area of seascape to the north of the Array Area appearing undeveloped. Views of the coastline from this location are relatively contained by the headlands at Clogga and Arklow Head to the south-east and north-east respectively, although there are also longer-distance views available towards the headland of Mizen Head to the north-east. The scale of the WTGs and their proximity will contrast with the somewhat contained nature of the surrounding bay and associated seascape, and will increase the magnitude of change associated with the Array Area.

17.11.1.168 Five WTGs at the southern extent of the Array Area will be seen beyond landform at the southern extent of the bay, and partially screened by associated vegetation. Due to the greater distance between the viewpoint and northern parts of the Array Area, WTGs in this area will appear more distant and smaller in scale, while WTGs towards the central and southern parts of the Array Area will be more evident.

17.11.1.169 The layout of the WTGs will generally appear well balanced in terms of spacing. Towards the southern part of the Array Area, several WTGs will appear to be arranged in pairs, although there will be limited stacking or overlapping between WTGs, which will reduce the influence of this effect. Towards the north of the Array Area, there will also be some limited stacking of WTGs. Overall, the layout will appear well balanced and evenly spaced.

17.11.1.170 Due to the layout of the WTGs and the angle of view towards the Array Area, several WTGs across central to southern parts will appear to be arranged in pairs, with associated gaps on either side of each pair. These WTGs appear in closest proximity to the viewpoint, and will slightly increase the magnitude of change compared to a more evenly spaced layout. There will also be a degree of stacking across northern parts of the Array Area, although these WTGs are seen in longer-distance views. Overall, the layout will have a somewhat unbalanced appearance. One OSP at the northern extent of the Array Area will be visible, although difficult to discern at this distance, while the southern OSP will be screened by landform and vegetation.

17.11.1.171 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.172 Taking into account the High sensitivity and High magnitude of change, the effect of the Proposed Development on receptors at Clogga Amenity Area during the operational and maintenance phase will be **Major (significant).**

Viewpoint 14: Kilmichael Point

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.173 This viewpoint is located on a footpath near Kilmichael Point. It is representative of views experienced by recreational receptors visiting the coast and residents at several properties in close proximity to the viewpoint. Similar views will be experienced by receptors visiting beaches to the north and south of Kilmichael Point.

17.11.1.174 The focus of views is to the east, towards the Irish Sea. In the foreground, coastal dunes feature rough grassland and there are stone walls and remnant stone ruins. The existing WTGs associated with ABWP1 are visible as small elements in the distance. To the north, Arklow Rock is clearly visible overlooking the beach along the coast and surrounding lower lying farmland. Further northeast, Mizen Head is visible in the distance with undulating afforested hills and uplands in the hinterland further west. Views to the south are available of the local grassed headlands and coastline with stone walls and ruins and featuring an isolated large stone dwelling. The views of the sea occupy a large proportion of the view with the coastline to the north and the south in the peripheral part of the view.

17.11.1.175 The viewpoint is located within the Kilmichael Point Distinctive Landscape, as designated by Wexford County Council, which indicates a higher value. The viewpoint is situated at a well-known vantage point, and open, expansive views of the sea and surrounding coastlines are available. The overall value of the view is considered to be High.

17.11.1.176 The view is experienced by recreational receptors visiting the coast and residents at nearby properties, whose attention is likely to be focussed on their surroundings. This indicates a higher susceptibility to changes in the surrounding view. The susceptibility of receptors at this viewpoint is slightly moderated by the existing presence of the ABWP1 WTGs in the view to the east, which establish this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be High.

17.11.1.177 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.178 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 10.98 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be evident.

17.11.1.179 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 14 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.180 The magnitude of change experienced at this viewpoint during the operational and maintenance phases will be High. From this low lying viewpoint the Array Area will be visible across the open sea, occupying around 85.06˚ of the view from north-east to east. It will be seen at a distance of approximately 10.98 km the nearest WTG, and in the context of the WTGs within the existing ABWP1 which are visible to the north-east. The difference in scale between the two developments will be apparent.

17.11.1.181 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea, although they will be read with the existing turbines that are a long-established component of this view. There are limited other man-made features or foreground elements in this view, and the Array Area will be visible in the most open, scenic direction of views from this viewpoint. One WTG is screened from view by signage at this viewpoint, but it will be visible from the immediate surroundings. The WTGs will occupy the majority of the seascape visible from this location.

17.11.1.182 The WTGs across central to southern parts will appear well balanced in terms of spacing, with limited stacking. There will be some stacking of WTGs across the northern extent of the layout, and some WTGs will appear to be arranged in pairs or small groups, with associated gaps in spacing on either side. However, these WTGs are located at greater distance from the viewpoint and will be more difficult to discern. Overall, the layout of the WTGs will be relatively well balanced. Two OSPs at the northern and southern extent of the Array Area will appear visible, with the southern OSP appearing more prominent due to its closer proximity, and the northern OSP difficult to discern at this distance.

17.11.1.183 Looking north-east to east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.184 Taking into account the Medium-High sensitivity and High magnitude of change, the effect of the Proposed Development on receptors at Kilmichael Point during the operational and maintenance phase will be **Major (significant).**

Viewpoint 15: Clones Coast Road

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.185 This viewpoint is located on Clones Coast Road, between Kilpatrick Beach and Kilbegnet / Kilgorman Bay Beach, to the north-east of Clone. It is representative of residential receptors at a small number of nearby properties. Similar views will be experienced by road users on the minor road, who are likely to be residents accessing their properties, or people staying at the nearby holiday parks to the south-west.

17.11.1.186 The focus of views is to the east over the Irish Sea. The sea occupies a large proportion of the view with the coastline to the north and the south in the peripheral part of the view. To the north, the promontory associated with Kilmichael Point is clearly visible. The existing WTGs associated with ABWP1 are visible as small elements in the distance to the east of Kilmichael Point. The landform at the coast, comprised of undulating sand dunes with coastal edge featuring beaches and rocky shorelines, is clearly visible along with the flat or gently undulating hinterland further west. A number of residential properties are visible to the west of the road in views to the north and south.

17.11.1.187 The viewpoint is not located within any landscape designations, which otherwise would indicate a higher value. The viewpoint provides some local value due to the expansive nature of views of the sea. Overall, the value is considered to be Medium-High.

17.11.1.188 The view is experienced by residential receptors in close proximity to the viewpoint, whose attention is likely to be focussed on the surroundings. This indicates a higher susceptibility to changes in the surrounding view. The susceptibility of receptors at this viewpoint is slightly moderated by the existing presence of the ABWP1 WTGs seen at distance in the view to the east. Overall, the susceptibility is considered to be High.

17.11.1.189 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.190 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 11.60 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be visible, and will be particularly evident across southern parts which are located in closer proximity to the viewpoint.

17.11.1.191 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 15 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.192 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be High. From this low lying view the Proposed Development will be visible across the open sea view, occupying around 74.75˚ of the view, at a distance of approximately 11.60 km to the nearest WTG. The WTGs will be seen in the context of the existing ABWP1 that is visible in the baseline view, and the difference in scale between the two developments will be apparent.

17.11.1.193 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. The WTGs will be seen in the most open, scenic direction of views, from north-east to east. There are limited foreground features in the baseline view which would otherwise moderate the magnitude of change associated with the Array Area. The WTGs will occupy a relatively large proportion of the open views out to sea, with a section of the view over the Irish Sea to the south-east remaining unaffected. However, they will be seen alongside the existing WTGs within ABWP1 which are a well-established feature of this view.

17.11.1.194 All WTGs within the Array Area will be visible to almost their full extents, and there will be no screening by topography or vegetation. The WTGs across the southern half of the Array Area, in closest proximity to the viewpoint, will appear well balanced in terms of spacing, with limited stacking. There will be stacking of WTGs across the northern extent of the layout, and some WTGs will appear to be arranged in pairs or small groups, with associated gaps in spacing on either side. However, these WTGs are located at greater distance from the viewpoint and will be more difficult to discern. Overall, the layout of the WTGs will appear relatively well balanced when looking to the east over the southern half of the Array Area, and more cluttered and uneven when looking to the north-east towards the northern part. Two OSPs at the northern and southern extent of the Array Area will be visible, with the southern OSP appearing more prominent due to its closer proximity, and the northern OSP difficult to discern at this distance.

17.11.1.195 Looking north-east to east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.196 Taking into account the High sensitivity and High magnitude of change, the effect of the Proposed Development on receptors at Clones Coast Road during the operational and maintenance phase will be **Major (significant).**

Viewpoint 16: Tara Hill Minor Road

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.197 This viewpoint is located on a minor road which passes to the east of Tara Hill. It is representative of views experienced by road users travelling in both directions on this route, including local residents. Similar, more elevated views would be available from Tara Hill.

17.11.1.198 Views are available from this elevated location of farmland with mature hedgerow vegetation, seen against the backdrop of the Irish Sea to the east. Small coastal settlements, holiday parks and scattered isolated dwellings are visible dispersed throughout this farmland. Arklow Rock is clearly visible as a small element in the distance to the north along with hill and mountain landscapes further afield and inland. The existing WTGs associated with ABWP1 are visible as very small elements in the distance.

17.11.1.199 The viewpoint is located within the Tara Hill Distinctive Landscape, as designated by Wexford County Council, which indicates a higher susceptibility. The viewpoint provides local value due to the expansive nature of views towards the coast from this elevated location. Overall, the value is considered to be High.

17.11.1.200 The view is experienced by road users travelling north and south along this route. Road users are considered to be of lower susceptibility to changes in the surrounding view due to their focus on the road. However, many of these receptors are likely to be local residents travelling along the minor road in close proximity to their properties, which would indicate a higher susceptibility to change. Existing views of WTGs within ABWP1 slightly reduce the susceptibility to changes associated with the Proposed Development due to establishing this type of development as a feature of the baseline. Overall, the susceptibility is considered to be Medium-High.

17.11.1.201 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.202 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 14.47 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be visible, and will be particularly evident across southern parts which are located in closer proximity to the viewpoint.

17.11.1.203 Taking into account the High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 16 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.204 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-High. From this elevated viewpoint, the Array Area will be visible across the open sea view from north-east to east, occupying around 59.53˚ of the view at a distance of approximately 14.47 km to the nearest WTG. The Array Area will be seen in the context of the existing WTGs within ABWP1, and the difference in scale between the two developments will be apparent.

17.11.1.205 The WTGs will be read across the horizon and largely set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. All WTGs within the Array Area will be visible from this location, with WTGs towards the south of the Array Area seen in closer proximity to the east, and therefore appearing more prominent in the view than WTGs towards the north, seen at greater distance to the north-east. The Array Area will occupy a relatively broad extent of the visible seascape, although the view over the Irish Sea to the south-east will remain unaffected.

17.11.1.206 All WTGs within the Array Area will be visible to almost their full extents, and there will be no screening by topography or vegetation. The WTGs at the southern extent of the Array Area, in closest proximity to the viewpoint, will appear well balanced in terms of spacing, with limited stacking. There will be stacking of WTGs across central and northern parts of the layout, and some WTGs will appear to be arranged in pairs or small groups, with associated gaps in spacing on either side. This will create a somewhat uneven appearance to the layout. Two OSPs at the northern and southern extent of the Array Area will appear visible, with the southern OSP appearing more prominent due to its closer proximity, and the northern OSP difficult to discern at this distance.

17.11.1.207 The Array Area will be seen beyond a number of man-made features in the foreground, including overhead lines and telegraph poles, as well as the WTGs within ABWP1 at distance, which will slightly moderate the magnitude of change. However, the WTGs will appear to contrast with the relatively small-scale, complex landscape pattern across the fore- to mid-ground, which will emphasise the scale of the WTGs in the associated seascape context.

17.11.1.208 Although the Array Area will occupy 59.53˚ of the view, this represents only a proportion of the overall seascape visible from this location, with the seascape to the south-east remaining undeveloped. This is also a relatively incidental viewpoint, offering open, elevated views towards the Irish Sea from an otherwise relatively enclosed, vegetated route.

17.11.1.209 Looking north-east to east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.210 Taking into account the High sensitivity and Medium-High magnitude of change, the effect of the Proposed Development on receptors at Tara Hill Minor Road during the operational and maintenance phase will be **Major (significant).**

Viewpoint 17: Ballymoney Beach

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.211 This viewpoint is located on Ballymoney Beach, to the south of the small car park and Ballymoney Beach Shop. It is representative of views experienced by recreational receptors visiting the coast.

17.11.1.212 Views are available to the east of the Irish Sea. Views to the north are restricted in part by the coastal landform comprised of low undulating sand dunes clothed in grassland and scrub which descend to the rocky shoreline. To the south, the coastline features undulating topography

comprised of sand dunes clothed in grassland and woody vegetation. These descend to the coastline featuring a series of small bays and small rocky promontories in the foreground. Further afield, the coastline extends as a low promontory further out to sea terminating at Cahore Point further south, in the distance. A number of individual isolated dwellings are located along the coast to the north. The existing WTGs within ABWP1 are visible to the north-east.

17.11.1.213 The viewpoint is not located within any designated landscapes, which otherwise would indicate a higher value. The viewpoint is situated at a well-known recreational point, and open, expansive views of the sea and surrounding coastlines are available. The overall value of the view is considered to be Medium-High.

17.11.1.214 The view is experienced by recreational receptors visiting the coast, whose attention is likely to be focussed on their surroundings. This indicates a higher susceptibility to changes in the surrounding view. The susceptibility of receptors at this viewpoint is slightly moderated by the existing presence of the ABWP1 WTGs in the view to the east, which establish this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be High.

17.11.1.215 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.216 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 14.38 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be visible, and will be particularly evident across southern parts which are located in closer proximity to the viewpoint.

17.11.1.217 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 17 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.218 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be High. From this low-lying location the Array Area will be visible across the open sea view, occupying around 53.72˚ of the view. This represents approximately half the seascape visible from this viewpoint. The nearest WTG will be seen at a distance of approximately 14.38 km in the view to the north-east. The Array Area will be visible in the context of the existing WTGs within ABWP1 which are visible to the north-east, and the difference in scale between the two developments will be apparent.

17.11.1.219 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. The northernmost WTG will be partially screened from view by the landform of Mizen Head, with the lower parts of the tower screened from view. With the exception of this WTG, the full extent of the Array Area will be seen, with the WTGs towards the southern extent appearing in closer proximity and those to the north appearing at distance. The OSP at the southern extent of the Array Area will be visible, while the northern OSP will be screened from view by the landform.

There are few intervening features between the viewpoint and the Array Area, and the WTGs will be seen in the most open direction of views over the Irish Sea. However, the Array Area will occupy only a proportion of these panoramic views, with views to the south-east over the sea remaining unaffected by development.

17.11.1.220 WTGs towards the south of the Array Area, in closest proximity to the viewpoint, will appear to be arranged in pairs, with associated gaps in the layout between pairs. However, this effect is less pronounced than at other viewpoints, and there will be limited overlapping of blades which will reduce its influence. Across central parts, the layout will appear to be relatively well balanced, while to the north there will be stacking of WTGs and the appearance of several groups of WTGs.

17.11.1.221 Looking east from this viewpoint the Array Area will sometimes appear backlit by the sun in the early morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the turbines.

17.11.1.222 Taking into account the High sensitivity and High magnitude of change, the effect of the Proposed Development on receptors at Ballymoney Beach during the operational and maintenance phase will be **Major (significant).**

Viewpoint 18: Courtown Harbour Beach

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.223 This viewpoint is located within a small amenity area to the west of the narrow, rocky Courtown Beach, featuring footpaths and benches. It is situated within the northern part of Courtown, between the coast and the harbour. The viewpoint is representative of views experienced by recreational receptors visiting the coast. Similar views will be experienced by receptors visiting a small beach to the north of the viewpoint, and by residents within the settlement.

17.11.1.224 Views are available of the Irish Sea to the east and the rocky shoreline at Courtown in the foreground. To the north, the coastline extends northeast in a series of sandy beaches and rocky areas. These coastal areas are backed by higher hummocky ground inland formed by sand dunes clothed in grassland and scrub. Further afield, extending out to sea, the promontory at Kilmichael Point is visible in the distance. To the south, the harbour at Courtown is visible in the foreground against a backdrop of high ground formed by sand dunes and clothed in grassland. The existing WTGs associated with ABWP1 are visible as very small elements in the distance.

17.11.1.225 The viewpoint is not located within any landscape designations, which otherwise would indicate a higher value. It offers some local value due to the expansive, open views towards the sea. Overall, the value of the view is considered to be Medium.

17.11.1.226 The view is experienced by recreational receptors visiting the coast, whose attention is likely to be focussed on their surroundings, indicating a higher susceptibility. The susceptibility of receptors at this viewpoint is slightly moderated by the existing presence of the ABWP1 WTGs in the view to the east, which establish this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-High.

17.11.1.227 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.228 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in

addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 16.44 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be visible, and will be particularly evident across southern parts which are located in closer proximity to the viewpoint.

17.11.1.229 Taking into account the Medium-High sensitivity and the Medium magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 18 during the construction and decommissioning phases will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium magnitude of change, in comparison to moderate (not significant) effects which may result from a Medium-Low magnitude of change, the distance of the Proposed Development 16.44 km from the viewpoint, and the open, clear views towards construction and decommissioning activity.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.230 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium. From this low lying viewpoint the Proposed Development will be visible across the open sea view, occupying around 42.53˚ of the view at a distance of approximately 16.44 km to the nearest WTG. It will be seen in the context of the existing WTGs within ABWP1 which are visible at distance to the north-east.

17.11.1.231 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. There are no topographical features to prevent views towards the Array Area, and all WTGs will be visible. They will be seen in the most open, scenic direction of views, over the Irish Sea. However, they will only occupy a proportion of the views of the sea from this location, and the view to the south-east will remain unaffected by development. The lower towers of WTGs towards the north of the Array Area will be positioned beyond the horizon due to distance and the curvature of the earth.

17.11.1.232 The WTGs will appear well balanced in terms of spacing across central parts of the Array Area. Towards the south, in closest proximity to the viewpoint, several WTGs will appear to be arranged in pairs, with some stacking and associated gaps on either side of each pair. The same effect will also occur across the northern part of the Array Area, although these WTGs are more difficult to discern due to distance. The southern OSP will be visible, albeit difficult to discern due to distance, while the northern OSP will be screened by the curvature of the earth.

17.11.1.233 The distance of 16.41 km between the viewpoint and the nearest WTG in the Array Area will somewhat moderate the magnitude of change. There are views over existing built development within Courtown to the west and south, and the flood defences provide evidence of man-made development in the view over the Irish Sea. However, the view out to sea represents an undeveloped horizon which is likely to be valued by local residents, and the WTGs will extend development into the view in this direction.

17.11.1.234 Looking north-east to east from this viewpoint the Array Area will sometimes appear backlit by the sun in the early morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.235 The geographic extent of effects is likely to be relatively limited. The ZTV indicates that visibility across this area will be somewhat intermittent, due to the effect of topographical changes. Actual visibility will also be reduced by built form and vegetation within the settlement. Residential properties are generally located away from the coastline, and the viewpoint has been positioned in an area with more open views over the coast than those areas in which residential development is located.

17.11.1.236 Taking into account the Medium-High sensitivity and Medium magnitude of change, the effect of the Proposed Development on receptors at Courtown Harbour Beach during the operational and maintenance phase will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium magnitude of change, in comparison to moderate (not significant) effects which may result from a Medium-Low magnitude of change, the distance of the Proposed Development 16.44 km from the viewpoint, and the open, clear views towards the WTGs.

Viewpoint 19: Cahore Point

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.237 This viewpoint is located on the headland at Cahore Point, to the north of Cahore Beach and south of Cahore Pier. It is representative of views experienced by recreational receptors visiting the coast and walking along the Wexford Coast Path, on which the viewpoint is located. Similar views will be experienced by residential receptors at properties along the coast to the north and south, and recreational receptors within the holiday park to the west.

17.11.1.238 The Irish Sea occupies a large proportion of the view to the north, east and south. To the north, the coastline is visible in the foreground along with the Wexford Coast Path. This is a relatively linear section of coastline, with broad associated views. The landform descends on a steep grassed slope to the rocky shoreline at this location. Further afield, the promontory at Kilmichael Point is visible in weather conditions that afford clear visibility. The existing WTGs associated with ABWP1 are visible as very small elements in the distance to the north-east. To the south, in the distance, woody vegetation associated with the Nature Reserve (Wexford Slobs) is clearly visible as a backdrop to the beach. To the south, the coastline is visible as an extensive beach backed by the hummocky landforms associated with the sand dunes clothed in grassland. To the west, caravans within a holiday park are visible set upon the cliffs.

17.11.1.239 The viewpoint is located within the Cahore Point Distinctive Landscape, as designated by Wexford County Council, and on the promoted Wexford Coast Path, both of which indicate a higher value. It is also of local value due to the open, expansive views towards the sea. The value of the view is considered to be High.

17.11.1.240 The viewpoint is representative of views experienced by recreational receptors visiting the beach and walking on the coastal path, whose attention is likely to be focussed on their surroundings. This indicates a higher susceptibility to changes in the surrounding view. The susceptibility to changes associated with the Proposed Development is slightly moderated by the existing presence of ABWP1 WTGs, which establish development of this type as a feature of the baseline view. Overall, the susceptibility is considered to be High.

17.11.1.241 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.242 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 18.86 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be visible, although more difficult to discern, particularly towards the north of the Array Area which is located at greater distance from the viewpoint.

17.11.1.243 Taking into account the High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 19 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.244 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-High. From this slightly elevated location the Array Area will be visible across the open sea view, occupying around 23.72˚ of the view, at a distance of approximately 18.86 km to the nearest WTG. The WTGs will be seen in the context of existing WTGs within ABWP1 which are visible at distance under clear conditions. The difference in scale between the two developments will be apparent.

17.11.1.245 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. There are no topographical features or vegetation within the baseline view to prevent views towards the Array Area, and all WTGs will be visible in the view to the north-east. The lack of built development in the baseline view, as well as the expansive, long-distance views along this relatively linear stretch of coastline, will increase the magnitude of change associated with the introduction of the large-scale WTGs into the seascape context. The magnitude of change will be slightly moderated by the distance of 18.86 km to the nearest WTG, and the horizontal extent of 23.72°, although the large scale of the WTGs will still be discernible at this distance. The WTGs to the north of the Array Area are more difficult to discern due to the increased distance from the viewpoint, while the WTGs to the south are more apparent.

17.11.1.246 There is a degree of stacking in the WTG layout, particularly across central and northern parts of the Array Area, and some associated gaps in spacing. However, this will have a limited influence on the magnitude of change due to the minimum distance of 18.86 km to the nearest WTG. WTGs at the southern extent of the Array Area, in closest proximity to the viewpoint, will appear well balanced. The OSP to the south of the Array Area will be theoretically visible, although likely difficult to discern at this distance. The northern OSP will not be visible due to the curvature of the earth. While the Array Area will be seen in the most open, scenic direction of views, it will occupy a relatively limited extent of the overall panoramic views of the Irish Sea available from this location, and the view to the east and south-east will remain undeveloped.

17.11.1.247 Looking north-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the early morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.248 Taking into account the High sensitivity and Medium-High magnitude of change, the effect of the Proposed Development on receptors at Cahore Point during the operational and maintenance phase will be **Major (significant).**

Viewpoint 20: Curracloe Beach

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.249 This viewpoint is located on Curracloe Beach, close to a path which leads to the associated car park. It is representative of views experienced by recreational receptors to the coast. Similar views will be experienced by residents at nearby properties and visitors to caravan parks in the vicinity.

17.11.1.250 The Irish Sea is visible to the east and occupies a large proportion of the view. To the north, the coastline between the foreground and longer distance views, while the landform of the bay can be seen curving to the east. Sand dunes featuring rough grassland extend into the foreground to the north and south of the viewpoint, while in longer-distance views to the north the landform

becomes more rugged and rocky. Further inland, to the north-west, the view is over a farmed landscape featuring areas of woodland and scattered properties. Existing WTGs within ABWP1 are not visible due to distance and the curvature of the earth, meaning that they are positioned beyond the horizon.

17.11.1.251 The viewpoint is not located within any designated landscapes, which would otherwise indicate a higher value. It is a well-known amenity area which offers open, expansive views over the Irish Sea. Overall, the value of the view is considered to be Medium-High.

17.11.1.252 The viewpoint is representative of views experienced by recreational receptors, whose attention is likely to be focussed on their surroundings. This indicates higher susceptibility to changes in the surrounding view. Overall, the susceptibility is considered to be Medium-High.

17.11.1.253 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.254 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-Low. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 41.10 km to the nearest WTG, some components of the construction and decommissioning of the Proposed Development will be difficult to discern. Activity will be more evident across southern parts of the Array Area which are located in closer proximity to the viewpoint, although still difficult to discern at this distance.

17.11.1.255 Taking into account the Medium-High sensitivity and the Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 20 during the construction and decommissioning phases will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered not significant in this instance due to a number of factors, primarily the distance of more than 40 km to the nearest WTG, and the extent of seascape which will remain unaffected by construction and decommissioning activity.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.256 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-Low. From this low-lying view the Array Area will be visible across the open sea view to the north-east, occupying around 9.18˚ of the view. The nearest WTG will be seen at a distance of approximately 41.10 km. The existing WTGs within ABWP1 are not visible from this location due to screening by the landform of the coastline to the north. However, several turbines within Ballywater Wind Farm are visible in the view to the north-east beyond the headland at Cahore Point.

17.11.1.257 A proportion of the WTGs will be visible in the view to the north-east, while approximately 16 WTGs will be screened beyond the coastline at Cahore Point. At this distance, the WTGs will occupy a relatively limited horizontal extent and will appear as a small element in the overall panoramic views available of the Irish Sea. The WTGs will be seen alongside the coastline at Cahore Point, and will appear to extend from the coastline into the sea. As a result, the WTGs will appear to blur the boundaries between the landscape and seascape, which will increase the magnitude of change associated with the Array Area. The WTGs will be read across the horizon

and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea.

17.11.1.258 The WTG towers will generally be screened beyond the horizon due to the curvature of the earth and the low-lying position of this viewpoint. There will be some stacking across the layout, particularly across northern parts, as well as some gaps in the layout. However, this will have a limited influence of magnitude of change given the minimum distance of 41.10 km to the nearest WTG. The OSP at the northern extent of the Array Area will be screened by the landform, while the southern OSP may be visible but will be difficult to discern at this distance (please note that the OSPs have not been modelled into the visualisation in Figure 17.38.2 due to distance of more than 20 km).

17.11.1.259 Looking north-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the early morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.260 Taking into account the Medium-High sensitivity and Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Curracloe Beach during the operational and maintenance phase will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered not significant in this instance due to a number of factors, primarily the distance of more than 40 km to the nearest WTG, and the extent of seascape which will remain unaffected by views of WTGs.

Viewpoint 21: Barnacleagh Minor Road

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.261 This viewpoint is located on a minor road near Barnacleagh, to the west of Arklow. It is representative of views experienced by local residents travelling on roads within the surrounding area.

17.11.1.262 Views are available of farmland in the foreground and middle distance to the south and east, featuring mature hedgerow vegetation, trees and areas of woodland. There are also scattered farm buildings and isolated properties throughout the surrounding landscape. The Irish Sea forms the backdrop to the south-east. Views to the north and west are screened by vegetation along the road. Arklow Rock is visible to the right of the viewer as a focal point at the coast. Arklow town is barely visible in the distance including industrial and commercial buildings as well as residential areas. The existing WTGs associated with ABWP1 are visible as very small elements in the distance.

17.11.1.263 The viewpoint is not located within any designated landscapes, which otherwise would indicate a higher value. It provides some local value due to the long-distance views to the coast. Overall, the value is considered to be Medium.

17.11.1.264 The viewpoint is representative of views experienced by residents travelling around the local area in proximity to their residence. Similar views will also be experienced from scattered residential properties within the surrounding landscape. Although road users are considered to be of lower susceptibility due to their attention being focussed on the road, residents in the area surrounding their properties are considered to be of higher susceptibility to changes in the surrounding view. The presence of WTGs within ABWP1 slightly moderates the susceptibility by establishing this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-High.

17.11.1.265 Taking into account the value of the view and receptor susceptibility, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.266 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 17.43 km to the nearest WTG, some components of the construction and decommissioning of the Proposed Development will be visible, although more difficult to discern due to distance. Activity at the northern extent of the Array Area will be screened from view by intervening vegetation in this view.

17.11.1.267 Taking into account the Medium-High sensitivity and the Medium magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 21 during the construction and decommissioning phases will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium magnitude of change (in comparison to moderate (not significant) effects which may result from a Medium-Low magnitude of change), the distance of the Proposed Development 17.43 km from the viewpoint, and the contrast of views of construction and decommissioning activity in the seascape, in the context of the small-scale, complex agricultural landscape in the foreground.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.268 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium. From this location the Array Area will occupy approximately 66.25˚ of the view from north-east to south-east. The nearest WTG will be seen at a distance of approximately 17.43 km. The WTGs will be visible in the context of the existing WTGs within ABWP1 which are just noticeable to the north-east. The difference in scale between the two developments will be apparent.

17.11.1.269 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. Due to the elevated inland position of this viewpoint, the vertical extent of seascape visible will be limited. The fore- to mid-ground view is occupied by the complex, small-scale pattern of the surrounding agricultural landscape, and the scale of the WTGs will appear to contrast with this existing scale.

17.11.1.270 However, the Array Area will be read with and seen beyond other man-made features across the foreground view, including the built form of Arklow town. To the north-east, 19 WTGs within the northern part of the Array Area will be screened by vegetation alongside the road, which will moderate the magnitude of change. This effect may be more limited in winter when vegetation cover will be reduced. The lower parts of several WTGs towards the south of the Array Area will also be screened from view by intervening topography around Arklow Rock.

17.11.1.271 The WTGs will appear to be arranged in pairs or small groups throughout the visible extent of the Array Area, due to the layout of the Array Area and the direction of view. However, the influence of this effect on the magnitude of change will be limited, due to the limited extent of stacking or overlapping of blades within pairs of WTGs.

17.11.1.272 Overall, the layout of the WTGs appears relatively well balanced in terms of spacing throughout. There is stacking of two WTGs towards the south of the Array Area, and the slight appearance of WTGs being arranged in pairs across the visible parts of the Array Area, although this effect is less pronounced than from other viewpoints. The OSP towards the south of the Array Area is likely to be visible from this location, while the northern OSP will be screened from view by intervening landform and vegetation. Although the Array Area will be seen in the most open,

scenic direction of views from this location, towards the Irish Sea, the existing man-made features in the foreground of the view, as well as the WTGs within ABWP1, will moderate the magnitude of change. This is a relatively incidental viewpoint offering open views to the east, from an area in which outward views are generally limited by vegetation cover including areas of woodland and extensive hedgerows.

17.11.1.273 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs. The southern OSP will be theoretically visible to the south-east but difficult to discern at this distance, while the northern OSP will be screened by vegetation.

17.11.1.274 Taking into account the Medium-High sensitivity and Medium magnitude of change, the effect of the Proposed Development on receptors at Barnacleagh Minor Road during the operational and maintenance phase will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium magnitude of change (in comparison to moderate (not significant) effects which may result from a Medium-Low magnitude of change), the distance of the Proposed Development, 17.43 km from the viewpoint, and the contrast of views of large-scale WTGs in the seascape, in the context of the small-scale, complex agricultural landscape in the foreground.

Viewpoint 22: Johnstown Coast Road

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.275 This viewpoint is located on the R750, Johnstown Coast Road, to the west of Johnstown Bay Beach and north-east of Arklow. It is representative of views experienced by residents at nearby properties, albeit likely somewhat filtered by existing vegetation within gardens. Similar views will be experienced by road users travelling on the R750.

17.11.1.276 Views are available through gaps in the hedgerow adjacent to the road to the east. The foreground of these views is formed by coastal farmland in pasture, which features low hedgerows. Due to the topography along the coastline, which drops down quite steeply to the east, the shore is not visible. There are however open views towards the Irish Sea in the middle distance. The existing WTGs within ABWP1 are visible as small elements in the distance.

17.11.1.277 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB), which indicates a higher value. It offers open views towards the Irish Sea, although these views are restricted to short stretches of the coastline while hedgerows along sections of the road and vegetation within gardens screen views to the east from much of the surrounding area. Overall, the value of the view is considered to be Medium-High.

17.11.1.278 The view is experienced by residential receptors within and around their residences, in close proximity to the viewpoint. Residential receptors are considered to be of higher susceptibility to changes in the surrounding view due to their attention likely being focussed on their surroundings. However, views towards the coast from residential properties near this viewpoint will generally be heavily filtered by vegetation. Views of the sea are more likely to be experienced by residential receptors travelling around the surrounding area. The susceptibility to change associated with the Proposed Development is slightly moderated by the presence of the existing ABWP1 WTGs in the view to the east. Overall, the susceptibility is considered to be Medium-High.

17.11.1.279 Taking into account the value of the view and the receptor susceptibility, the sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.280 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 11.23 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity across northern parts of the Array Area will be filtered or screened by intervening vegetation, while activity across central and southern parts will be more readily visible.

17.11.1.281 Taking into account the Medium-High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 22 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.282 The magnitude of change experienced at this viewpoint during the operational and maintenance phases will be High. From this low lying viewpoint the Array Area will be visible across the open sea view, occupying around 98.69˚ of the view, at a distance of approximately 11.23 km to the nearest WTG. It will be seen from north-east to south-east, in the context of the existing WTGs within ABWP1 which are visible to the east. The difference in scale between the two developments will be evident.

17.11.1.283 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. However, they will be seen in the context of existing man-made features in the foreground of the view. To the left of the view the northern portion of the Array Area will be positioned behind vegetation and built form in the fore- to mid-ground, reducing the visibility of WTGs in this direction. Approximately 14 WTGs will be fully screened by vegetation and built form, while several more will be partially screened or filtered.

17.11.1.284 Although some of the WTGs to the north of the Array Area will be screened from view by existing vegetation from this viewpoint, it is possible that nearby residential properties will experience more open views towards a higher proportion of the WTGs, due to more limited screening by roadside hedgerows which reduce visibility from the viewpoint itself. Although the Array Area occupies a horizontal extent of 98.69˚, this is likely to occupy the full extent of the open view over the Irish Sea from these properties.

17.11.1.285 The relatively simple landscape pattern which constitutes the foreground of the view will slightly moderate the magnitude of change associated with the introduction of the ABWP2 WTGs. However, the scale of the WTGs will contrast with the scale of the existing agricultural landscape, and will be emphasised by the proximity of the Array Area to the viewpoint.

17.11.1.286 Overall, the layout will appear relatively well balanced. Stacking of WTGs will be limited, and the WTGs towards the south of the Array Area in particular will be evenly spaced. Across central and northern parts of the layout, the WTGs will appear to be arranged in pairs, with associated gaps on either side of each pair, although this effect is less pronounced than from other viewpoints. The WTGs will be seen in the most open, scenic direction of views, and will likely occupy the full extent of the available view over the Irish Sea. The magnitude of change will be moderated slightly by the existing presence of the WTGs within ABWP1 which establishes development of this type as a feature of the baseline view. However, the difference in scale between the two developments will be apparent and will emphasise the large scale of the ABWP2 WTGs.

17.11.1.287 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs. The southern OSP is likely to be visible from this location, while the northern OSP will be screened from view by vegetation.

17.11.1.288 Taking into account the Medium-High sensitivity and High magnitude of change, the effect of the Proposed Development on receptors at Johnstown Coast Road during the operational and maintenance phase will be **Major (significant).**

Viewpoint 23: Kileagh Minor Road

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.289 This viewpoint is located on a minor road near Kileagh, to the north-west of Avoca. It is representative of views experienced by road users, including local residents travelling on roads within the surrounding area.

17.11.1.290 The foreground of the view is formed by rough pasture, which slopes down towards the wooded Vale of Avoca in the middle distance. The valley floor is screened from view due to the topography, although gently undulating hill farmland can be seen on the eastern valley side in middle to longer distance views. Mature hedgerow vegetation is abundant and large tracts of woodland and forestry are present. The Irish Sea is visible beyond these hills to the east. In the distance, Arklow Rock is visible as a small element. Tara Hill is visible to the right of the viewer. The existing WTGs associated with ABWP1 are visible as very small elements in the distance. There is evidence of human influence in the landscape through the presence of overhead lines, farming infrastructure, a small single turbine and a transmission tower .

17.11.1.291 The viewpoint is located within South East Mountain Lowlands (AHA 3) which indicates a higher value. However, the evidence of human influence in the surrounding landscape, particularly in the foreground, detracts somewhat from its overall value. The value of the view is considered to be Medium-High.

17.11.1.292 The viewpoint is representative of views experienced by road users travelling south-east along this route. This includes residential receptors travelling around the local area. However, there are limited residential properties in close proximity to the viewpoint, and local residents are therefore considered to be of lower susceptibility at this viewpoint than they would be in close proximity to their properties. Road users are considered to have a lower susceptibility to changes in the surrounding view due to their focus on the road, while residential receptors are considered to be of higher susceptibility. Taking these factors into consideration, the susceptibility is considered to be Medium.

17.11.1.293 Taking into account the judgements of value and susceptibility, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.294 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. However, due to screening by intervening landform, views of construction and decommissioning activity across the Array Area will largely be restricted to views of partially built WTGs. Sea-level construction activity may be visible across a small area at the southern extent of the Array Area. In addition, at a distance of 20.23 km to the nearest WTG, it is

likely that some elements of the construction and decommissioning activity will be difficult to discern.

17.11.1.295 Taking into account the Medium-High sensitivity and the Medium magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 23 during the construction and decommissioning phases will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered to be not significant in this instance due to a number of factors. This includes the relatively limited proportion of the view which will be influenced by construction and decommissioning activity, and the distance of more than 20 km to the nearest WTG. There are a number of vertical elements in the view which will also moderate the effect, and the activity will largely be associated with views of partially built turbines seen above the landscape, rather than in the seascape context. In addition, this is a relatively incidental viewpoint from which more open views are available, in contrast to much of the surrounding landscape and route, and the geographic extent of these effects will be limited.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.296 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium. From this elevated viewpoint the Array Area will be visible across the open sea from north-east to south-east, occupying around 64.25˚ of the view. The nearest WTG will be seen at a distance of approximately 20.23 km. The Array Area will theoretically be seen in the context of ABWP1, although views towards this development are very limited due to the distance and intervening topography.

17.11.1.297 The Array Area is positioned beyond an area of elevated topography around Barranisky to the east of the Vale of Avoca, which will screen views towards approximately 14 WTGs. The WTGs throughout much of the Array Area will be seen rising above this elevated landform to the east, rather than in the seascape context. The lower parts of WTGs will generally be screened throughout the Array Area, with the exception of WTGs at its southern extent. In this section of the view, to the south-east, the WTGs will be seen against the horizon formed by the Irish Sea. WTGs across parts of the centre of the Array Area will be almost completely screened from view by the topography, with only small parts of the blade tips being seen above the horizon.

17.11.1.298 Overall, the layout will appear relatively well balanced. Stacking of WTGs will be limited, although where visible the WTGs will appear to be arranged in pairs due to the angle of view and layout of the Array Area. However, the limited stacking between WTGs will limit the influence of this effect. The OSP at the southern extent of the Array Area may be visible, although difficult to discern at this distance, while the northern OSP will be screened by topography (please note that OSPs have not been modelled into the visualisation in Figure 17.41.2 due to distance of more than 20 km). Where visible, the WTGs will be seen in the context of man-made features in the foreground of the view.

17.11.1.299 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.300 Taking into account the Medium-High sensitivity and Medium magnitude of change, the effect of the Proposed Development on receptors at Kileagh Minor Road during the operational and maintenance phase will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered to be not significant in this instance due to a number of factors. This includes the relatively limited proportion of the view which will be influenced by the WTGs, and the distance of more than 20 km to the nearest WTG. There are a number of vertical elements in the view which will also moderate the effect, and the WTGs will generally be seen above the landscape, rather than in the seascape context. In addition, this is a relatively incidental viewpoint

from which more open views are available, in contrast to much of the surrounding landscape and route, and the geographic extent of these effects will be limited.

Viewpoint 24: Mizen Head

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.301 This viewpoint is located on the R750 to the north of Mizen Head, close to the southerly part of Brittas Bay. It is representative of nearby residential receptors, recreational visitors to the coast, and cyclists travelling along Scenic Route 31.

17.11.1.302 The focus of views is to the east, over the coastline and the Irish Sea. The foreground is formed by rough grassland and vegetation between the road and the shoreline. To the north, the sandy beach of Brittas Bay can be seen curving to the east, with the headland at Ballynacarrig clearly visible in longer-distance views to the north-east. Further inland, wooded hill farmland can be seen. Mizen Head is clearly visible in the foreground to the south-east. Four of the seven existing WTGs associated with ABWP1 are visible as small elements in the distance, with the remaining WTGs screened by the landform of Mizen Head.

17.11.1.303 The viewpoint is located within the Southern Coastal Area (Coastal Area AONB), and is located along Scenic Route 31, both of which indicate a higher value. It is situated at a point which offers open, expansive views over the Irish Sea. Overall, the value of the view is considered to be High.

17.11.1.304 The viewpoint is representative of views experienced by recreational receptors visiting the coast, including cyclists on Scenic Route 31, as well as residential receptors at scattered properties along the coast. Recreational and residential receptors are considered to be of higher susceptibility to changes in the surrounding view due to their likely focus on the surrounding environment. The susceptibility to changes associated with the Proposed Development is slightly moderated by the existing presence of WTGs within ABWP1, which establishes this type of development as a feature of the baseline view. Overall, the susceptibility is considered to be High.

17.11.1.305 Taking into account the judgements of value and susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.306 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Activity towards the south of the Array Area will be screened or filtered by landform, vegetation and built form to the south-west of the viewpoint. There may be limited views towards partially built or deconstructed WTGs across this area. Across other parts of the Array Area, construction and decommissioning activity will be evident, at a distance of approximately 8.20 km, and all components will be readily visible.

17.11.1.307 Taking into account the High sensitivity and the High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 24 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.308 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be High. From this low-lying viewpoint, the Array Area will be visible across the open sea view, occupying around 102.31˚ of the view, at a distance of approximately 8.20 km to the nearest WTG. It will be seen in the context of several of the existing WTGs within ABWP1 which are visible to the south-east. The difference in scale between the two developments will be apparent.

17.11.1.309 The WTGs will be read across the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. Approximately 14 WTGs towards the south of the Array Area will be screened from view by intervening topography, vegetation and built form to the south-east of the viewpoint. Where visible, the WTGs will be seen in the most open, scenic direction of views, and will occupy a large proportion of the view over the Irish Sea from this location, although a section of the view to the north-east will remain undeveloped. Although there are long-distance views out to sea from this location, the bay to the north of Mizen Head, seen in close proximity views to the south-east, is relatively small-scale, and the view to the north is contained by the headland at Ballynacarrig at a distance of approximately 4 km. In this context, the large scale of the WTGs will be apparent and somewhat constrasting with the scale of the existing baseline view.

17.11.1.310 There will be some limited stacking throughout the layout, with the blades of several WTGs appearing to overlap. However, overall the layout will appear relatively well balanced and evenly spaced. The OSP at the southern extent of the Array Area will be screened from view by the intervening topography, while the northern OSP will be visible.

17.11.1.311 Looking north-east to south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it will appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.312 Taking into account the High sensitivity and High magnitude of change, the effect of the Proposed Development on receptors at Mizen Head during the operational and maintenance phase will be **Major (significant).**

Viewpoint 25: Newcastle Beach

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.313 This viewpoint is located at Newcastle Beach, to the north-east of the former Newcastle Railway Station. It is representative of views experienced by recreational receptors visiting the coast. These receptors are likely to be walking along the coastline, rather than specifically visiting the beach for recreation, as the beach is relatively exposed and rocky.

17.11.1.314 The focus of views is to the east, over the Irish Sea, with the beach at Newcastle in the foreground, separated from the viewpoint by a strip of large boulders associated with coastal defences. A railway line passes from north to south to the immediate west of the viewpoint. To the north, the peaks of Bray Head and Great Sugar Loaf mountains are visible. These peaks, along with the wider Wicklow Mountains seen to the west, form focal points in the view inland. To the south, the promontory associated with Wicklow Head is clearly visible, and the series of lighthouses on the headland can be seen against the skyline. Further inland, hill farmland can be seen, as well as the coastal town of Wicklow, situated across lower elevation on the hills to the south of the bay. The existing WTGs associated with ABWP1 are screened from view beyond Wicklow Head.

17.11.1.315 The viewpoint is located within the Northern Coastal Area (Coastal Area AONB) and along Scenic Route 7, both of which indicate a higher value. It is situated at a point which offers open,

expansive views over the Irish Sea. Overall, the value of the view is considered to be Medium-High.

17.11.1.316 The viewpoint is representative of views experienced by recreational receptors visiting the coast, whose attention is likely to be focussed on their surroundings. The susceptibility is considered to be Medium-High.

17.11.1.317 Taking into account the judgements of susceptibility and value, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.318 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Activity towards the south of the Array Area will be screened or filtered by landform, vegetation and built form to the south-west of the viewpoint. There may be limited views towards partially built or deconstructed WTGs across this area. Across other parts of the Array Area, construction and decommissioning activity will be evident, although at a distance of 18.76 km to the nearest WTG, some components may be difficult to discern.

17.11.1.319 Taking into account the Medium-High sensitivity and the Medium magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 25 during the construction and decommissioning phases will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium magnitude of change (in comparison to moderate (not significant) effects which may result from a Medium-Low magnitude of change), and the position of construction and decommissioning activity in the seascape adjacent to the landform of Wicklow Head to the south, which will emphasise the scale of the emerging WTGs.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.320 The magnitude of change that will be experienced at this viewpoint during the operational and maintenance phase will be Medium. From this low-lying viewpoint, the Array Area will be visible across the open sea view to the south-east, occupying around 20.81˚ of the view, at a distance of approximately 18.76 km to the nearest WTG. It will be seen in the context of the very distant, limited views of existing WTGs within ABWP1.

17.11.1.321 The WTGs will be read alongside the coastline to the south-east. Several WTGs towards the south of the Array Area will be fully or partially screened from view by the landform at Wicklow Head. 12 WTGs will be fully screened from view, while a further 12 will be partially screened, with hubs and/or blade tips only appearing above the headland. Some of these will be difficult to discern at this distance.

17.11.1.322 The WTGs that are fully visible will be read on the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. The WTGs will be seen alongside and beyond the coastline at Wicklow Head, and will appear to extend from the coastline into the sea. As a result, the WTGs will appear to blur the boundaries between the landscape and seascape, which will increase the magnitude of change associated with the Array Area. The scale of the WTGs will also appear to contrast with the existing scale of the landscape. This will be particularly apparent where the WTGs are seen beyond and appearing above the headland at Wicklow Head, given that they will be larger than this landform.

17.11.1.323 The layout will generally appear relatively uneven, with a degree of stacking visible throughout the horizontal extent. Due to the angle of view towards the Array Area, many of the WTGs will appear to be arranged in groups with associated gaps on either side. In particular, the WTG at the left of the view, in closest proximity to the viewpoint, will be separated from the WTGs to its right by a relatively large gap. One OSP at the northern extent of the Array Area will be theoretically visible, while the southern OSP will be screened from view by the landform of Wicklow Head.

17.11.1.324 The WTGs will be seen in the most open, scenic direction of views, although they will occupy only a small proportion of the panoramic views over the Irish Sea available from this viewpoint, and the seascape to the east and north-east will remain undeveloped. The Array Area will be seen in the context of man-made development to the south, including the flood defences, railway line and Wicklow town.

17.11.1.325 Looking south-east, the WTGs will sometimes appear backlit by the sun in the morning.

17.11.1.326 Taking into account the Medium-High sensitivity and Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Newcastle Beach during the operational and maintenance phase will be **Moderate (significant)**. Moderate effects are assessed as significant at this viewpoint due to the Medium magnitude of change (in comparison to moderate (not significant) effects which may result from a Medium-Low magnitude of change), and the position of the Proposed Development in the seascape adjacent to the landform of Wicklow Head to the south, which will emphasise the scale of the emerging WTGs.

Viewpoint 26: Scarr Mountain

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.327 This viewpoint is located at the summit of Scarr Mountain, within the southern part of the WMNP. It is representative of views experienced by recreational receptors walking within the surrounding landscape.

17.11.1.328 From this elevated location, views are available towards the Irish Sea with the mountain moorland landscape of the Wicklow Mountains in the foreground. Further afield, undulating wooded farmlands are visible in the distance. The distinctive peak of Great Sugar Loaf is clearly visible to the north. The waterbody associated with the Vartry Reservoir is clearly visible in the distance. The existing offshore WTGs within ABWP1 are visible as very small elements in the distance.

17.11.1.329 The viewpoint is located within the nationally-designated WMNP, as well as the Mountain and Lakeshore AONB. This indicates it is a landscape of national importance, and is therefore of High value.

17.11.1.330 The viewpoint is representative of views experienced by recreational receptors visiting the National Park, whose attention is likely to be focussed on the surrounding views. The presence of the existing WTGs within ABWP1 slightly moderates the susceptibility to changes associated with the Proposed Development by establishing this type of development as a feature of the baseline. Overall, the susceptibility is considered to be Medium-High.

17.11.1.331 Taking into account the value of the view and the receptor susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.332 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-Low. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements

associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. However, at a distance of 30.04 km to the nearest WTG, it is likely that some elements of the construction and decommissioning activity will be difficult to discern. Due to the elevated position of this viewpoint, sea-level activity will likely be backclothed against the sea beyond. It is likely that effects will primarily arise from views of partially built or deconstructed WTGs.

17.11.1.333 Taking into account the High sensitivity and the Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 26 during the construction and decommissioning phases will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered not significant in this instance, due to a number of factors, including primarily the distance of almost 30 km, and the large-scale, simple nature of the surrounding landscape, within which construction and decommissioning activity will form a relatively limited feature.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.334 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-Low. From this elevated viewpoint the Array Area will be visible across the open sea view to the south-east, occupying around 33.78˚ of the view, at a distance of approximately 30.04 km to the nearest WTG. The WTGs will be seen in the context of the existing WTGs within ABWP1, and the difference in scale between the two developments will be apparent.

17.11.1.335 The WTGs will be read across the horizon, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. Due to the elevated position of this viewpoint the WTGs will largely be seen backclothed against the sea beyond. The hubs of several WTGs towards the southern extent of the Array Area will be seen against the skyline, as well as the blade tips of WTGs throughout the layout. Intervening topography will screen the lower parts of several WTGs, although all WTGs within the Array Area will be visible to some extent. The relatively simple pattern of the mid-ground landscape, featuring large areas of coniferous woodland, will moderate the magnitude of change associated with the introduction of the WTGs into the view.

17.11.1.336 Overall, the layout appears well balanced in terms of spacing throughout. There will be some grouping of WTGs, with associated gaps in the layout, but this will have a limited influence on the balance of the overall layout. The Array Area will occupy a relatively limited extent of the panoramic views available from this elevated viewpoint. The Array Area will appear in the lowest-lying, most open direction of view over the Irish Sea, towards which the eye is likely to be drawn. However, sections of the sea view to the north of the Array Area will remain undeveloped. The two OSPs are unlikely to be visible from this location due to distance and screening by intervening topography (please note that the OSPs have not been modelled into the visualisation in Figure 17.44.2 due to distance of more than 20 km).

17.11.1.337 Looking south-east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the turbines.

17.11.1.338 Taking into account the High sensitivity and the Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Scarr Mountain during the operational and maintenance phase will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered not significant in this instance, due to a number of factors. This includes the distance of almost 30 km, and the relatively large scale, simple landscape featuring conifer woodland, which is better able to accommodate the scale of the WTGs. The WTGs will

occupy a relatively limited extent of the panoramic views available from this viewpoint. On balance, effects are not considered to be significant.

Viewpoint 27: Tara Hill Track

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.339 This viewpoint is located on a track on the eastern side of Tara Hill. It is representative of recreational receptors visiting Tara Hill, including walkers and cyclists.

17.11.1.340 From this elevated location close to the summit of Tara Hill, views are available to the east over an expanse of farmland against the backdrop of the Irish Sea. Small coastal settlements, holiday parks and scattered isolated dwellings are visible dispersed throughout this farmland. Mature hedgerow vegetation defines the field pattern. Tracts of woodland feature randomly in this landscape. Promontories along the coast at Wicklow Head, Mizen Head and Arklow Rock are clearly visible as small elements in the distance. The existing WTGs associated with ABWP1 are visible as very small elements in the distance.

17.11.1.341 This viewpoint is located within the Tara Hill Distinctive Landscape, as designated by Wicklow County Council, which indicates a higher value. It is a well-known amenity area which offers open, expansive views over the Irish Sea. Overall, the value of the view is considered to be High.

17.11.1.342 The viewpoint represents views experienced by recreational receptors, primarily walkers visiting the summit of Tara Hill. Their attention is likely to be focussed on their surroundings, indicating a higher susceptibility to changes in the surrounding view. The susceptibility to the Proposed Development is slightly moderated by the presence of the existing WTGs within ABWP1, which establishes development of this type as a feature of the baseline view. Overall, the susceptibility is considered to be Medium-High.

17.11.1.343 Taking into account the judgements of value and susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.344 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-High. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. At a distance of 14.97 km to the nearest WTG, all components of the construction and decommissioning of the Proposed Development will be readily visible. Activity throughout the Array Area will be visible, and will be particularly evident across southern parts which are located in closer proximity to the viewpoint.

17.11.1.345 Taking into account the High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 27 during the construction and decommissioning phases will be **Major (significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.346 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-High. From this elevated viewpoint the Array Area will be visible across the open sea view, occupying around 59.09˚ of the view from north-east to east. The nearest WTG will be seen at a distance of approximately 14.97 km. The WTGs will be seen

in the context of the existing WTGs within ABWP1, and the difference in scale between the two developments will be apparent.

17.11.1.347 From this elevated viewpoint the WTGs will be read across the horizon and set partially against the skyline, with the lower parts of the WTG towers backclothed against the sea beyond. The man-made appearance, upright form and movement of the WTGs will contrast with the horizontal appearance of the sea. There is no intervening topography or vegetation which would prevent views towards the Array Area, and all WTGs will be visible. The large scale of the WTGs will be to contrast with the relatively small-scale landscape pattern seen in the fore- to mid-ground of the view. The Array Area will be seen to the north-east, and a proportion of the seascape to the south-east will remain unaffected by development.

17.11.1.348 All WTGs within the Array Area will be visible to almost their full extents, and there will be no screening by topography or vegetation. The WTGs at the southern extent of the Array Area, in closest proximity to the viewpoint, will appear well balanced in terms of spacing, with limited stacking. There will be stacking of WTGs across central and northern parts of the layout, and some WTGs will appear to be arranged in pairs or small groups, with associated gaps in spacing on either side. This will create a somewhat uneven appearance to the layout. Two OSPs at the northern and southern extent of the Array Area will appear visible, with the southern OSP appearing more prominent due to its closer proximity, and the northern OSP difficult to discern at this distance.

17.11.1.349 Looking north-east to east from this viewpoint the Array Area will sometimes appear backlit by the sun in the morning. In clear weather it would appear side-lit by the afternoon sun, brightening the appearance of the WTGs.

17.11.1.350 Taking into account the High sensitivity and the Medium-High magnitude of change, the effect of the Proposed Development on receptors at Tara Hill Track during the operational and maintenance phase will be **Major (significant).**

Viewpoint 28: Greystones Cliff Walk

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.351 This viewpoint is located on a footpath along the Cliff Walk between Bray and Greystones, to the north of Greystones. It is representative of views experienced by recreational receptors walking along the coastal route.

17.11.1.352 Views are available to the east of the Irish Sea with cliffs in the foreground featuring coastal grassland and scrub vegetation. To the south, views of the coast are available. The coastal town of Greystones is visible as a small element in the distance along with the coastline further south. In the far distance, Wicklow Head can be seen as a very small element under weather conditions which afford clear visibility. The majority of the existing WTGs associated with ABWP1 are screened from view by the coastline to the south, with the majority of one WTG and the blade tips of three further WTGs theoretically visible to the south, beyond the headland.

17.11.1.353 This viewpoint is located within the Northern Coastal Area (Coastal Area AONB), as well as on Scenic Route 7, both of which indicate a higher value. It is situated on a promoted walking route, along part of the coast which offers open, expansive views over the Irish Sea. Overall, the value of the view is considered to be Medium-High.

17.11.1.354 The viewpoint represents views experienced by recreational receptors, primarily walkers on the coastal route. Their attention is likely to be focussed on their surroundings, indicating a higher susceptibility to changes in the surrounding view. Overall, the susceptibility is considered to be Medium-High.

17.11.1.355 Taking into account the judgements of value and susceptibility, the overall sensitivity is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.356 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Medium-Low. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Activity towards the south of the Array Area will be screened or filtered by landform, vegetation and built form. There may be limited views towards partially built or deconstructed WTGs across this area. Across other parts of the Array Area, construction and decommissioning activity will be apparent, although at a distance of 30.83 km, this will likely be difficult to discern. Effects will primarily arise from visibility of partially built or deconstructed WTGs.

17.11.1.357 Taking into account the Medium-High sensitivity and the Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 28 during the construction and decommissioning phases will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered not significant in this instance due to a number of factors. The position of the Proposed Development to the south-east is oblique to the main view over the Irish Sea to the east, and the majority of the panoramic views over the seascape will remain unaltered by construction activity. The distance of more than 30 km to the nearest WTG also moderates the effect, and due to distance, the apparent scale of the WTGs and associated construction activity is reduced. In addition, the effect will be experienced over a relatively limited geographic area, with the majority of views from Greystones and other parts of the cliff walk remaining unaffected.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.358 The magnitude of change experienced at this viewpoint during the operational and maintenance phase will be Medium-Low. From this elevated viewpoint, the Array Area will be visible across the open sea view, occupying around 14.55˚ of the view to the south-east. The nearest WTG will be seen at a distance of approximately 30.83 km. Several WTGs within ABWP1 are theoretically visible from this viewpoint, as indicated on Figure 17.46.2, but actual visibility is likely to be very limited due to distance and the scale of these WTGs.

17.11.1.359 The WTGs will be read against the coastline around Greystones. Approximately eight WTGs at the southern extent of the Array Area will be screened from view by intervening topography and vegetation. Several more will be partially screened by the landform at Wicklow Head, with just the hubs and blade appearing above the headland. The WTGs will be read on the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea.

17.11.1.360 The Array Area will be seen beyond the built form of the Greystones area. Although this will slightly moderate its magnitude of change given the existing presence of man-made development, the position of the WTGs beyond the landform will cause them to appear to extend from the coastline into the sea. As a result, the WTGs will appear to blur the boundaries between the landscape and seascape, which will increase the magnitude of change associated with the Array Area. The scale of the WTGs will also appear to contrast with the existing scale of the landscape, including built form within Greystones. This effect will be particularly apparent where the WTGs are seen beyond and appearing above the headland at Wicklow Head, given that they will be larger than this landform.

17.11.1.361 The layout will generally appear relatively uneven, with a degree of stacking visible throughout the horizontal extent. Due to the angle of view towards the Array Area, many of the

WTGs will appear to be arranged in groups with associated gaps on either side. In particular, the WTG at the left of the view, in closest proximity to the viewpoint, will be separated from the WTGs to its right by a relatively large gap. Although one OSP at the northern extent of the Array Area will be theoretically visible, actual visibility is likely to be limited at this distance of more than 30 km (please note that OSPs have not been modelled into the visualisation in Figure 17.46.2 due to distance of more than 20 km).

17.11.1.362 Looking south-east, the Array Area will sometimes appear backlit by the sun in the morning.

17.11.1.363 Taking into account the Medium-High sensitivity and the Medium-Low magnitude of change, the effect of the Proposed Development on receptors at Greystones Cliff Walk during the operational and maintenance phase will be **Moderate (not significant)**. Although the effect is judged to be moderate, this is considered not significant in this instance due to a number of factors. The position of the Proposed Development to the south-east is oblique to the main view over the Irish Sea to the east, and the majority of the panoramic views over the seascape will remain unaltered. The distance of more than 30 km to the nearest WTG also moderates the effect, and due to distance, the apparent scale of the WTGs is reduced. In addition, the effect will be experienced over a relatively limited geographic area, with the majority of views from Greystones and other parts of the cliff walk remaining unaffected.

Viewpoint 29: Sorrento Park

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.364 This viewpoint is located at Sorrento Park within Dalkey, to the south-east of the centre of Dublin. It is representative of views experienced by recreational receptors visiting the viewpoint within the park.

17.11.1.365 Views are available of the Irish Sea to the east and south, and the coastline of Killiney Bay is visible to the south-west. The cliff coastline, beach and wooded hills associated with the suburban areas of Dalkey and Killiney are visible in the foreground. Further afield, the distinctive skyline associated with Great Sugar Loaf, Little Sugar Loaf and Bray Head, which stretch broadly west to east near the coast at Bray, provide a backdrop to the view. The foothills and some of the mountains within Wicklow are visible further inland in the distance. The coastline further south, beyond Bray Head is visible as a very small element under weather conditions which afford clear visibility. The seven existing WTGs associated with ABWP1 are screened from view.

17.11.1.366 This viewpoint is within a well-known amenity area which offers open, expansive views over the Irish Sea. Overall, the value of the view is considered to be High.

17.11.1.367 The viewpoint represents views experienced by recreational receptors visiting the viewpoint at the summit of the hill on which the park is situated. This viewpoint constitutes the only open space within the park, which otherwise comprises trails to the summit and dense vegetation. It is therefore likely that visitors to the park and visiting it specifically to experience the view, which indicates a higher susceptibility to changes in the surrounding view. Overall, the susceptibility is considered to be Medium-High.

17.11.1.368 Taking into account the judgements of value and susceptibility, the overall sensitivity is considered to be High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.369 During the construction and decommissioning phases, the magnitude of change experienced at this viewpoint will be Low. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in

addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Activity towards the south of the Array Area will be screened or filtered by landform, vegetation and built form. There may be limited views towards partially built or deconstructed WTGs across this area. Across other parts of the Array Area, construction and decommissioning activity will be apparent, although at a distance of 41.27 km to the nearest WTG, this will likely be difficult to discern. Effects will primarily arise from visibility of partially built or deconstructed WTGs.

17.11.1.370 Taking into account the High sensitivity and the Low magnitude of change, the effect of the Proposed Development on receptors at Viewpoint 29 during the construction and decommissioning phases will be **Moderate-Minor (not significant).**

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.371 The magnitude of change experienced during the operational and maintenance phase will be Low. The Array Area will be visible across the open sea view, occupying around 10.30˚ of the view to the south-east. The nearest WTG will be seen at a distance of approximately 41.27 km.

17.11.1.372 Eight WTGs at the southern extent of the Array Area will be screened from view by the intervening landform and vegetation, while several more will be partially screened from view, with just the blade tips appearing above the headland at Wicklow Head. Although theoretically visible, these blade tips are likely to be difficult to discern at this distance in all but the clearest visibility. The WTGs that are visible will be read on the horizon and set against the skyline, their man-made appearance, upright form and movement contrasting with the horizontal appearance of the sea. Although the northern OSP will be theoretically visible, there is unlikely to be actual visibility of this feature due to distance (please note that OSPs have not been modelled into the visualisation shown in Figure 17.47.2 due to distance of more than 20 km).

17.11.1.373 The WTGs will be read against the coastline and inland hills and mountains. The position of the WTGs beyond the distant landform of Wicklow Head will cause them to appear to extend from the coastline into the sea. As a result, the WTGs will appear to blur the boundaries between the landscape and seascape, which will increase the magnitude of change associated with the Array Area. The scale of the WTGs will also appear to contrast with the existing scale of the landscape, in particular where the WTGs are seen beyond and appearing above the headland at Wicklow Head. There will be some grouping of WTGs across the layout, with associated gaps on either side. In particular, the WTG at the left of the Array Area will be separated from the adjacent WTGs by a relatively large gap. However, at this distance, spacing of the WTGs will have a limited influence on magnitude of change.

17.11.1.374 The WTGs will occupy a relatively limited extent of the panoramic views available from this natural viewpoint, at a distance of more than 40 km. This distance and the contained nature of the view towards the Array Area will moderate the magnitude of change associated with it.

17.11.1.375 Looking south-east, the WTGs will sometimes appear backlit by the sun in the morning.

17.11.1.376 Taking into account the High sensitivity and the Low magnitude of change, the effect of the Proposed Development on receptors at Sorrento Park during the operational and maintenance phase will be **Moderate-Minor (not significant).**

R750

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.377 This route passes between Wicklow in the north and Arklow in the south. It broadly follows the coastline, generally passing within approximately 1 km of the coast.

17.11.1.378 Between Wicklow and Magherabeg, the route is located between approximately 200m to 1.2 km from the coast. At its northern extent, it passes generally west to east from Rathnew through the centre of Wicklow. The route then turns to the south, and is positioned further inland at Wicklow Head, through a generally agricultural landscape. Further south, it passes closer to the coast again, near the small settlement of Blainroe, before turning west near Magheramore, where there is a junction with the L1102 to the north.

17.11.1.379 Outward views from the route along this section are generally limited, including by built form within Wicklow and by hedgerows and roadside vegetation along other sections. There are some small stretches of the route which have the opportunity for open views towards the Irish Sea, including from a stretch to the south of Dunbur, available when travelling south; from a stretch of the route near Silver Strand Caravan Park; and along the southern stretch near Magheramore where field gates offer gaps in roadside vegetation.

17.11.1.380 The attention of receptors is likely to be at least somewhat focussed on their surroundings, due to the relatively scenic nature of this route, although enclosure provided by vegetation along the route reduces the susceptibility. Receptors are likely to be travelling at speed. Overall, susceptibility is considered to be Medium-Low susceptibility. The value of views is considered to be Medium, given the opportunity for glimpsed views towards the Irish Sea, and the surrounding coastal farmland. Overall, the sensitivity of receptors along this section of the route between Wicklow and Magherabeg is considered to be Medium-Low.

17.11.1.381 Between Magherabeg and Mizen Head, the R750 passes in relatively close proximity to the coast. At its most distant points, it is positioned approximately 1.2 km from the coast at Magherabeg, and 700m at Potters Point. However, along most of this stretch, the road is located within approximately 500m of the coastline. At Magherabeg, the route passes directly south towards Ballynacarrig, where it turns slightly south-west in alignment with the coastline, before passing to the south again between Cornagower and Mizen Head.

17.11.1.382 Along the northern section of this route, outward views towards the Array Area are screened by the relatively wooded landscape around Magherabeg and Furzeditch, as well as by vegetation along the route. To the south of this, where the route passes in closer proximity to the coast, there is more opportunity for views towards the Irish Sea. These are generally glimpsed views, seen beyond roadside vegetation. Further south, near Ballynacarrig, views open up more to the east, due to the steeper topography down to the coast and the proximity of the route to the coastline, although views of the Irish Sea are generally still restricted to glimpsed views due to screening by roadside vegetation. To the south of Ballynacarrig, views are once again more limited, and sand dunes to the west of Brittas Bay beach begin to play a role in limiting views to the east. Where the route passes close to the coast, north of Mizen Head, views open up over the Irish Sea. These views are panoramic in nature.

17.11.1.383 The attention of receptors along this stretch of the route is likely to be at least somewhat focussed on their surroundings, due to its relatively scenic nature and the opportunity for open views along a short stretch of the route at its southern extent, as well as the recreational attractions along this section, including Brittas Bay beach. Receptors are likely to be travelling at speed. Overall, the susceptibility is considered to be Medium. The value of views is considered to be Medium, given the opportunity for panoramic views towards the Irish Sea along limited sections, as well as wooded areas to the north. Overall, the sensitivity of receptors along this section of the route between Magherabeg and Mizen Head is considered to be Medium.

17.11.1.384 Between Mizen Head and Arklow, the R750 passes within approximately 1 km of the coast at its greatest extent, as well as within less than 100m. It passes generally north-east to south-west, in alignment with the coastline.

17.11.1.385 Along the northern part of this section of the route, there are open views towards the Irish Sea to the east from a relatively open part of the landscape near Ardanary. Further south, the

R750 continues away from the coast, and views towards the sea are obscured. Vegetation within the European Club golf course also limits views to the east from this stretch. To the south-west of the golf course, Buckroney Dunes restrict views towards the sea. South of this, the route passes close to the coast and there are open, panoramic views over the Irish Sea, available to receptors travelling in both directions. This visibility extends along a stretch of approximately 800m. Beyond this, the route passes away from the coast again and intervening vegetation and dunes limit views. Near Ennereilly Beach, views open up over a short section of the route to the south-east over the Irish Sea. These views are primarily available to road users travelling south, although there are also some more limited views available to those travelling north. Further south, vegetation again obscures views to the east, before they open up along short sections near Johnstown Bay Beach. Beyond this, on the approach towards Arklow, views to the east are generally restricted, although there are some views of the Irish Sea available from a stretch of the route south of Seabank.

17.11.1.386 The attention of receptors along this stretch of the route is likely to be at least somewhat focussed on their surroundings, due to its relatively scenic nature and the opportunity for open views along short stretches of the route, as well as the recreational attractions along this section, including Ennereilly Beach. Receptors are likely to be travelling at speed. Overall, the susceptibility is considered to be Medium. The value of views is considered to be Medium, given the opportunity for glimpsed views towards the Irish Sea. Overall, the sensitivity of receptors along this section of the route between Mizen Head and Arklow is considered to be Medium.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.387 During the construction and decommissioning phases, the magnitude of change experienced between Wicklow and Magherabeg will be no higher than Low. Between Magherabeg and Mizen Head, and Mizen Head and Arklow, the magnitude of change along parts of the route experiencing visibility of the construction and decommissioning activity will range from Medium-High to Medium.

17.11.1.388 The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Visibility of the construction and decommissioning activity will vary along the route, with frequent filtering of the activity by landform and vegetation alongside the road. Where visible, it will be seen at distances of up to approximately 12 km. Along parts of the route, there will be open views towards construction and decommissioning activity throughout the Array Area.

17.11.1.389 Taking into account the Medium-Low sensitivity of receptors travelling on the route between Wicklow and Magherabeg, and the Low magnitude of change across this area, the effect of the Proposed Development on receptors travelling along this part of the route during the construction and decommissioning phase will be **Minor (not significant)**. Taking into account the Medium sensitivity of receptors travelling on parts of the route between Magherabeg and Arklow, and the Medium-High to Medium magnitude of change across this area, the effect of the Proposed Development on receptors travelling along this part of the route during the construction and decommissioning phase will range from **Moderate (significant)** to **Moderate (not significant)**. Across much of the route, there will be no visibility of construction or decommissioning activity due to screening by adjacent landform and vegetation, and there will be no change and no effect.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.390 Between Wicklow and Magherabeg, the magnitude of change will be no higher than Low. The ZTV in Appendix 17.5, Figure 17.11.1i indicates that there will be no theoretical visibility along the stretch of the R750 through Wicklow. To the south of this, visibility ranging from low-level to high-level is indicated. However, actual visibility of the Proposed Development will be very limited, primarily due to screening by roadside vegetation. Where views are available over the Irish Sea, these are generally directly east, while the Proposed Development is located to the south-east. There may be glimpsed views towards the northern WTGs within the Proposed Development where field gates and gaps in roadside vegetation allow open views to the east from southern parts of the route. These changes will be experienced by road users likely travelling at speeds of up to 80 km per hour. Overall, the magnitude of change along sections of the route with actual visibility of the Proposed Development is considered to be Low. Elsewhere, there will be zero change. Taking into account the Medium sensitivity and the Low magnitude of change, the effect of the Proposed Development on receptors travelling on the R750 between Wicklow and Magherabeg during the operational and maintenance phase will be **Minor (not significant)** along short sections, reducing to no change and no effect along most of the route.

17.11.1.391 Between Magherabeg and Mizen Head, the magnitude of change will range from Medium-High to zero. For receptors travelling in both directions along the section of the route to the north of Mizen Head, who will experience oblique, open views towards the Proposed Development to the east, the magnitude of change will be Medium-High. These views will be oblique to direct, experienced by receptors travelling in both directions on the route, over a short distance. There will be a Medium magnitude of change experienced by receptors travelling along sections of the route around Ballynacarrig, from where glimpsed views of the Proposed Development will be available. This will be fleeting, oblique views experienced by road users travelling at speed in both directions. Overall, effects ranging from **Moderate (significant)** to **Moderate (not significant)** will be experienced along short sections of this stretch of the route, at Mizen Head and Ballynacarrig respectively. Elsewhere, there will be no change as a result of the Proposed Development.

17.11.1.392 Between Mizen Head and Arklow, the magnitude of change will range from Medium-High to zero. For receptors travelling in both directions along sections of the route south of Buckroney Dunes, there will be oblique views towards the Proposed Development, which will occupy much of the available open view out to sea, and the magnitude of change will be Medium-High. Along sections of the route near Ennereilly Beach, Johnstown Bay Beach and Seabank, receptors will experience visibility of WTGs within the Proposed Development over short distances. These views will generally be oblique to the east, although there will be some more direct views for road users travelling north. The associated magnitude of change will be Medium. From a stretch of the route near Ardanary, there are likely to be views towards the Proposed Development along a short stretch of the route for road users travelling north. The magnitude of change will be Medium-High. Overall, effects ranging from **Moderate (significant)** to **Moderate (not significant)** will be experienced along short sections of this part of the route, where visibility is experienced by road users travelling at speed. Elsewhere, there will be no change as a result of the Proposed Development. Moderate effects will range from significant to not significant, based on the Medium-High to Medium magnitude of change, with a Medium-High magnitude of change judged to lead to significant effects.

Dublin – Cherbourg Ferry

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.393 This ferry route passes between Dublin and Cherbourg, travelling east out of Dublin before passing to the south, parallel to the eastern coast of Ireland. It then passes to the south-west around the south-western coast of England, before turning to the east and travelling to Cherbourg.

17.11.1.394 Within the Study Area, it passes broadly south, and comes within approximately 11 km of the Array Area at its closest point. Due to the close proximity of the Array Area to the route of the ferry, there is the potential for significant effects to occur. However, only those parts of the route within the Study Area are considered within the assessment, due to the very limited potential for significant effects beyond this area.

17.11.1.395 There will are views from the majority of the route. Views are available both over the Irish Sea to the east, as well as towards the eastern coastline of Ireland to the west. The attention of receptors is likely to be at least somewhat focussed on their surroundings, due to the relatively scenic nature of views and the opportunity for open views. Overall, the susceptibility is considered to be Medium-High. The value of views is considered to be Medium-High, given the opportunity for panoramic views over the Irish Sea and the coastline of Ireland, which will be seen at distances of approximately 11 km from parts of the route. Overall, the sensitivity of receptors travelling on this route is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.396 This ferry route passes between Dublin and Cherbourg, travelling east out of Dublin before passing to the south, parallel to the eastern coast of Ireland. It then passes to the south-west around the south-western coast of England, before turning to the east and travelling to Cherbourg.

17.11.1.397 Within the Study Area, it passes broadly south, and comes within approximately 11.52 km of the nearest WTG at its closest point. Due to the close proximity of the Array Area to the route of the ferry, there is the potential for significant effects to occur. However, only those parts of the route within the Study Area are considered within the assessment, due to the very limited potential for significant effects beyond this area.

17.11.1.398 There will are views from the majority of the route. Views are available both over the Irish Sea to the east, as well as towards the eastern coastline of Ireland to the west. The attention of receptors is likely to be at least somewhat focussed on their surroundings, due to the relatively scenic nature of views and the opportunity for open views. Overall, the susceptibility is considered to be Medium-High. The value of views is considered to be Medium-High, given the opportunity for panoramic views over the Irish Sea and the coastline of Ireland, which will be seen at distances of approximately 20 km from parts of the route. Overall, the sensitivity of receptors travelling on this route is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.399 The ZTV indicates varying levels of visibility of the Proposed Development. As the ferry passes out of or into Dublin Harbour, views towards the Array Area will be screened by the landform to the south, and there will be no visibility. Visibility will also be limited due to distance and the curvature of the earth as the ferry passes beyond around 45 km to the south of the Array Area. However, between these two areas, there will be widespread visibility of the Array Area from the ferry route as it passes through the rest of the Study Area.

17.11.1.400 In particular, passengers travelling on the ferry will have close-proximity views of the WTGs as it passes to the east of the Array Area, coming within approximately 12.17 km of the WTGs at

the closest point of the route. All WTGs will be visible, and will be seen in front of the view towards the Irish Coast. Across this area, a large horizontal extent of the view will be occupied by the Array Area. Where this is the case, up to around 15 km from the Array Area, the magnitude of change will be High.

17.11.1.401 Further north and south, where the WTGs will be visible, but seen occupying a more limited horizontal extent due to the angle of view between the ferry and the Array Area, and where the effect of the WTGs obscuring views towards the Irish Coast will be more limited, the magnitude of change will be Medium-High.

17.11.1.402 Overall, effects ranging from **Major (significant)** to **Major-Moderate (significant)** will be experienced by passengers travelling along this route where visibility occurs within the Study Area.

Railway between Greystones and Wicklow

BASELINE AND SENSITIVITY TO CHANGE

17.11.1.403 The Dublin – Rosslare Main Line railway line passes along the east coast of Ireland, from Dublin in the north to Rosslare Harbour in the south. It is within the Study Area along its whole length, and passes within approximately 11 km of the Array Area at its closest point. From Dublin, it passes alongside the coastline to Wicklow, where the route turns inland through Rathdrum and Avoca. At this point it turns south-east and travels closer to the coast again, passing through Arklow, before again turning inland and passing through Gorey and Enniscorthy to Wexford and Rosslare Harbour. As described within the preliminary assessment (Volume III, Appendix 17.2), only a limited part of the route has the potential to undergo significant effects as a result of the Proposed Development. This comprises the section of the route between Greystones and Wicklow.

17.11.1.404 Between Greystones and Newcastle, the route passes broadly south and south-east, in very close proximity to the coastline. Where the route passes through Greystones itself, outward views are very limited due to screening by built form within the settlement. Further south, there are more open views to the east over the Irish Sea along almost the full extent of the route, with the exception of a short stretch to the south of Kilcoole railway station, where woodland to the east of the railway line prevents outward views.

17.11.1.405 Between Newcastle and Wicklow, the route passes to the south-west, again following the coastline at close proximity. Open views to the east over the Irish Sea are available along the full extent of this route, with the exception of at its southern extent as the railway line enters Wicklow, where built form begins to obscure views to the east and the railway line turns away from the coast.

17.11.1.406 Along both sections of route, the attention of receptors is likely to be at least somewhat focussed on their surroundings, due to the relatively scenic nature of views and the opportunity for open views along most of the route. Overall, the susceptibility is considered to be Medium. The value of views is considered to be Medium-High, given the opportunity for panoramic views towards the Irish Sea. Overall, the sensitivity of receptors along both these sections of the route, between Greystones and Newcastle, and Newcastle and Wicklow, is considered to be Medium-High.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING CONSTRUCTION AND DECOMMISSIONING

17.11.1.407 During the construction and decommissioning phases, the magnitude of change experienced on this route will range from Medium to Low. The main visual impacts relating to the construction and decommissioning phases will include the operations and machinery movements associated with the Proposed Development, with a maximum effect scenario when all WTGs are

in place in addition to concentrations of activity in the form of WTG installation or decommissioning vessels and cable-laying vessels. Construction and decommissioning activity will be evident at distances of between approximately 10 km to 30 km. Due to the orientation of the railway, travelling north to south with views generally orientated east to west, and the position of the Array Area to the south-east, direct views towards construction and decommissioning activity will be limited. Activity will be most evident across parts with highest visibility of the Array Area, as indicated by the ZTV. The magnitude of change will range from Medium across parts of the route with higher-level visibility, to Low across parts with lower-level visibility. However, higher level visibility is generally restricted to areas beyond approximately 15 km, at which distance some components of the construction and decommissioning activity will be more difficult to discern, and it is likely that effects will primarily arise from visibility of the partially built or deconstructed WTGs. Where visibility is available in closer proximity, construction and decommissioning activity will be more evident, although likely only visible across a small proportion of the Array Area, due to screening by the landform.

17.11.1.408 Taking into account the Medium-High sensitivity and the Medium to Low magnitude of change, the effect of the Proposed Development on receptors travelling on the railway between Greystones and Wicklow during the construction and decommissioning phases will range from **Moderate (significant)** where there is clear visibility of construction and decommissioning activity to **Moderate-Minor (not significant)** where visibility is more restricted. The moderate effect is considered to be significant due to the minimum distance of approximately 10 km and the higher-level visibility of construction and decommissioning activity, as indicated by the ZTV.

MAGNITUDE OF CHANGE AND SIGNIFICANCE OF EFFECT DURING OPERATION AND MAINTENANCE

17.11.1.409 Between Greystones and Wicklow, the ZTV (Volume III, Appendix 17.5, Figure 17.11.1i) indicates that there will be high-level visibility of the Proposed Development along several short sections of the route. This includes a section to the north of Greystones, close to Viewpoint 28. However, the railway line passes underground along this section, and actual visibility is considered to be restricted. Further south, a small section of high-level visibility is indicated to the south-east of Delgany. Along this section of approximately 2km, passengers may experience visibility of the Proposed Development. However, due to the orientation of the railway, with views available to the east and west as the train travels north and south, and the position of the Proposed Development to the south-east, it is likely that actual views will be more limited than that indicated by the ZTV. The overall magnitude of change along this section is considered to be Medium. Further south, the ZTV indicates that visibility will be lower-level, with between 34 – 44 of the 56 WTGs visible. Again, actual visibility is likely to be more limited than this due to the orientation of the railway in relation to the Proposed Development. These effects will occur at a minimum distance of approximately 11.54 km. The overall magnitude of change along this section is considered to be Medium-Low. Overall, effects ranging from **Moderate (significant)** to **Moderate (not significant)** will be experienced along this part of the route, where visibility is experienced by passengers travelling south at speed.

17.11.1.410 Between Newcastle and Wicklow, the ZTV indicates varying levels of visibility of the Proposed Development. This is due to screening by Wicklow Head to the south, which prevents views towards southern parts of the Array Area from areas nearby. Visibility is therefore higher-level towards the north of this section of the railway line, decreasing with proximity to Wicklow. Again, visibility will be lower than that indicated by the ZTV due to the orientation of the train in relation to the Proposed Development. Where the ZTV indicates highest-level visibility for this section, the magnitude of change will be Medium. This decreases further south, reducing to Low where between 1 – 11 of the WTGs will be visible north of Wicklow. Within Wicklow, Overall, effects ranging from **Moderate (not significant)** to **Moderate-Minor (not significant)** will be experienced along this part of the route, where visibility is experienced by passengers travelling

south at speed. The moderate effect is considered to be significant due to the minimum distance of approximately 10 km and the higher-level visibility of construction and decommissioning activity, as indicated by the ZTV.

Assessment of night-time lighting

17.11.1.411 Night-time lighting effects of Project Design Option 2 will be the same as those assessed above for Project Design Option 1 in Section 17.10.1. This is due to the fact that effects arise as a result of visibility of the marine navigational and aviation lighting of the Proposed Development, and visibility of both Project Design Options will be sufficiently similar that the assessment of effects will not differ between them.

17.11.1.412 Visual representations of Project Design Option 2 at night are shown from the following viewpoints, which illustrate the limited difference in appearance of lighting of Project Design Option 2:

- Viewpoint 4 Ballynacraig Public House (Figure 17.22.2 (j-o));
- Viewpoint 10 Ferry Bank, Arklow (Figure 17.28.2 (j-o));
- Viewpoint 13 Clogga Amenity Area (Figure 17.31.2 (j-o));
- Viewpoint 23 Mizen Head (Figure 17.41.2 (j-o)).

Summary

17.11.1.413 Overall, the visual effects of Project Design Option 2 will be the same as those assessed above for Project Design Option 1 in Section 17.10. Although the overall effect is considered to be the same, a full written assessment has been included as there will be differences in the actual views experienced by each visual receptor between the Project Design Options. These differences include the distance to the nearest WTG, the number of WTGs visible and the overall layout of the WTGs within the Array Area, as described for each viewpoint and visual receptor above.

17.11.2 Impact 2 – Seascape Effects

17.11.2.1 Seascape effects of Project Design Option 2 will be the same as those assessed above for Project Design Option 1. This is due to the fact that seascape effects arise as a result of visibility of the Proposed Development, and visibility of both Project Design Options will be sufficiently similar that the assessment of effects will not differ between them.

17.11.2.2 Please refer to Figure 17.9.2, which shows the blade tip ZTV of Project Design Option 2 alongside seascape character receptors, and the assessment of seascape effects provided in Section 17.10.2 above.

17.11.3 Impact 3 – Landscape Character Effects

17.11.3.1 Landscape character effects of Project Design Option 2 will be the same as those assessed above for Project Design Option 1. This is due to the fact that landscape character effects arise as a result of visibility of the Proposed Development, and visibility of both Project Design Options will be sufficiently similar that the assessment of effects will not differ between them.

17.11.3.2 Please refer to Figure 17.10.2 – Figure 17.10.2iii, which show the blade tip ZTV of Project Design Option 2 alongside landscape character receptors, and the assessment of landscape character effects provided in Section 17.10.3 above.

17.11.4 Impact 4 – Landscape Designation Effects

17.11.4.1 Landscape designation effects of Project Design Option 2 will be the same as those assessed above for Project Design Option 1. This is due to the fact that landscape designation effects arise

as a result of visibility of the Proposed Development, and visibility of both Project Design Options will be sufficiently similar that the assessment of effects will not differ between them.

17.11.4.2 Please refer to Figure 17.10.2 – Figure 17.10.2iii, which show the blade tip ZTV of Project Design Option 2 alongside landscape designation receptors, and the assessment of landscape character effects provided in Section 17.10.4 above.

17.12 Cumulative impact assessment

17.12.1 Methodology

17.12.1.1 The methodology for the Cumulative impact assessment (CIA) is set out in full in Appendix 17.1 and summarised as follows.

Approach to Additional or Combined Cumulative Effects

17.12.1.2 The CIA takes into account the impact associated with the Proposed Development together with other proposed and reasonably foreseeable projects, plans and existing and permitted projects. The projects and plans selected as relevant to the CIA presented within this chapter area based upon the results of a screening exercise (see Volume III, Appendix 3.2: CIA Screening). Each project and plan has been considered on a case-by-case basis for screening in or out of this chapter's assessment based upon, effect-receptor pathways and the spatial/temporal scales involved. Cumulative effects are therefore the additional or combined effect of the Proposed Development in combination with the effects from a number of different projects, on the same receptor or resource.

17.12.1.3 GLVIA3 (Landscape Institute and IEMA 2013, para 7.8) defines cumulative landscape and visual effects as those that *"may result from an individual project that is being assessed interacting with the effects of other proposed developments in the area".*

17.12.1.4 NatureScot's guidance, Assessing the Cumulative Impact of Onshore Wind Energy Developments (NatureScot, 2021) is widely used across the UK to inform the specific assessment of the cumulative effects of windfarms. In the absence of specific guidance for Ireland, it is also used as best practice in the assessment of cumulative effects of windfarms in Ireland. Both GLVIA3 and NatureScot's guidance provide the basis for the methodology for the cumulative SLVIA undertaken in the SLVIA. The NatureScot (2021) guidance states that:

- *"The purpose of a Cumulative Landscape and Visual Impact Assessment (CLVIA) is to describe, visually represent and assess the ways in which a proposed wind farm would have additional impacts when considered with other consented or proposed wind farms".;*
- *Cumulative landscape effects are those effects that 'can impact on either the physical fabric or character of the landscape, or any special values attached to it'; and*
- *Cumulative visual effects are those effects that can be caused by combined visibility and/or sequential impacts. Combined visibility occurs where the observer is able to see two or more developments from one viewpoint. Sequential effects occur when the observer has to move to another viewpoint to see different developments*"

17.12.1.5 In line with NatureScot guidance and GLVIA3, cumulative effects are assessed in this SLVIA as the additional changes caused by the Proposed Development in conjunction with other similar developments (not the totality of the cumulative effect).

17.12.1.6 The CIA assesses the cumulative effect of the Proposed Development with other projects (Table 17.16) against the baseline (Section 17.6), with the assessment of significance apportioning the amount of the effect that is attributable to the Proposed Development. The contribution of the Proposed Development to the cumulative effect upon the baseline character/view is assessed

and information provided on how the effects of the Proposed Development would combine and interact with the effects of other development.

17.12.1.7 Adjacent developments may complement one another, or may be discordant with one another, and it is the increased or reduced level of significance of effects which arises as a result of this change that is assessed in the CIA, such as through design discordance or proliferation of multiple developments affecting characteristics or new geographic areas, and ultimately if character changes occur because of multiple developments becoming a prevailing characteristic of the seascape or view.

17.12.1.8 Due to the commitments made by the Developer in respect of the Foreshore Licence FS007339 and Foreshore Licence Application FS007555 (Table 17.15), FS007339 and FS007555 have been screened out of the cumulative impact assessment.

Long list and short list process

17.12.1.9 The CIA is undertaken in line with the approach set out in the Volume III, Appendix 3.2 CIA Screening. .

17.12.1.10 The first step for the CIA was to collate a long list of projects. A screening process was carried out by defining agreed search areas (or 'range'), within which different plans and projects may have a cumulative effect with the Proposed Development and then identifying those plans and projects within that area within a long list of projects, as set out in Volume III, Appendix 3.2 CIA Screening.

17.12.1.11 A further screening exercise was then undertaken for seascape, landscape and visual. This further screening exercise screened the plans and projects identified in the long-list in or out of the final assessment based on:

- The data confidence;
- Whether there is a conceptual overlap;
- Whether there is a spatial overlap which has the potential to result in significant effects; and
- Whether there is a temporal overlap which has the potential to result in significant effects.

17.12.1.12 Following this second screening process, a 'short-list' has been created for seascape, landscape and visual, with the included plans and projects taken forward for the assessment, focusing on projects within the cumulative search area base plan compiled within the 60 km SLVIA study area (Figure 17.15), with potential for cumulative impact interactions. This short-list of projects included in the CIA for seascape, landscape and visual is presented in Table 17.16 with justification for the inclusion of plans and projects assessed further in the CIA.

Tiered Approach to CIA

17.12.1.13 In accordance with NatureScot guidance and GLVIA3 (para 7.13), existing projects and those which are under construction are included in the seascape, landscape and visual baseline and described as part of the baseline conditions and shown in Figure 17.15.1, including the extent to which these have altered character and views, and affected sensitivity to windfarm development.

17.12.1.14 An assessment of the additional effect of the Proposed Development is undertaken in conjunction with a baseline that includes operational and under-construction projects (Table 17.16) as part of the main assessment in Section 17.10 and Section 17.11. This includes assessment of the Proposed Development against magnitude factors such as its size, scale, spread and landscape context, as well as cumulative effect factors relating to the operational and under-construction wind farms, such as its increase in spread, aesthetic relationship, and contrasts of size and spacing of turbines of the projects.

17.12.1.15 A further assessment of the additional cumulative seascape, landscape and visual effects of the Proposed Development with other proposed developments (that are not yet present in the

landscape/seascape) is undertaken in this CIA within Sections 17.12.2 to 17.12.5, based on a tiered approach, including projects with planning consent and those that are subject to a valid planning application that has not yet been determined (Landscape Institute, 2013, para 7.13)

17.12.1.16 In undertaking this CIA for the Proposed Development, it is important to bear in mind that other projects and plans under consideration will have differing potential for proceeding to an operational stage and hence a differing potential to ultimately contribute to a cumulative impact alongside the Proposed Development. A tiered approach has be adopted, in line with the approach set out in Volume III, Appendix 3.2 CIA Screening, which recognises the degrees of uncertainty associated with other plans and projects will be applied. This provides a framework for placing relative weight upon the potential for each project/plan to be included in the CIA to ultimately be realised, based upon the project/plan's current stage of maturity and certainty in the projects' parameters.

Phase 1 Offshore wind projects in Ireland

17.12.1.17 All Phase 1 projects have been awarded a Maritime Area Consent (MAC), however none of the projects will have formally submitted applications for planning consent and will not be awarded consent within the timescales for submission of the EIAR for the Proposed Development. Notwithstanding this, due to the likely similar development timelines of the Phase 1 projects and the resultant risk associated with cumulative effects, there is a requirement to assess Phase 1 projects within the EIAR, as appropriate and as information allows. As a result, Phase 1 projects fall outside of the standard hierarchy.

17.12.1.18 In the CIA for seascape, landscape and visual, Phase 1 projects are assessed similarly to Tier 3 where sufficient information exists, or where information isn't available, a very high-level assessment is undertaken. For all projects, scoping has been published, and coordinated consultation between the Phase 1 projects is ongoing to enable sharing of information for assessments to allow an informed and robust assessment to be undertaken.

17.12.1.19 Phase 1 projects comprise:

- Codling Wind Park;
- Dublin Array;
- Fuinneamh Sceirde Teoranta (Sceirde Rocks);
- North Irish Sea Array; and
- Oriel Wind Park.

17.12.1.20 Two of these Phase 1 projects are located within the 60 km study area for the Proposed Development – Codling Wind Park; and Dublin Array. Given the potential for cumulative impact pathways, the CIA for seascape, landscape and visual focuses on the cumulative effect of the Proposed Development with Codling Wind Park and Dublin Array. All other Phase 1 projects are located outside the 60 km SLVIA study area.

17.12.1.21 A list of other projects and plans considered within the CIA for seascape, landscape and visual receptors is set out in Table 17.16.

Following this screening process, the 'short-list' of projects and plans take forward for assessment in the CIA for seascape, landscape and visual receptors is presented in Table 17.16 and shown in Figure 17.15.1.

Table 17.16: List of other projects and plans considered within the CIA

Project/Plan	Status	Distance from Array Area (km)	Distance from Cable Corridor and Working Area (km)	Description of Project/Plan	Dates of construction	Dates of operation	Overlap with the Proposed Development
Baseline (operational and under-construction projects that are part of the baseline and considered as part of assessment in Section 17.9)							
ABWP1	Operational	Located within Array Area	0.5	Offshore wind energy development consisting seven offshore WTGs with 126.8 m blade tip height (104 m rotor diameter and hub height 74.8 m).			Considered as part of baseline conditions in assessment of significance (Section 17.8) and CIA (Section 17.12).
All onshore wind energy developments within SLVIA study area (shown in Figure 17.5.1)	Operational	N/A	N/A	Onshore wind energy development	N/A	N/A	Considered as part of baseline conditions in assessment of significance (Section 17.8) and CIA (Section 17.12).
Tier 1 (Other Arklow Bank Wind Park 2 Developments)							
ABWP2 OGI	Consented	10.2	0.0	Onshore elements of ABWP2 including OGI	2026-2030	2030	Assessed in the Tier 1 CIA in Section 17.12.2.

Project/Plan	Status	Distance from Array Area (km)	Distance from Cable Corridor and Working Area (km)	Description of Project/Plan	Dates of construction	Dates of operation	Overlap with the Proposed Development
ABWP2 O&M Facility	Consented	4.29	11.9	Onshore elements of ABWP2 comprising the O&M Facility.	2026 - 2030	2030	Assessed in the Tier 1 CIA in Section 17.12.2.
Tier 2 (Permitted application(s), but not yet implemented)							
No Tier 2 plans or projects within SLVIA study area / no potential for significant cumulative effect interaction	N/A	N/A	N/A	N/A	N/A	N/A	No cumulative effects with Tier 2 projects
Tier 3 (Submitted application(s), but not yet determined)							
Decommissioning of ABWP1	Proposed	0	0.5	Decommissioning of ABWP1.	Assumed to be between 2025 – 2027 over four-month period concurrent with construction phase of ABWP2.	N/A	Assessed in the Tier 3 CIA in Section 17.12.4.
Phase 1 Projects (Scoping Report submitted, application yet to be submitted)							

Project/Plan	Status	Distance from Array Area (km)	Distance from Cable Corridor and Working Area (km)	Description of Project/Plan	Dates of construction	Dates of operation	Overlap with the Proposed Development
Codling Wind Park	Proposed	10.3	9.4	Proposed offshore wind energy development consisting 60 WTGs with blade tip height of 314 m above LAT (rotor diameter 276 m and hub height 176 m). Maximum of three OSPs of 45 x 35m and topside height of 45m. Location and WTG layout as shown in Figure 17.15.1.	2026 - 2028	From 2029	Potential for temporal overlap with Proposed Development construction and operation and maintenance phases. Assessed in the Phase 1 Projects CIA in Section 17.12.5.
Dublin Array	Proposed	25.8	24.9	Proposed offshore wind energy development consisting 39 WTGs with blade tip height of 309.6 m above LAT (rotor diameter 278 m and hub height 170.6 m). Maximum of one OSP of 40 x 40m and topside height of 45m. Location and WTG layout as shown in Figure 17.15.1.	2026 - 2029	From 2030	Potential for temporal overlap with Proposed Development construction and operation and maintenance phases. Assessed in the Phase 1 Projects CIA in Section 17.12.5.
North Irish Sea Array	Proposed	65.1	64.1	Proposed offshore wind energy development consisting 35 WTGs with blade tip height of 316 m above LAT (rotor diameter	2025 - 2028	From 2029	Assessed in the Phase 1 Projects CIA in Section 17.12.5.

Project/Plan	Status	Distance from Array Area (km)	Distance from Cable Corridor and Working Area (km)	Description of Project/Plan	Dates of construction	Dates of operation	Overlap with the Proposed Development
				276 m and hub height 178 m). Maximum of one OSP of 80 x 40m and topside height of 60m. Location and WTG layout as shown in Figure 17.15.1.			
Oriel Wind Park	Proposed	108.1	107.2	Proposed offshore wind energy development consisting 25 WTGs with blade tip height of 270 m above LAT (rotor diameter 236 m and hub height 152 m). Maximum of one OSP of 40 x 30m and topside height of 50m. Location and WTG layout as shown in Figure 17.15.1.	2025 - 2026	From 2027	Assessed in the Phase 1 Projects CIA in Section 17.12.5.

17.12.1.23 The cumulative impacts presented and assessed in this section have been selected from the project parameters provided in Volume III, Chapter 4: Description of Development as well as the information available on other projects and plans. The cumulative effect assessment covers effects arising from both Project Design Option 1 (Table 17.10) and Project Design Option 2 (Table 17.11). The cumulative effects assessment presented in Sections 17.12.2 to 17.12.5 below is applicable to both project design options. Effects of greater significance are not predicted to arise should either of these alternative project design options be consented.

17.12.1.24 Table 17.17 presents the potential impacts, development phase, and the list of projects / plans with which the two Project Design Options have been cumulatively assessed.

Table 17.17: Cumulative assessment impacts, phases, scenarios, and projects to be considered cumulatively

Potential cumulative impact	Phase			Projects considered cumulatively	Justification for projects considered cumulatively
	C	O	D		
Visual effects resulting from ABWP2 in the context of cumulative developments	✓	✓	✓	Project parameters associated with Project Design Option 1 (Table 17.10) or Project Design Option 2 (Table 17.11) are assessed cumulatively with the following other projects/plans: **Phase 1 projects:** • Codling Wind Park • Dublin Array **Tier 1 projects:** • OGI • OMF	Outcome of the CIA will be highest when the greatest number of schemes are under construction, operation and maintenance or decommissioning concurrently.
Seascape character effects resulting from ABWP2 in the context of cumulative developments	✓	✓	✓	Project parameters associated with Project Design Option 1 (Table 17.10) or Project Design Option 2 (Table 17.11) are assessed cumulatively with the following other projects/plans: **Phase 1 projects:** • Codling Wind Park • Dublin Array **Tier 1 projects:** • OGI • OMF	Outcome of the CIA will be highest when the greatest number of schemes are under construction, operation and maintenance or decommissioning concurrently.
Landscape character effects resulting from ABWP2 in the context of cumulative developments	✓	✓	✓	Project parameters associated with Project Design Option 1 (Table 17.10) or Project Design Option 2 (Table 17.11) are assessed cumulatively with the following other projects/plans: **Phase 1 projects:** • Codling Wind Park	Outcome of the CIA will be highest when the greatest number of schemes are under construction, operation and maintenance or decommissioning concurrently.

Potential cumulative impact	Phase C	Phase O	Phase D	Projects considered cumulatively	Justification for projects considered cumulatively
				• Dublin Array **Tier 1 projects:** • OGI • OMF	
Landscape designation effects resulting from ABWP2 in the context of cumulative developments	✓	✓	✓	Project parameters associated with Project Design Option 1 (Table 17.10) or Project Design Option 2 (Table 17.11) are assessed cumulatively with the following other projects/plans: **Phase 1 projects:** • Codling Wind Park • Dublin Array **Tier 1 projects:** • OGI • OMF	Outcome of the CIA will be highest when the greatest number of schemes are under construction, operation and maintenance or decommissioning concurrently.

17.12.1.25 Information sharing has taken place between ABWP2 and the Phase 1 projects included for cumulative assessment, namely Codling Wind Park and Dublin Array, to allow a greater degree of certainty in the cumulative assessment. Each of these Phase 1 projects has multiple layout options. As per the approach taken by all Phase 1 projects, for the purposes of creating a clear and proportionate assessment, one layout has been assessed for each project. The layouts selected are those with the fewest, tallest WTGs, as the greater tip height is likely to lead to most widespread visibility and is therefore considered to represent the maximum effect. Layouts with a greater number of shorter WTGs are considered to result in more limited effects due to reduced visibility.

17.12.1.26 However, it may be the case that differing effects are experienced where a combination of layout options are seen, for example one project with a greater number of smaller WTGs, and one project with fewer, taller WTGs, due to the contrast in scale between projects, seen at close proximity to each other. Where this is the case, these effects are not considered to be greater in magnitude or significance than the effects identified within the following CIA.

17.12.2 Tier 1 CIA

17.12.2.1 The Tier 1 CIA considers the cumulative effects of the Proposed Development with the onshore elements of ABWP2, forming a 'whole project effect assessment'. A description of the significance of cumulative effects upon seascape, landscape and visual receptors arising from each identified impact is given below.

17.12.2.2 Seascape, landscape and visual receptors may be affected by the construction, operation and maintenance and decommissioning of the Proposed Development and the construction, operation and maintenance and decommissioning of the onshore elements of ABWP2. These comprise:

- Onshore Grid Infrastructure (OGI): including the onshore substation, onshore cable corridor, and Landfall location; and
- Operation and Maintenance Facility (OMF): including onshore infrastructure comprising operations and maintenance building, substation and associated infrastructure; and quayside

and nearshore infrastructure, comprising cranes, storage tanks, pontoon system and associated infrastructure.

17.12.2.3 There is potential for effects of the ABWP2 onshore infrastructure to interact, spatially and temporally with the Array Area of the Proposed Development, to create cumulative effects on a receptor. While the OGI and OMF are considered in a separate EIA as part of a separate application, given the functional link, a 'combined' assessment is made considering both the Proposed Development and the OGI and OMF. This provides an assessment of impact interactions and additive effects and thus any change in the significance of effects as assessed separately.

17.12.2.4 An assessment of these Tier 1 cumulative effects has been undertaken in the sections below to assess any areas where the construction, operation and maintenance and decommissioning of the Proposed Development and the construction, operation and maintenance and decommissioning of the ABWP2 onshore infrastructure combine, or inter-relate, to have an effect. For example, visibility of the Proposed Development and the onshore substation or Landfall, from a particular viewpoint or landscape designation, may interact to produce a different, or greater effect on a receptor than when the effects are considered in isolation.

Cumulative Effect (Tier 1) of the Construction and Decommissioning of the Proposed Development on Views / Visual Amenity, Seascape Character, Landscape Character and Landscape Designations

17.12.2.5 In accordance with the information in Table 17.16 above, it is assumed that construction associated with the OGI, OMF and Proposed Development would occur at the same time. As such, there is potential for cumulative effects to arise as a result of the construction and decommissioning of the Proposed Development in the context of the construction of the OGI and OMF (Tier 1 cumulative developments).

OGI – CUMULATIVE VISUAL EFFECTS

17.12.2.6 The majority of viewpoints and visual receptors in the SLVIA Study Area will not experience cumulative effects, since they have either no visibility, or very limited/distant visibility, of either or both the construction of the OGI or the Proposed Development, and therefore there is limited potential for cumulative effects to occur. Cumulative effects will only occur on those viewpoints and visual receptors in close proximity to the proposed Landfall at Johnstown North, or near to the onshore cable corridor between the Landfall and proposed substation, where the construction of the onshore infrastructure will occur in areas that may also be susceptible to changes resulting from views of the construction of the Proposed Development.

17.12.2.7 These effects will likely be limited to a small part of the SLVIA Study Area, between the Landfall at Johnstown North and the substation near Avoca River Business Park, west of Arklow.

17.12.2.8 Views experienced by receptors within this localised area (including receptors travelling on the R750, and at Viewpoint 22: Johnstown Coast Road and Viewpoint 9: N11 / M11) are likely to experience significant cumulative effects during, and close to, the construction of the Landfall and onshore cable route, together with the construction of the Proposed Development in offshore views, over a short-term period when their construction periods overlap. Cumulative visual effects are assessed as diminishing with distance inland, where offshore views become intermittent and less frequent, due to the enclosure of the surrounding landscape, including field boundaries, roadside vegetation and settlement, which limit views of the Proposed Development and the OGI.

17.12.2.9 The LVIA for the OGI (Sure Partners Ltd., 2021b) notes that the Landfall facility temporary construction compounds will be located on "*the inland side of the coast road and will not obstruct views of the coast from the coast road*". The onshore cable corridor is also located to the west of the R750. Due to the position of each of these elements of the OGI and the locations of receptors within the surrounding landscape (generally focussed along the R750), views of the cable

corridor, Landfall and Proposed Development from the R750 will not be experienced simultaneously in views looking out over the coast to the east. There is however, potential for construction of the Landfall and onshore cable corridor inland to the west and the Proposed Development offshore to the east, to have sequential cumulative effects on views experienced by people travelling along the R750 Coast Road, between Johnstown North and Seabank/Ballymoney, before the onshore cable corridor extends further inland. There is also potential for successive views by other rural residential receptors in the vicinity of the Landfall and cable corridor to be affected by views of the construction of the OGI inland to the west and the Proposed Development offshore to the east, with the localised area near the Landfall and the section of the onshore cable corridor between Johnstown North and Seabank/Ballymoney.

17.12.2.10 Where there are sequential or successive views of the Landfall and coastal section of the onshore cable corridor between the Landfall and Seabank/Ballymoney, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development with the Landfall and onshore cable corridor of the OGI is assessed as High, resulting in significant adverse visual effects on receptors temporarily during the construction period within a limited geographic extent in close range to the Landfall and coastal section of the onshore cable corridor. The cumulative magnitude of change is assessed as reducing quickly with increased distance from the Landfall and cable corridor, becoming not significant beyond approximately 1-2km where the landform and existing vegetation provides screening of the Landfall and cable corridor construction.

17.12.2.11 There is very limited potential for the construction of the onshore substation and the inland section of the onshore cable corridor (between the R772 Dublin Road and the onshore substation) to result in cumulative effects with the Proposed Development as they are located well inland onshore, with different receptors impacted compared to those impacted by the Proposed Development. There is very limited potential for combined or sequential visibility of the construction of the onshore substation and the Proposed Development due to its location at the Kilbride Industrial Estate, which is located well inland to the west of Arklow and the M11. Construction associated with the onshore substation is also likely to be well screened by landform, existing industrial uses and woodland vegetation around the substation site. The cumulative effect during construction and decommissioning resulting from the Proposed Development in addition to the onshore substation of the OGI is assessed as being of Low to Negligible magnitude and not significant.

OGI – CUMULATIVE LANDSCAPE EFFECTS

17.12.2.12 The majority of LCAs and landscape designations in the SLVIA study area will not experience cumulative effects, since they have either no visibility, or very limited / distant visibility, of either the construction of the OGI or the construction of the Proposed Development, and therefore have limited potential for cumulative effects to occur. There is only considered to be potential for cumulative effects to occur on those LCAs, RSCAs and landscape designations near the Landfall and onshore cable corridor, where the construction of the OGI will occur in areas that may also be susceptible to changes resulting from views of the construction of the Proposed Development.

17.12.2.13 In terms of cumulative effects on landscape character, the OGI is located within the Southern Coastal Area (Wicklow) LCA. The LVIA for the OGI (Sure Partners Ltd., 2021b) identifies short-term, localised adverse significant construction phase effects on this LCA as a result of the Landfall, and short-term, localised not significant construction phase effects as a result of the construction of the onshore cable corridor.

17.12.2.14 As described in the main assessment in Section 17.10.3, parts of this LCA with open views over the Irish Sea will experience significant effects as a result of the construction and decommissioning of the Proposed Development. When considered alongside the direct effects

of the construction of the OGI on the LCA, there is potential for views of construction activity in the Irish Sea associated with the Proposed Development to result in additional significant cumulative effects on landscape character, due to the scale of construction activity taking place both onshore and offshore. These effects will however, will be limited in geographic extent to the area in close proximity to the Landfall and coastal section of the onshore cable corridor between the Landfall and Seabank/Ballymoney, and will be temporary and short-term, with the land surrounding the onshore cable corridor being progressively restored during the construction phase.

17.12.2.15 There are considered to be no further significant landscape or seascape effects as a result of the Proposed Development in the context of the OGI, beyond the Southern Coastal Area (Wicklow) LCA.

OMF – CUMULATIVE LANDSCAPE AND VISUAL EFFECTS

17.12.2.16 There is considered to be limited potential for cumulative effects associated with the construction of the Proposed Development in the context of the construction of the OMF. Visibility of construction associated with both the OMF and Proposed Development is likely to be restricted to a localised area within Arklow itself near the harbour area of Arklow town. From Viewpoint 10: Ferry Bank, Arklow, construction activity associated with the OMF is likely to be seen in successive views alongside construction within the Array Area. However, the construction of the OMF will be in keeping with existing industrial development at the harbour in such views, and the level of effect associated with the Proposed Development and the OMF in this context is considered to be no higher than that assessed in the main assessment for the Proposed Development. No additional significant Tier 1 cumulative effects are therefore anticipated as a result of the construction of the Proposed Development in the context of the construction of the OMF.

Cumulative Effect (Tier 1) of the Operation and Maintenance of the Proposed Development on Views / Visual Amenity, Seascape Character, Landscape Character and Landscape Designations

OGI – CUMULATIVE LANDSCAPE AND VISUAL EFFECTS

17.12.2.17 The Landfall and cables associated with the OGI would be buried onshore and would not be visible during the operational phase, therefore no cumulative landscape and visual effects are identified when considered together with the Proposed Development during operation and maintenance.

17.12.2.18 The LVIA for the OGI (Sure Partners Limited, 2021b) states that "*the underground nature of the landfall site and cable circuits and the relatively secluded site area of the 220kV substation and NETN connection are such as to limit the potential influence on the landscape and visual environment to their more immediate context.*" Given the position of the substation on brownfield land within an existing industrial area and its relatively wooded surroundings, locations from which there will be intervisibility of the onshore substation and the Proposed Development are likely to be very limited. There is very limited potential for combined or sequential visibility of the substation and the Proposed Development due to its location at the Kilbride Industrial Estate, which is located well inland to the west of Arklow and the M11. The operational onshore substation is also likely to be well screened by landform, existing industrial uses and woodland vegetation around the substation site. The cumulative effect on landscape and visual receptors during the operation and maintenance phase resulting from the Proposed Development in addition to the onshore substation of the OGI is assessed as being of Low to Negligible magnitude and not significant.

OMF – CUMULATIVE LANDSCAPE AND VISUAL EFFECTS

17.12.2.19 The LVIA for the OMF (Sure Partners Limited, 2021a) identified no significant landscape or visual effects arising from its construction, operation and maintenance, or decommissioning. The LVIA states that there is "*scope for the Proposed Development to be accommodated in this location without unacceptable effects on seascape, landscape character and visual amenity*". Given the position of the OMF within an area of existing industrial activity at the harbour in Arklow, opportunities for cumulative landscape and seascape effects to arise as a result of the Proposed Development in the context of the OMF are considered to be limited. Visibility of both the OMF and Proposed Development is likely to be restricted to a relatively localised area within Arklow itself. From Viewpoint 10: Ferry Bank, Arklow, the OMF is likely to be seen in successive views alongside the Proposed Development WTGs. However, the OMF will be in keeping with existing industrial development at the harbour in such views, and the level of effect associated with the Proposed Development and the OMF in this context is considered to be no higher than that assessed in the main assessment for the Proposed Development. No additional significant Tier 1 cumulative effects are anticipated in views from Arklow or other receptors in the SLVIA study area.

17.12.3 Tier 2 CIA

17.12.3.1 As identified in Table 17.16 there are no Tier 2 plans or projects within SLVIA study area (permitted application(s), but not yet implemented), therefore no potential for significant cumulative effect interaction with the Proposed Development.

17.12.4 Tier 3 CIA

17.12.4.1 As identified in Table 17.16, there is one Tier 3 project within the SLVIA study area, comprising the decommissioning of the operational ABWP1, which will consist of complete removal of all above-sea elements of this operational windfarm.

17.12.4.2 The decommissioning of ABWP1 is assumed to take place over a four-month period, concurrent with the construction phase of the Proposed Development. This represents a maximum potential effect scenario during construction, where construction activity associated with the Proposed Development and decommissioning activity associated with ABWP1 occurs concurrently. Receptors including RSCA 13: South East Irish Sea, within which both the Proposed Development and ABWP1 are located, and landscape and visual receptors along the coastline within the SLVIA study area, will experience changes as a result of the presence of construction vessels, the emergence of the Proposed Development WTGs and removal of ABWP1 WTGs and associated infrastructure, and the use of lighting to aid construction during hours of darkness.

17.12.4.3 During the construction phase, cumulative seascape, landscape and visual effects arising with the decommissioning of the operational ABWP1 may be associated with an increase in offshore activity, including vessel movements and views of the Proposed Development in combination with the decommissioning of ABWP1 WTGs. Due to the larger scale and extent of the Proposed Development, its construction will have a significant effect on seascape, landscape and visual receptors, as described in the main assessment in Section 17.10 and 17.11. Taking account of decommissioning activity associated with ABWP1, including removal of WTGs and vessel movements in the Irish Sea, the construction of the Proposed Development will extend the influence of offshore WTG construction further north and south across an additional extent of the seascape and at larger scale/prominence. However, due to the relatively small scale of the ABWP1 decommissioning activities in the context of the construction of the Proposed Development, the contribution of the decommissioning of ABWP1 to the cumulative magnitude of change during construction will be relatively limited, and the cumulative effect of the Proposed Development will be similar to, and no greater than, the construction effects identified in the main

assessment in Section 17.10 and 17.11, and would occur temporarily over a short-term period of approximately 4 months.

17.12.4.4 An assessment of the effect of the Proposed Development during the operational phase is undertaken in conjunction with a baseline that includes the operational ABWP1 as part of the main assessment in Section 17.10 and 17.11. The decommissioning assumption is complete removal of all above sea offshore components of ABWP1 during the construction phase of ABWP2 between 2025 – 2027. In this scenario, the seven WTGs comprising ABWP1 would be removed from the seascape and would represent a reduced effect on seascape, landscape and visual receptors during the operational phase of ABWP2 (one that is less than the scenario assessed with the presence of ABWP1). Based on the published best practice and agreed approach of considering the operational ABWP1 as part of the baseline, and the maximum effect scenario being one in which ABWP1 is present, the effects of the Proposed Development alone (after decommissioning of ABWP1) are unlikely to significant beyond those already assessed for the Proposed Development when considered in the context of ABWP1. Due to the phasing of the decommissioning and construction phases of each development, there will be a continuity in the presence of WTGs in the seascape and in views from the coast, however the contrast in scale between the smaller ABWP1 WTGs and the larger ABWP2 WTGs will be removed when the Proposed Development is viewed after decommissioning of ABWP1. Given all of these factors, it is assessed that the cumulative effect of the Proposed Development after decommissioning of ABWP1 will be similar to, and no greater than, the operational effects identified in the main assessment in Section 17.10 and 17.11.

17.12.5 Phase 1 Projects CIA: Project Design Option 1 and 2

Phase 1 Projects CIA: Impact 1 – Visual Effects

17.12.5.1 The CIA undertaken within this SLVIA focuses on the cumulative effects of the Proposed Development with other Phase 1 projects within the SLVIA study area that have been awarded a Maritime Area Consent (MAC), namely Dublin Array and Codling Wind Park.

17.12.5.2 Cumulative visual effects are assessed for each representative viewpoint in the following viewpoint assessment, in respect of both the operational and maintenance phase, and the construction and decommissioning phase of the Proposed Development. The baseline description and sensitivity for each receptor is presented in the main assessment in Section 17.10.1.

17.12.5.3 A preliminary assessment has been undertaken to review the potential for cumulative effects from the representative viewpoints and due to the lack of visibility of the other Phase 1 projects, several viewpoints have been scoped out of further assessment due to there being no likelihood of significant cumulative effects. Viewpoints that are assessed as having no significant cumulative effects due to the lack of visibility of the other Phase 1 projects (and therefore no potential for cumulative effect) are:

- Viewpoint 3 Ballynacarrig 3rd Class Road;
- Viewpoint 4 Ballynacarrig public house;
- Viewpoint 6 Tongelee 3rd Class Road;
- Viewpoint 9 Johnstown N11/M11;
- Viewpoint 12 Moneyribbin 3rd Class Road;
- Viewpoint 20 Curracloe Beach;
- Viewpoint 21 Barnacleagh Minor Road; and
- Viewpoint 22 Johnstown Coast Road.

17.12.5.4 A full assessment of the likely significant cumulative effects from all other representative viewpoints is undertaken as follows.

Viewpoint 1: Wicklow Head

CUMULATIVE CONTEXT

17.12.5.5 The most relevant cumulative development to this assessment is Codling Wind Park which will be located to the north of the Proposed Development and located approximately 11.6km from the viewpoint at its closest point. Codling Wind Park will comprise 60 WTGs up to 314 m in height. Dublin Array will also be theoretically visible, as shown on the cumulative wireline, but will be screened from view by vegetation surrounding the viewpoint. There will also be screening of WTGs within Codling Wind Park by the landform and vegetation to the east of the viewpoint, which exceeds the theoretical screening by the landform indicated in Figure 17.19.1. A limited number of WTGs within Codling Wind Park will therefore be visible from the viewpoint itself, although there will be more widespread views of all WTGs within Codling Wind Park from nearby locations.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.6 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as **Medium-Low** from the specific location of this viewpoint (where views of Codling Wind Park are screening by landform), but is assessed as High from areas nearby. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness. The Proposed Development will be seen in closer proximity to the viewpoint than Codling Wind Park, at a distance of 6.6 km to the nearest WTG. The closer range, greater visibility and greater horizontal extent of the Proposed Development means that its construction will have a notable influence on the view, as described in the main assessment. Taking account of construction associated with WTGs within Codling Wind Park is visible at a distance of 11.6 km, the construction of the Proposed Development will extend this influence further south across an additional extent of the seascape, although with the separation between marking these as two separate developments and avoiding one continuous extent. The additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development is assessed as Medium-Low from the viewpoint itself, due to screening of construction and decommissioning activity associated with Codling Wind Park, while from areas nearby from which there is greater visibility of Codling Wind Park, the cumulative magnitude of change is assessed as High.

OPERATIONAL PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.7 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-Low from the specific location of this viewpoint, with a High cumulative magnitude of change occurring from areas nearby. Codling Wind Park will be visible to the east. A relatively limited proportion of its 60 WTGs will be visible from the viewpoint itself, due to screening by the headland of Wicklow Head and nearby vegetation, although from nearby areas there may be visibility of all WTGs within Codling Wind Park. the Proposed Development will be located in closer proximity to the viewpoint, at 6.6 km, while Codling Wind Park will be seen at a distance of 11.6 km, and the Proposed Development will occupy a greater horizontal extent of the view. The Proposed Development will extend offshore wind farm development into a further sector of the view over the seascape from this location.

17.12.5.8 The separation between the Proposed Development and Codling Wind Park will mark these as two separate developments and avoid one continuous extent. Both developments will have a

similar broadly linear layout parallel to the coastline, which will moderate the cumulative magnitude of change. The principal cumulative change is that when considered together, Codling Wind Park and the Proposed Development will occupy the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative change due to its wider lateral spread in the field of view and its closer proximity to the viewpoint.

17.12.5.9 Overall, the additional cumulative magnitude of change arising from the addition of the Proposed Development is assessed as Medium-Low from the viewpoint itself, due to screening of WTGs within Codling Wind Park by intervening topography, however from locations near to the viewpoint that experience greater visibility of Codling Wind Park, the cumulative magnitude of change resulting from the addition of the Proposed Development is assessed as High.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.10 The contribution of the Proposed Development to the cumulative effect experienced at this viewpoint during the construction and operational phases is assessed as **Moderate (significant),** resulting from the High sensitivity of the visual receptors and the Medium-Low cumulative magnitude of change and from areas near to the viewpoint, there will be a **Major** (**significant)** effect, resulting from the High sensitivity of the visual receptors and the High cumulative magnitude of change. The principal cumulative effect arising is that when considered together, Codling Wind Park and the Proposed Development will occupy the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative effect due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible.

Viewpoint 2: Blainroe Golf Club

CUMULATIVE CONTEXT

17.12.5.11 The most relevant cumulative development to this assessment is Codling Wind Park which will be located to the north of the Proposed Development and located approximately 13.4 km from the viewpoint at its closest point. Codling Wind Park will comprise 60 WTGs up to 314 m in height. The cumulative wireline in Figure 17.20.1 shows that Codling Wind Park will be seen in the view to the north-east. There will be no further cumulative developments visible. The majority of WTGs within Codling Wind Park will be readily visible, with some degree of stacking.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.12 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as High. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.13 The cumulative wireline in Figure 17.20.1 shows that Codling Wind Park will be seen in the view to the north-east, while the Proposed Development will be seen to the south-east. The Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 6.6 km to the nearest WTG compared to a distance of 13.4km for Codling Wind Park. The closer proximity of WTGs within the Proposed Development means that its construction will have a notable influence on the view, as described in the main assessment. Taking account of construction associated with a number of WTGs within Codling Wind Park visible at a distance of 13.4 km, the construction of the Proposed Development will extend this influence further south across an additional extent of the seascape, and construction activity will occupy much of the

overall view over the open seascape. The separation between the Proposed Development and Codling Wind Park will mark these as two separate developments, avoiding one continuous extent, which will slightly moderate the magnitude of change. The additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development is assessed as High.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.14 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as High. The Proposed Development will occupy a slightly larger horizontal extent of the seascape than Codling Wind Park, and will be seen at closer proximity. This closer proximity will also cause the scale of the WTGs within the Proposed Development to appear larger than those within Codling Wind Park. The Proposed Development will extend the influence of offshore wind farm development, established by Codling Wind Park and ABWP1, further south across the view over the seascape from this viewpoint. It will result in much of the seascape being occupied by offshore wind farm development.

17.12.5.15 Taking account of ABWP1, the Proposed Development will not be seen as a new and unfamiliar feature in the view over the coast, with WTGs of a similar scale and similar layout, featuring as linear developments parallel to the coast. There will also be separation between the two developments, which will prevent them appearing as one continuous development. This will slightly moderate the magnitude of change, although the Proposed Development will bring WTGs into closer proximity to the viewpoint, and will occupy a larger horizontal extent of the view over the coast. The principal cumulative change is that when considered together, Codling Wind Park and the Proposed Development will occupy the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative change due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. The Proposed Development will therefore form a notable increase in the extent of offshore wind farm development readily visible across the seascape, and will result in an additional High cumulative magnitude of change.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.16 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Major (significant)** owing to the Medium-High sensitivity of the visual receptors and the High cumulative magnitude of change. The principal cumulative effect arising is that when considered together, Codling Wind Park and the Proposed Development will occupy the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative effect due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible.

Viewpoint 5: Brittas Bay Beach

CUMULATIVE CONTEXT

17.12.5.17 The most relevant cumulative development to this assessment is Codling Wind Park which will be located to the north of the Proposed Development and located approximately 19.3km from the viewpoint at its closest point. Codling Wind Park will comprise 60 WTGs up to 314 m in height. The cumulative wireline in Figure 17.23.1 shows that Codling Wind Park will be seen in the view to the north-east. There will be no further cumulative developments visible. Many of the WTGs within Codling Wind Park will be readily visible, with some degree of stacking, although there will also be an element of screening of the lower parts of WTGs by the landform to the north-east at

Potters Point. WTGs within Codling Wind Park will occupy a relatively limited extent of the overall views of the seascape visible from this viewpoint.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.18 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as High. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.19 The cumulative wireline in Figure 17.23.1 shows that Codling Wind Park will be seen in the view to the north-east, while the Proposed Development will be seen to the east and south-east. the Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 7.7 km to the nearest WTG compared to a distance of 19.3km for Codling Wind Park. The closer proximity of WTGs within the Proposed Development means that its construction will have a notable influence on the view, as described in the main assessment. Taking account of construction associated with a number of WTGs within Codling Wind Park, visible at a distance of 19.3 km, the construction of the Proposed Development will extend this influence further south across a new and greater extent of the seascape. On balance, there will be an additional High cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.20 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as High. the Proposed Development will occupy a larger horizontal extent of the seascape than Codling Wind Park, and will be seen at closer proximity. While both developments will have an influence on the view, they will be seen in different sectors of the view, there will be separation between the two developments that will prevent them appearing as one continuous development and Codling Wind Park will be seen at relative distance (19.3km). These factors will slightly moderate the magnitude of change.

17.12.5.21 However, the Proposed Development will bring WTGs into closer proximity to the viewpoint, and will occupy a larger horizontal extent of the view over the coast. Due to this closer proximity, the WTGs within the Proposed Development will appear at a larger scale than those within Codling Wind Park, which will increase the magnitude of change associated with them. Given views of Codling Wind Park, the Proposed Development will increase the influence of offshore wind farm development in the view over the coast, and will result in the majority of the field of view over the seascape being occupied by WTGs. The principal cumulative change is that when considered together, Codling Wind Park and the Proposed Development will occupy the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative change due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. The additional cumulative magnitude of change arising as a result of the introduction of the Proposed Development is assessed therefore as High.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.22 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Major (significant)** owing to the High sensitivity of the visual receptors and the High cumulative magnitude of change. The principal cumulative effect arising is that when considered together, Codling Wind Park and the Proposed Development will occupy the majority of the sea skyline in the view, and in this view, the Proposed

Development will contribute more to that cumulative effect due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. The cumulative effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible.

Viewpoint 7: Balinvally 3rd Class Road

CUMULATIVE CONTEXT

17.12.5.23 Cumulative developments visible from this viewpoint comprise Dublin Array and Codling Wind Park, seen in views to the north-east at distances of 34.8 km and 25.2 km respectively. Dublin Array will comprise 39 WTGs up to 309.6 m in height, and Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.25.1 shows that both these developments will be subject to screening by intervening landform. A number of WTGs within Codling Wind Park will be visible to their full extents and seen within the seascape context. However, the lower parts of the remaining Codling Wind Park and Dublin Array WTGs visible from this viewpoint will be screened from view and they will be seen beyond the landform to the north-east, rather than in the seascape context. They will occupy a relatively limited extent of the overall views available from this location. There will be no further cumulative developments visible.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.24 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-Low. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness. The cumulative wireline in Figure 17.25.1 shows that Dublin Array and Codling Wind Park will be seen in the view to the north-east, generally visible beyond the upland agricultural landscape context, while the Proposed Development will be seen to the east and south-east in the seascape context.

17.12.5.25 The Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 13.6 km to the nearest WTG compared to distances of 25.2 km for Codling Wind Park and 34.8 km for Dublin Array. The closer proximity of WTGs within the Proposed Development, as well as its relatively linear layout, means that its construction will occupy a wide horizontal extent, and will have a notable influence on the view, as described in the main assessment. Taking account of construction associated with a number of WTGs within cumulative developments, visible at a minimum distance of 25.2 km, the construction of the Proposed Development will extend this influence further south across a new and greater extent of the seascape. However, the cumulative magnitude of change will be moderated by the relatively limited visual influence of construction of Codling Wind Park and Dublin Array, owing to the distance and screening of construction activities by intervening landform during the majority of the construction period. On balance, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as is assessed as Medium-Low.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.26 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-Low. the Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park and Dublin Array, and will be seen at closer proximity. It will be seen in the seascape context to the south-east, and the majority of WTGs will be readily visible, while WTGs within Codling Wind Park and Dublin Array will be seen generally in the landscape context to the north-east and partially

screened by intervening landform. The separation between the developments and the different sectors of view in which they will be seen will prevent them appearing as one continuous development.

17.12.5.27 Taking account of Codling Wind Park, Dublin Array and ABWP1, the Proposed Development will not be seen as a new and unfamiliar feature in the view over the coast, which will moderate the magnitude of change. However, it will introduce further WTGs into the view over the seascape to the south-east, which will otherwise be limited to a small number of WTGs within Codling Wind Park. The Proposed Development will bring WTGs into closer proximity to the viewpoint, and will occupy a larger horizontal extent of the view over the coast. The Proposed Development will increase the influence of offshore wind farm development in the view over the seascape. However, the cumulative magnitude of change will be moderated by the relatively limited influence of Codling Wind Park and Dublin Array on the views from this location, and their position seen beyond agricultural land rather than in the seascape context. This means that the magnitude of change will primarily be as assessed in the main assessment, with an additional Medium-Low cumulative magnitude of change arising from the introduction of the Proposed Development in the context of cumulative developments.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.28 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Moderate (not significant)** owing to the High sensitivity of the visual receptors and the Medium-Low cumulative magnitude of change. Although the effect is moderate, this cumulative effect is considered to be not significant in this instance due to the position of Dublin Array and Codling Wind Park beyond the landscape rather than in their seascape context, their distance from the viewpoint, and the limited amount of these developments that will visible due to the intervening landform screening. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible.

Viewpoint 8: Ballinaskea 3rd Class Road

CUMULATIVE CONTEXT

17.12.5.29 The most relevant cumulative development to this assessment is Codling Wind Park which will be located to the north of the Proposed Development and located approximately 25.3km from the viewpoint at its closest point. Codling Wind Park will comprise 60 WTGs up to 314 m in height. The cumulative wireline in Figure 17.26.1 shows that Codling Wind Park will be seen in the view to the north-east. There will be no further cumulative developments visible. Many of the WTGs within Codling Wind Park will be readily visible, with some degree of stacking, although there will also be screening of WTGs towards the north of the development by the landform to the north-east. WTGs within Codling Wind Park will occupy a relatively limited extent of the overall views of the seascape visible from this viewpoint, and several will be seen in the landscape context rather than in open views over the sea.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.30 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.31 The cumulative wireline in Figure 17.26.1 shows that Codling Wind Park will be visible to the north-east, seen partially in the landscape context and partially in the seascape context, and with some screening by landform and vegetation, while the Proposed Development will be seen to the east in the seascape context, with more limited screening by vegetation.

17.12.5.32 The Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 11.5 km to the nearest WTG, compared to a distance of 25.3 km for Codling Wind Park. The closer proximity of WTGs within the Proposed Development, as well as its relatively linear layout, means that its construction will occupy a wide horizontal extent, and will have a notable influence on the view, as described in the main assessment. Taking account of construction associated with WTGs within Codling Wind Park, visible at a minimum distance of 25.3 km, the construction of the Proposed Development will extend this influence further south across a greater extent of the seascape. However, the cumulative magnitude of change will be moderated by the relatively limited visual influence of construction of Codling Wind Park, owing to the distance and screening by intervening landform. On balance, there will be an additional Medium cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.33 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-High. The Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park, and will be seen at closer proximity. It will be seen in the seascape context to the east, and the majority of WTGs will be readily visible, while some WTGs within Codling Wind Park will be seen within the landscape context to the north-east or partially screened by intervening landform. The distance between the developments will influence the scale at which they are perceived, which will prevent them appearing as one continuous development. However, there will be a limited undeveloped extent of seascape between the two developments, and the difference in the distance between the viewpoint and the two developments will result in the WTGs within the Proposed Development appearing larger in scale due to proximity.

17.12.5.34 Taking account of ABWP1, the Proposed Development will not be seen as a new and unfamiliar feature in the view over the coast, which will moderate the magnitude of change. However, it will introduce further WTGs into the view over the seascape to the east, which will otherwise be limited to a small number of WTGs within Codling Wind Park. The Proposed Development will bring WTGs into closer proximity to the viewpoint, and will occupy a larger horizontal extent of the view over the coast. The Proposed Development will increase the influence of offshore wind farm development in the view over the seascape further south, resulting in only a very limited extent of the seascape visible from this viewpoint being unaffected by WTG development.

17.12.5.35 The principal cumulative change is that when considered together, Codling Wind Park and the Proposed Development may be perceived as combining to form one contiguous development occupying the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative change due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. However, the cumulative magnitude of change will be moderated to some degree by the relative distance of Codling Wind Park and the Proposed Development from this location and its set back position from the coast. The additional cumulative magnitude of change arising from the introduction of the Proposed Development in the context of cumulative developments is therefore assessed as Medium-High.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.36 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Major-Moderate (significant)** owing to the Medium-High sensitivity of the visual receptors and the Medium-High cumulative magnitude of change. The principal cumulative effect arising is that when considered together, Codling Wind Park and the Proposed Development may be perceived as combining to form one contiguous development occupying the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative effect due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible.

Viewpoint 10: Ferry Bank, Arklow

CUMULATIVE CONTEXT

17.12.5.37 The most relevant cumulative development to this assessment is Codling Wind Park which will be located to the north of the Proposed Development and located approximately 30.2km from the viewpoint at its closest point. Codling Wind Park will comprise 60 WTGs up to 314 m in height. The cumulative wireline in Figure 17.28.1 shows that Codling Wind Park will be seen in the view to the north-east. There will be no further cumulative developments visible. Many of the WTGs within Codling Wind Park will be readily visible, with notable stacking, although there will also be screening of WTGs towards the north of the development by the landform to the north-east. WTGs within Codling Wind Park will occupy a limited extent of the overall views of the seascape visible from this viewpoint.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.38 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-Low. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.39 The cumulative wireline in Figure 17.28.1 shows that construction activity across southern parts of Codling Wind Park will be visible to the north-east, seen at the northern extent of the visible seascape, while northern parts of this development will be screened by the landform. The Proposed Development will be seen to the east in the seascape context, and construction activity throughout the Array Area will be visible.

17.12.5.40 The Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 12.1 km to the nearest WTG, compared to a distance of 30.2 km for Codling Wind Park. The closer proximity of WTGs within the Proposed Development, as well as its relatively linear layout, means that its construction will occupy a wider horizontal extent to the south, and will have a notable influence on the view, as described in the main assessment. Construction activity at the northern extent of the Array Area will overlap with construction associated with Codling Wind Park in views from this location, creating a concentration of activity in this area. However, the cumulative magnitude of change will be moderated by the relatively limited visual influence of the construction of Codling Wind Park, owing to the distance to Codling Wind Park and screening of the majority of the Codling Wind Park construction works by the intervening headland landform along the coast, such that cumulative interaction during construction would be contained to a fairly limited part of the view and with Codling Wind Park construction works only likely to be perceived in periods of excellent visibility. On balance, the additional cumulative magnitude

arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Medium-Low.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.41 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-Low. The Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park, and will be seen at closer proximity. It will be seen in the seascape context to the east, and the majority of WTGs will be readily visible, while some WTGs within Codling Wind Park will be seen within the landscape context to the north-east or partially screened by intervening landform. WTGs within the Proposed Development will appear to overlap with the horizontal extent occupied by WTGs within Codling Wind Park, which will blur the distinction between the two developments and increase the cumulative magnitude of change associated with the Proposed Development. The principal cumulative change is that when considered together, Codling Wind Park and the Proposed Development will occupy a wider lateral spread in the field of view, however the cumulative change is limited by the long distance to Codling Wind Park and the screening of Codling Wind Park provided by the intervening coastal landform. The distance to Codling Wind Park will influence the scale at which it is perceived, with WTGs within Codling Wind Park appearing smaller and more distant than those within the Proposed Development. Taking account of ABWP1, the Proposed Development will also not be seen as a new and unfamiliar feature in the view over the coast, which will also moderate the magnitude of change.

17.12.5.42 Overall, the cumulative magnitude of change will be moderated by the relatively limited influence of Codling Wind Park on the views from this location, given its distance from the viewpoint and the screening provided by the intervening coastal landform, with the majority of Codling Wind Park screened behind this headland and only a limited portion of its southern array being visible in the view. This means that the additional cumulative magnitude of change arising from the introduction of the Proposed Development in the context of cumulative developments is assessed as Medium-Low.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.43 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Moderate (not significant)** owing to the High sensitivity of the visual receptors and the Medium-Low cumulative magnitude of change. The cumulative effect is considered to be not significant in this instance due to the limited cumulative interaction between the Proposed Development and Codling Wind Park, as a result of the position of Codling Wind Park at a distance of more than 30 km and partially screened behind the intervening coastal landform to the north-east. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible.

Viewpoint 11: Arklow Town

CUMULATIVE CONTEXT

17.12.5.44 The most relevant cumulative development to this assessment is Codling Wind Park which will be located to the north of the Proposed Development and located approximately 31.7km from the viewpoint at its closest point. Codling Wind Park will comprise 60 WTGs up to 314 m in height. The cumulative wireline in Figure 17.29.1 shows that Codling Wind Park will be seen in the view to the north-east. There will be no further cumulative developments visible. A relatively small proportion of the WTGs within Codling Wind Park will be visible, with notable stacking, and the majority will be screening from view by the landform, vegetation and built form to the north-east.

WTGs within Codling Wind Park will occupy a limited extent of the overall views of the seascape visible from this viewpoint.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.45 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.46 The cumulative wireline in Figure 17.29.1 shows that construction activity associated with a limited number of WTGs within southern parts of Codling Wind Park will be visible to the north-east, seen at the northern extent of the visible seascape, while northern parts of this development will be screened by the landform. The Proposed Development will be seen to the east in the seascape context, and construction activity throughout the Array Area will be visible.

17.12.5.47 Construction activity associated with the Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 12.1 km to the nearest WTG, compared to a distance of 30.2 km for Codling Wind Park. The closer proximity of WTGs within the Proposed Development, as well as its relatively linear layout, means that its construction will occupy a wide horizontal extent, and will have a notable influence on the view, as described in the main assessment. Construction activity at the northern extent of the Array Area will overlap with construction associated with Codling Wind Park in views from this location, creating a concentration of activity in this area. However, the cumulative magnitude of change will be moderated by the relatively limited visual influence of construction of Codling Wind Park, owing to distance and screening by intervening landform. On balance, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Low.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.48 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. The Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park, and will be seen at closer proximity. It will be seen in the seascape context to the east at a minimum distance of 13.1 km, and the majority of WTGs will be readily visible, while a limited number of WTGs within Codling Wind Park will be seen to the north-east at a minimum distance of 31.7 km. WTGs within the Proposed Development will appear to overlap with the horizontal extent occupied by WTGs within Codling Wind Park, which will blur the distinction between the two developments and increase the cumulative magnitude of change associated with the Proposed Development. The distance between the developments will influence the scale at which they are perceived, with WTGs within Codling Wind Park appearing smaller than those within the Proposed Development. However, the visual influence of WTGs within Codling Wind Park is likely to be very limited at this viewpoint, due to its distance and the intervening screening by both landform and woodland, which limits the cumulative interaction between the two projects. On balance, the additional cumulative magnitude of change arising from the introduction of the Proposed Development in the context of cumulative developments is assessed as Low.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.49 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Moderate-Minor (not significant)** owing to the Medium-High sensitivity of the visual receptors and the Low cumulative magnitude of change.

The cumulative effect of the Proposed Development is assessed as not significant primarily due to the distance of Codling Wind Park (31.7km) and its limited visibility as the majority of Codling Wind Park will be screened by the intervening landform and woodland, therefore the cumulative interaction in the view is limited. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible.

Viewpoint 13: Clogga Amenity Area

CUMULATIVE CONTEXT

17.12.5.50 The most relevant cumulative development to this assessment is Codling Wind Park which will be located to the north of the Proposed Development and located approximately 33.8km from the viewpoint at its closest point. Codling Wind Park will comprise 60 WTGs up to 314 m in height. The cumulative wireline in Figure 17.31.1 shows that Codling Wind Park will be seen in the view to the north-east. There will be no further cumulative developments visible. Although the majority of the WTGs within Codling Wind Park will be visible, the distance from the viewpoint means that the lower parts of many of the WTGs will be positioned below the horizon. There will be notable stacking across the layout. WTGs within Codling Wind Park will occupy a relatively limited extent of the overall views of the seascape visible from this viewpoint.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.51 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.52 The cumulative wireline in Figure 17.31.1 shows that construction activity associated with WTGs within Codling Wind Park will be visible to the north-east, seen at the northern extent of the visible seascape, while northern parts of this development will be screened by the landform. the Proposed Development will be seen to the east in the seascape context, and construction activity throughout the Array Area will be visible.

17.12.5.53 Construction activity associated with the Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 11.6 km to the nearest WTG, compared to a distance of 33.8 km for Codling Wind Park. The closer proximity of WTGs within the Proposed Development, as well as its relatively linear layout, means that its construction will occupy a wide horizontal extent, and will have a notable influence on the view, as described in the main assessment. Construction activity at the northern extent of the Array Area will overlap with construction associated with Codling Wind Park in views from this location, creating a concentration of activity in this area, however this will be at long distance from the viewpoint. The Proposed Development will introduce construction activity into otherwise undeveloped parts of the seascape, and in combination with Codling Wind Park the lateral spread of WTG development will occupy the full horizontal extent of the sea view in the panorama. However, the cumulative magnitude of change will be moderated by the relatively limited visual influence of construction associated with Codling Wind Park, owing to the long distance of Codling Wind Park at approximately 33.8 km from its closest point to the viewpoint and the relatively small extent of the view occupied by Codling Wind Park. On balance, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Medium.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.54 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium. The Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park and will be seen at closer proximity. It will be seen in the seascape context to the east, and the majority of WTGs will be readily visible, while WTGs within Codling Wind Park will be more difficult to discern in the view to the north-east due to distance. WTGs within the Proposed Development will appear to overlap with the horizontal extent occupied by WTGs within Codling Wind Park, which will blur the distinction between the two developments and increase the cumulative magnitude of change associated with the Proposed Development. The distance between the developments will influence the scale at which they are perceived, with WTGs within Codling Wind Park appearing smaller than those within the Proposed Development. Taking account of ABWP1, the Proposed Development will not be seen as a new and unfamiliar feature in the view over the coast, which will moderate the magnitude of change. However, it will introduce further wind farm development into the view over the seascape to the east, which will otherwise be limited to smaller WTGs within ABWP1.

17.12.5.55 The principal cumulative change is that when considered together, Codling Wind Park and the Proposed Development will occupy the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative change due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. However, the cumulative magnitude of change will be moderated to some degree by the distance of Codling Wind Park on the views from this location (33.8km), which limits its cumulative influence with the Proposed Development to relatively infrequent periods of excellent visibility. On balance, additional cumulative magnitude of change arising from the introduction of the Proposed Development is assessed as Medium.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.56 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Major-Moderate (significant)** owing to the High sensitivity of the visual receptors and the Medium cumulative magnitude of change. The principal cumulative change is that when considered together, Codling Wind Park and the Proposed Development may be perceived as combining to form one contiguous development occupying the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative change due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. The cumulative effect is limited mainly by the distance to Codling Wind Park, its limited horizontal extent and frequency of visibility, occurring only in periods of excellent visibility. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible.

Viewpoint 14: Kilmichael Point

CUMULATIVE CONTEXT

17.12.5.57 Cumulative developments visible from this viewpoint comprise Dublin Array and Codling Wind Park, seen in views to the north-east at distances of 48.6 km and 35.9 km respectively. Dublin Array will comprise 39 WTGs up to 309.6 m in height, and Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.32.1 shows that Dublin Array will be subject to screening by intervening landform, with only the blade tips of a small number of WTGs visible. Visibility of WTGs within Codling Wind Park will be more widespread. However, the lower parts of the WTGs within Codling Wind Park will be positioned below the horizon due to the curvature of the earth and distance from this viewpoint. These cumulative

developments will occupy a relatively limited extent of the overall views available from this location. There will be no further cumulative developments visible.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.58 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.59 The cumulative wireline in Figure 17.32.1 shows that construction activity associated with WTGs within Dublin Array and Codling Wind Park will be visible to the north-east, seen at the northern extent of the visible seascape, although the majority of Dublin Array will be screened by the landform. The Proposed Development will be seen to the east in the seascape context, and construction activity throughout the Array Area will be visible.

17.12.5.60 Construction activity associated with the Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 10.9 km to the nearest WTG, compared to a distance of 35.9 km for Codling Wind Park and 48.6 km for Dublin Array. The closer proximity of WTGs within the Proposed Development, as well as its relatively linear layout, means that its construction will occupy a wide horizontal extent, and will have a notable influence on the view, as described in the main assessment. Construction activity at the northern extent of the Array Area will overlap with construction associated with Codling Wind Park in views from this location, creating a concentration of activity in this area. The Proposed Development will introduce construction activity into otherwise undeveloped parts of the seascape. However, the cumulative magnitude of change will be moderated by the relatively limited visual influence of construction associated with Codling Wind Park and Dublin Array, owing to the minimum distance of more than 35 km. On balance, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Medium.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.61 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium. The Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park and Dublin Array, and will be seen at closer proximity. It will be seen in the seascape context to the east, and the majority of WTGs will be readily visible, while WTGs within other cumulative developments will be more difficult to discern in the view to the north-east due to distance. WTGs within the Proposed Development will appear to overlap with the horizontal extent occupied by WTGs within Codling Wind Park, which will blur the distinction between the two developments and increase the cumulative magnitude of change associated with the Proposed Development. The distance between the developments will influence the scale at which they are perceived, with WTGs within Codling Wind Park appearing smaller than those within the Proposed Development. Taking into account Codling Wind Park, Dublin Array and ABWP1, the Proposed Development will not be seen as a new and unfamiliar feature in the view over the coast, which will moderate the magnitude of change.

17.12.5.62 The principal cumulative change is that when considered together, Codling Wind Park and the Proposed Development will occupy the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative change due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. However, the cumulative magnitude of change will be moderated to some degree by the distance of Codling Wind Park

(35.9km) and Dublin Array (48.6km) on the views from this location, which limits its cumulative influence with the Proposed Development to relatively infrequent periods of excellent visibility. On balance, the additional cumulative magnitude of change arising from the introduction of the Proposed Development is assessed as Medium.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.63 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Major-Moderate (significant)** owing to the High sensitivity of the visual receptors and the Medium cumulative magnitude of change The principal cumulative change is that when considered together, Codling Wind Park and the Proposed Development may be perceived as combining to form one contiguous development occupying the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative change due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. The cumulative effect is limited mainly by the distance to Codling Wind Park, its limited horizontal extent and frequency of visibility, occurring only in periods of excellent visibility. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible.

Viewpoint 15: Clones Coast Road

CUMULATIVE CONTEXT

17.12.5.64 Cumulative developments visible from this viewpoint comprise Codling Wind Park, seen in views to the north-east at a distance of 38.2 km. WTGs within Dublin Array are also theoretically visible, but will be screened from view by the landform and vegetation. Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.32.1 shows that visibility of WTGs within Codling Wind Park will also be limited, with screening of a number of WTGs by the landform. Those WTGs which are visible will occupy a relatively limited extent of the overall views available from this location. There will be no further cumulative developments visible.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.65 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-Low. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.66 The cumulative wireline in Figure 17.33.1 shows that construction activity associated with Codling Wind Park will be visible to the north-east, seen at the northern extent of the visible seascape, although this will be restricted to construction across the southern part of the development. The Proposed Development will be seen to the east in the seascape context, and construction activity throughout the Array Area will be visible.

17.12.5.67 Construction activity associated with the Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 11.6 km to the nearest WTG, compared to a distance of 38.2 km for Codling Wind Park. The closer proximity of WTGs within the Proposed Development, as well as its relatively linear layout, means that its construction will occupy a wide horizontal extent, and will have a notable influence on the view, as described in the main assessment. Construction activity at the northern extent of the Array Area will overlap with construction associated with Codling Wind Park in views from this location, creating a

concentration of activity in this area. The Proposed Development will introduce construction activity into otherwise undeveloped parts of the seascape. However, the cumulative magnitude of change will be moderated by the relatively limited visual influence of construction associated with Codling Wind Park, owing to the minimum distance of more than 38 km. On balance, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Medium-Low.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.68 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-Low. the Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park, and will be seen at closer proximity. It will be seen in the seascape context to the east, and the majority of WTGs will be readily visible, while WTGs within Codling Wind Park will be more difficult to discern in the view to the north-east due to distance. WTGs within the Proposed Development will appear to overlap with the horizontal extent occupied by WTGs within Codling Wind Park, which will blur the distinction between the two developments and increase the cumulative magnitude of change associated with the Proposed Development. The distance between the developments will influence the scale at which they are perceived, with WTGs within Codling Wind Park appearing smaller than those within the Proposed Development.

17.12.5.69 Taking into account ABWP1, the Proposed Development will not be seen as a new and unfamiliar feature in the view over the coast, which will moderate the magnitude of change. However, it will introduce further wind farm development into the view over the seascape to the east, which will otherwise be limited to smaller WTGs within ABWP1. The Proposed Development will bring large WTGs into closer proximity to the viewpoint, and will occupy a larger horizontal extent of the view over the seascape. However, the cumulative magnitude of change will be moderated by the relatively limited influence of Codling Wind Park on the views from this location, given it is partially screened behind the intervening coastal landforms and its long distance over 38km from the viewpoint, which limits the potential for cumulative interaction at such long range and limits the effect of the Proposed Development primarily to a project alone effect from this viewpoint. On balance, the additional cumulative magnitude of change arising from the introduction of the Proposed Development is assessed as Medium-Low.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.70 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Moderate (not significant)** owing to the High sensitivity of the visual receptors and the Medium-Low cumulative magnitude of change. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible. In this instance, the effect is assessed not significant due to the limited potential for cumulative interaction with Codling Wind Park which is partially screened behind the intervening coastal landforms and is located at long range, given its long distance over 38km from the viewpoint, which limits the effect of the Proposed Development primarily to a project alone effect from this viewpoint in all but infrequent excellent visibility conditions.

Viewpoint 16: Tara Hill Minor Road

CUMULATIVE CONTEXT

17.12.5.71 Cumulative developments visible from this viewpoint comprise Codling Wind Park, seen in views to the north-east at a distance of 41.9 km. Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.32.1 shows that visibility of WTGs within

Codling Wind Park will be limited, with screening of a number of WTGs by surrounding vegetation. There may be more open views towards Codling Wind Park from nearby. These WTGs will occupy a relatively limited extent of the overall views available from this location. There will be no further cumulative developments visible.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.72 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.73 The cumulative wireline in Figure 17.34.1 shows that construction activity associated with Codling Wind Park will be visible to the north-east, seen at the northern extent of the visible seascape, although there will be some screening by intervening vegetation around Tara Hill from this viewpoint. The Proposed Development will be seen to the east and north-east in the seascape context, and construction activity throughout the Array Area will be visible.

17.12.5.74 Construction activity associated with the Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 14.5 km to the nearest WTG, compared to a distance of 41.9 km for Codling Wind Park. The closer proximity of WTGs within the Proposed Development, as well as its relatively linear layout, means that its construction will occupy a wide horizontal extent, and will have a notable influence on the view, as described in the main assessment. Construction activity at the northern extent of the Array Area will overlap with construction associated with Codling Wind Park in views from this location, creating a concentration of activity in this area. The Proposed Development will introduce construction activity into otherwise undeveloped parts of the seascape. However, the cumulative magnitude of change will be moderated by the relatively limited influence of Codling Wind Park on the views from this location, given it is partially screened behind the intervening coastal landforms and its long distance of approximately 42km from the viewpoint, which limits the potential for cumulative interaction at such long range and limits the effect of the Proposed Development primarily to a project alone effect from this viewpoint. On balance, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Low.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.75 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. The Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park, and will be seen at closer proximity. It will be seen in the seascape context to the east and north-east, and the majority of WTGs will be readily visible, while WTGs within Codling Wind Park will be more difficult to discern in the view to the north-east due to distance. WTGs within the Proposed Development will appear to overlap with the horizontal extent occupied by WTGs within Codling Wind Park, which will blur the distinction between the two developments and increase the cumulative magnitude of change associated with the Proposed Development. The distance between the developments will influence the scale at which they are perceived, with WTGs within Codling Wind Park appearing smaller than those within the Proposed Development.

17.12.5.76 Taking into account ABWP1, the Proposed Development will not be seen as a new and unfamiliar feature in the view over the coast, which will moderate the magnitude of change. However, it will introduce further wind farm development into the view over the seascape to the east, which will otherwise be limited to smaller WTGs within ABWP1. However, the cumulative

magnitude of change will be moderated by the relatively limited influence of Codling Wind Park on the views from this location, given it is partially screened behind the intervening coastal landforms and its long distance of approximately 42km from the viewpoint, which limits the potential for cumulative interaction at such long range and limits the effect of the Proposed Development primarily to a project alone effect from this viewpoint. On balance, the additional cumulative magnitude of change arising from the introduction of the Proposed Development is assessed as Low.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.77 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Moderate-Minor (not significant)** owing to the Medium-High sensitivity of the visual receptors and the Low cumulative magnitude of change. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible. In this instance, the effect is assessed not significant due to the limited potential for cumulative interaction with Codling Wind Park which is partially screened behind the intervening vegetation and is located at long range, given its long distance of approximately 42km from the viewpoint, which limits the effect of the Proposed Development primarily to a project alone effect from this viewpoint in all but infrequent excellent visibility conditions.

Viewpoint 17: Ballymoney Beach

CUMULATIVE CONTEXT

17.12.5.78 Cumulative developments visible from this viewpoint comprise Codling Wind Park, seen in views to the north-east at a distance of 43.6 km. Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.35.1 shows that visibility of WTGs within Codling Wind Park will be limited, with a number of WTGs appearing as blade tips only due to screening by the landform. Where WTGs are visible in the seascape context, the lower parts will be screened below the horizon due to distance and the curvature of the earth. Those WTGs which are visible will occupy a relatively limited extent of the overall views available from this location. There will be no further cumulative developments visible.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.79 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.80 The cumulative wireline in Figure 17.35.1 shows that construction activity associated with Codling Wind Park may be partially visible to the north-east, seen at the northern extent of the visible seascape, although there will be considerable screening by intervening coastal landforms, built features and vegetation from this viewpoint such that the majority of the Codling Wind Park array will not be visible. At a distance of 43.6 km to the closest part of Codling Wind Park, it is also likely that construction activity will be difficult to discern at this distance, and as such, there will be very limited cumulative interaction between the Proposed Development and Codling Wind Park. As a result, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Low.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.81 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. The Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park and will be seen at closer proximity. It will be seen in the seascape context to the east and north-east, and the majority of WTGs will be readily visible. There will be considerable screening of the construction activities associated with Codling Wind Park due to the intervening coastal landforms, built features and vegetation from this viewpoint, such that the majority of the Codling Wind Park array will not be visible in the view and only the southern end of the Codling Wind Park would be theoretically visible at a distance of 43.6km. When WTGs within Codling Wind Park are visible, the Proposed Development will appear to overlap with the horizontal extent of Codling Wind Park, which will give the impression of a contiguous development, however WTGs within Codling Wind Park likely to be very difficult to discern in the view to the north-east due to distance of more than 43.6 km, which will result in limited cumulative interaction.

17.12.5.82 Overall, taking into account the limit amount of Codling Wind Park that will be visible and the distance of 43.6 km to Codling Wind Park, and the resulting limited opportunity for cumulative interactions as a result of the introduction of the Proposed Development, the additional cumulative magnitude of change arising from the introduction of the Proposed Development is assessed as Low.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.83 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Moderate-Minor (not significant)** owing to the Medium-High sensitivity of the visual receptors and the Negligible cumulative magnitude of change. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible. In this instance, the effect is assessed not significant due to the limited potential for cumulative interaction with Codling Wind Park which is partially screened behind the intervening coastal landforms and is located at long range, given its long distance of approximately 43.6km from the viewpoint, which limits the effect of the Proposed Development primarily to a project alone effect from this viewpoint in all but infrequent excellent visibility conditions.

Viewpoint 18: Courtown Harbour Beach

CUMULATIVE CONTEXT

17.12.5.84 Cumulative developments visible from this viewpoint comprise Codling Wind Park, seen in views to the north-east at a distance of 47.4 km. Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.36.1 shows that visibility of WTGs within Codling Wind Park will be limited, with a number of WTGs appearing as blade tips only due to screening by the landform. Where WTGs are visible in the seascape context, the lower parts will be screened below the horizon due to distance and the curvature of the earth. Those WTGs which are visible will occupy a relatively limited extent of the overall views available from this location. There will be no further cumulative developments visible.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.85 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the

presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.86 The cumulative wireline in Figure 17.36.1 shows that construction activity associated with Codling Wind Park may be theoretically visible to the north-east, seen at the northern extent of the visible seascape, however the northern and western parts of Codling Wind Park will be screened by intervening landform, with just the southern and eastern part of Codling Wind Park theoretically visible. However, at a distance of 47.4 km to the closest part of Codling Wind Park, it is likely this activity will be difficult to discern, and there will be very limited cumulative interaction between the Proposed Development and Codling Wind Park at such long range. As a result, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Low.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.87 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. The Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park and will be seen at closer proximity, in the seascape context to the north-east, and the majority of the Proposed Development WTGs will be readily visible. There will however, be considerable screening of Codling Wind Park due to the intervening coastal landforms, built features and vegetation from this viewpoint, such that much of the Codling Wind Park array will not be visible in the view and only the southern end of Codling Wind Park would be theoretically visible. When WTGs within Codling Wind Park are visible, the Proposed Development will appear to overlap with the horizontal extent of Codling Wind Park, which will give the impression of a contiguous development, however WTGs within Codling Wind Park likely to be very difficult to discern in the view to the north-east due to distance of more than 47.4 km, which will result in limited cumulative interaction.

17.12.5.88 Overall, taking into account the distance of 47.4 km to Codling Wind Park, and the resulting limited opportunity for cumulative interactions as a result of the introduction of the Proposed Development, the additional cumulative magnitude of change arising from the introduction of the Proposed Development is assessed as Low.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.89 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Moderate-Minor (not significant)** owing to the Medium-High sensitivity of the visual receptors and the Low cumulative magnitude of change. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible. In this instance, the effect is assessed not significant due to the limited potential for cumulative interaction with Codling Wind Park which is partially screened behind the intervening coastal landforms and is located at long range, given its long distance of approximately 47.4km from the viewpoint, which limits the effect of the Proposed Development primarily to a project alone effect from this viewpoint in all but infrequent excellent visibility conditions.

Viewpoint 19: Cahore Point

CUMULATIVE CONTEXT

17.12.5.90 Cumulative developments theoretically visible from this viewpoint comprise Codling Wind Park, seen in views to the north-east at a distance of 54.3 km, and Dublin Array, which is unlikely to be visible in reality, at a distance of 68 km. Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.37.1 shows that visibility of WTGs within

Codling Wind Park will be limited, with screening of the lower parts of all WTGs and the hubs of a number of WTGs below the horizon due to distance and the curvature of the earth. Those WTGs which are visible will occupy a relatively limited extent of the overall views available from this location. There will be no further cumulative developments visible.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.91 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Negligible. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.92 The cumulative wireline in Figure 17.37.1 shows that construction activity associated with Codling Wind Park may be theoretically visible to the north-east, seen at the northern extent of the visible seascape and positioned partially below the horizon. However, at a minimum distance of 54.3 km, it is likely this activity will be difficult to discern, and largely beyond the horizon at such range, and that there will be very limited cumulative interaction between the Proposed Development and Codling Wind Park during the construction and decommissioning phases due to the limited visibility of construction works associated with Codling Wind Park and Dublin Array. It is considered that cumulative interactions with Dublin Array will be very limited to none, due to the distance of 68 km from this viewpoint. As a result, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Negligible.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.93 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Negligible. The Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park, and will be seen at closer proximity, at a minimum distance of 19 km, in the seascape context to the north-east, and all WTGs will be visible to some extent, although WTGs towards the north of the Array Area will be more difficult to discern. However, at a minimum distance of 54.3 km to Codling Wind Park, it is likely that the Codling Wind Park will be difficult to discern, that its WTGs are largely beyond the horizon at such range, and that there will be very limited cumulative interaction between the Proposed Development and Codling Wind Park during the operational phase due to the limited visibility Codling Wind Park and Dublin Array. Cumulative effects with Dublin Array is considered very unlikely, due its distance at 68 km from the viewpoint.

17.12.5.94 Overall, taking into account the minimum distance of 54.3 km to the nearest cumulative development, and the resulting limited opportunity for cumulative interactions as a result of the introduction of the Proposed Development, the cumulative magnitude of change arising from the introduction of the Proposed Development in the context of cumulative developments is assessed as Negligible.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.95 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Minor (not significant)** owing to the High sensitivity of the visual receptors and the Negligible cumulative magnitude of change. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible. In this instance, the effect is assessed not significant due to the limited potential for cumulative interaction with Codling Wind Park and Dublin Array that are located at very long range from the viewpoint, largely behind the horizon

and unlikely to be discernible in the majority of atmospheric conditions, which limits the effect of the Proposed Development primarily to a project alone effect from this viewpoint.

Viewpoint 23: Kileagh Minor Road

CUMULATIVE CONTEXT

17.12.5.96 Cumulative developments visible from this viewpoint comprise Dublin Array and Codling Wind Park, seen in views to the north-east at distances of 38.7 km and 31.2 km respectively. Dublin Array will comprise 39 WTGs up to 309.6 m in height, and Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.41.1 shows that both these developments will be subject to screening by intervening landform. WTGs within Dublin Array and Codling Wind Park will be partially seen beyond the landform to the north-east, with much of the arrays screened by the intervening topography and the visible WTGs appearing in a landscape context rather than in a seascape context where there are no largely views of the sea in which they are located. The exception to this is several WTGs towards the south of Codling Wind Park, which will be seen positioned within the seascape, due to more limited intervening topography within this sector of the view. Each development will occupy a relatively limited extent of the overall views available from this location. There will be no further cumulative developments visible.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.97 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness. The cumulative wireline in Figure 17.41.1 shows that Dublin Array and Codling Wind Park will be seen in the view to the north-east, generally seen beyond the surrounding upland landscape context, while the Proposed Development will be seen to the east and south-east, partially seen beyond the upland landscape and partially extending into the seascape context to the south.

17.12.5.98 The Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 20.1 km to the nearest WTG compared to distances of 31.2 km for Codling Wind Park and 38.7 km for Dublin Array, however all of these Phase 1 projects will be seen at relatively long distance from the viewpoint. The landform screening, distance and partial visibility of Codling Wind Park and Dublin Array will limit the scale and influence of construction phase activities in the view from these projects. The closer proximity of WTGs within the Proposed Development, as well as its relatively linear layout, means that its construction will occupy a wide horizontal extent into the seascape context to the south. It will have a notable influence on the view, as described in the main assessment, albeit with central to northern parts of the Array Area screened from view.

17.12.5.99 Taking into account construction associated with a number of WTGs within cumulative developments, visible at a minimum distance of 31.2 km, the construction of the Proposed Development will extend this influence further south across a new and wider extent of the surrounding landscape and seascape. However, the cumulative magnitude of change will be moderated by the relatively limited visual influence of construction of Codling Wind Park and Dublin Array, owing to the distance of these projects and screening by intervening landform of construction activities at sea level in particular, which are unlikely to be visible. On balance, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Low.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.100 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-Low. The Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park and Dublin Array, and will be seen at closer proximity. Parts of the Proposed Development Array Area will be seen in the seascape context to the south-east, and across this sector the WTGs will be seen to their full extents, although there will also be screening of WTGs in central and northern parts of the Array Area by intervening landform. WTGs within Codling Wind Park and Dublin Array will be seen generally in the landscape context to the north-east and partially screened by intervening landform. The separation between the developments and the different sectors of view in which they will be seen will prevent them appearing as one continuous development.

17.12.5.101 The Proposed Development will introduce and extend the lateral spread of WTGs into the view over the seascape to the south-east, which is currently free from wind farm development and will combine with Codling Wind Park and Dublin Array to create a pattern of development beyond the hill range to the north and in the seascape backdrop. However, the cumulative magnitude of change will be moderated by the relatively limited influence of Codling Wind Park and Dublin Array on the views from this location, their long distances from the viewpoint (31.2 km to Codling Wind Park and 38.7 km to Dublin Array) and their position seen generally beyond agricultural land rather than in the seascape context. On balance, the additional cumulative magnitude of change arising from the Proposed Development during the operational and maintenance phase is assessed as Medium-Low.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.102 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Moderate (not significant)** owing to the Medium-High sensitivity of the visual receptors and the Medium-Low cumulative magnitude of change. Although the effect is moderate, the cumulative effect is considered to be not significant in this instance due to the position of Dublin Array and Codling Wind Park seen beyond the landscape rather than in their seascape context, their partial visibility due intervening screening and their distance from the viewpoint, as well as the relative distance to the Proposed Development at 20.1km and it's the partial amount of the WTG layout that will be visible in the southern portion of the Array Area and its position in the backdrop beyond the intervening, prevailing landscape. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible.

Viewpoint 24: Mizen Head

CUMULATIVE CONTEXT

17.12.5.103 The most relevant cumulative development to this assessment is Codling Wind Park which will be located to the north of the Proposed Development and located approximately 21.4km from the viewpoint at its closest point. Codling Wind Park will comprise 60 WTGs up to 314 m in height. The cumulative wireline in Figure 17.23.1 shows that Codling Wind Park will be seen in the view to the north-east. Dublin Array will also be theoretically visible at a distance of 33.3 km to the north-east, although views of this development will be restricted to a small number of blade tips due to screening by intervening landform. There will be no further cumulative developments visible. The WTGs within Codling Wind Park will be readily visible, with some degree of stacking between WTGs within the array.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.104 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as High. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.105 The cumulative wireline in Figure 17.42.1 shows that construction activity associated with Codling Wind Park will be seen in the view to the north-east, while the Proposed Development will be seen to the east and south-east. The Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 8.1 km to the nearest WTG compared to a distance of 21.4 km for Codling Wind Park. The closer proximity of WTGs within the Proposed Development means that its construction will have a notable influence on the view, as described in the main assessment. Taking into account construction activities associated with Codling Wind Park, visible at a distance of 21.4 km, the construction of the Proposed Development will extend this influence further south across a new and greater extent of the seascape. Construction activity will be seen extending throughout the full seascape visible from this location across the combination of Codling Wind Park and the Proposed Development. On balance, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as High.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.106 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as High. The principal cumulative change is that when considered together, Codling Wind Park and the Proposed Development may be perceived as combining to form one contiguous development occupying the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative change due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. These magnitude of change will be slightly moderated by the distance to Codling Wind Park, which extends to the north at longer range at over 21.4km from the Proposed Development.

17.12.5.107 However, the Proposed Development will bring WTGs into closer proximity to the viewpoint and will occupy a wider horizontal extent of the view over the seascape. Due to this closer proximity, the WTGs within the Proposed Development will appear at a larger scale than those within Codling Wind Park, and contribute to a wider spread of WTGs, which will increase the cumulative magnitude of change associated with them. On balance, the additional cumulative magnitude of change arising from the introduction of the Proposed Development is assessed as High.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.108 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Major** (**significant)** owing to the High sensitivity of the visual receptors and the High cumulative magnitude of change. The principal cumulative effect arising is that when considered together, Codling Wind Park and the Proposed Development are likely to be perceived as combining to form one contiguous development occupying the majority of the sea skyline in the view, and in this view, the Proposed Development will contribute more to that cumulative effect due to its wider lateral spread in the field of view and its closer proximity to the viewpoint. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible.

Viewpoint 25: Newcastle Beach

CUMULATIVE CONTEXT

17.12.5.109 Cumulative developments theoretically visible from this viewpoint comprise North Irish Sea Array, Dublin Array and Codling Wind Park, located to the north-east at distances of 62.9 km, 12 km and 13.2 km respectively. Although North Irish Sea Array is indicated as theoretically visible on the cumulative wireline in Figure 17.43.1, at a distance of 62.9 km, it is unlikely there will be actual visibility of WTG blade tips within this development at this long range. Dublin Array will comprise 39 WTGs up to 309.6 m in height, and Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.43.1 shows that both these developments will be widely visible at relatively close proximity in the view to the north-east and east. There will be no screening and all WTGs will be visible to their full extents, with a degree of stacking visible across both developments. In Both Dublin Array and Codling Wind Park will occupy a notable horizontal extent of the sea skyline and due to their proximity to one another and similarity in scale, may be perceived as a single contiguous development (albeit with a small gap evident between them on the sea skyline).

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.110 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.111 The cumulative wireline in Figure 17.43.1 shows that Dublin Array and Codling Wind Park will be visible to the north-east and east respectively. Construction activity associated with both developments will be apparent across a wide expanse of the visible seascape, at a distance of 12 km to the nearest WTG, within Dublin Array and 13.2 km to Codling Wind Park.

17.12.5.112 The Proposed Development will be seen at greater distance from the viewpoint than these cumulative developments, at a distance of 18.4 km to the nearest WTG and will be located oblique to the view to the south along the coast. The construction of the southern parts of the Proposed Development will be screened from view by Wicklow Head to the south, at sea level, although the blade tips of several WTGs may be seen above this landform when constructed. Although construction activity associated with the Proposed Development will occupy a relatively limited extent of the overall panoramic views available from this location, it will extend the influence of offshore wind farm construction further south into a new part of the view. Taking into account construction associated with WTGs within Dublin Array and Codling Wind Park, which contribute more to the cumulative effect at closer range, the construction of the Proposed Development will extend this influence further south into the seascape along the coast beyond Wicklow Head. However, the cumulative magnitude of change will be moderated by the distance to the Proposed Development (18.4km) and its location being oblique to the main views directly out to sea. On balance, the additional Medium cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Medium.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.113 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium. The Proposed Development will occupy a smaller horizontal extent of the seascape than either Dublin or Codling Wind Park, due to its greater distance from the viewpoint and screening of southern parts of the

Array Area by the landform at Wicklow Head, which mean than only the northern parts of the Proposed Development will be visible. The Proposed Development and the cumulative developments will all have a strong influence on the view, viewed in sequence in different sectors of the view, however there will be separation between the Proposed Development and the cumulative developments which will prevent them appearing as a continuous development, as there is a clear gaps between Codling Wind Park and the Proposed Development further to the south. The longer distance of the Proposed Development from the viewpoint and its oblique position along the coast also contribute to slightly moderating the cumulative magnitude of change.

17.12.5.114 However, the Proposed Development will extend the influence of offshore wind farm development further south in the view over the seascape from this viewpoint, visible at mid-range and as part of a sequence of offshore wind farms panning round the offshore view. Although the WTGs will occupy a relatively limited horizontal extent and there will be separation between the developments that will maintain sections of undeveloped seascape horizon, their position at the southern edge of the visible seascape means that offshore wind farm development will extend wind farm development into a wider proportion of the seascape in the view at mid range. On balance, the additional cumulative magnitude of change arising from the introduction of the Proposed Development is assessed as Medium.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.115 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Moderate (significant)** owing to the Medium-High sensitivity of the visual receptors and the Medium cumulative magnitude of change. The effect will be adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible. The cumulative effects is considered significant in this instance due to the contribution of the Proposed Development to the sequence of offshore wind farms that will be visible in the offshore panorama at mid-range and its extension of the cumulative effect to the south beyond Wicklow Head.

Viewpoint 26: Scarr Mountain

CUMULATIVE CONTEXT

17.12.5.116 Cumulative developments visible from this viewpoint comprise Dublin Array and Codling Wind Park, seen in views to the north-east at distances of 28.4 km and 31.7 km respectively. Dublin Array will comprise 39 WTGs up to 309.6 m in height, and Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.44.1 shows that the full extent of Codling Wind Park will be visible in the seascape context beyond the rolling agricultural landscape to the east. WTGs across the southern part of Dublin Array will be visible in the seascape context, while WTGs towards its northern extent will be positioned beyond intervening landform, including Great Sugarloaf, which will screen the lower parts of several WTGs. Each development will occupy a relatively limited extent of the overall panoramic views available from this location. There will be no further cumulative developments visible.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.117 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-Low. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.118 The cumulative wireline in Figure 17.44.1 shows that construction activity associated with WTGs within Dublin Array and Codling Wind Park will be visible to the north-east and east, seen at the northern extent of the visible seascape, although some sea-level construction associated with Dublin Array may be screened by the landform to the north-east. Construction activity is likely to be somewhat difficult to discern due to the minimum distance of 28.4 km to the nearest WTG.

17.12.5.119 Construction activity associated with the Proposed Development will be seen at a similar distance from the viewpoint, at a distance of 29.5 km to the nearest WTG, with similar restrictions in visibility of construction activities in the seascape at long range. However, due to its relatively linear layout, particularly in comparison to Codling Wind Park, construction activity associated with the Proposed Development will occupy a greater horizontal extent of the view than either of the cumulative developments. There will be no overlap of construction activity associated with the three developments due to separation between them, which will slightly moderate the magnitude of change. However, the Proposed Development will introduce construction activity into an otherwise undeveloped part of the seascape and will extend the influence of offshore wind farm development throughout a wider extent of the view. As a result of the addition of the construction of the Proposed Development, wind farm development will extend across a wider part of the visible seascape, from north-east to south-east.

17.12.5.120 On balance, due to long distance of the construction activities associated with the Proposed Development and the other Phase 1 projects, and the degree and influence of other intervening landscape influences between the viewpoint and the coast, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Medium-Low.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.121 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-Low. The Proposed Development will occupy a greater horizontal extent of the seascape than either Dublin or Codling Wind Park, due to its linear layout and similar distance from the viewpoint as the cumulative developments. While the Proposed Development and the cumulative developments will all have an influence on the view, they will be seen in different sectors of the view, and there will be separation between the Proposed Development and the cumulative developments which will prevent them appearing as a continuous development. The WTGs within all three developments will appear at a similar scale due to the similar distance of each from the viewpoint. These factors will slightly moderate the magnitude of change. The minimum distance of 29.5 km between the viewpoint and the Proposed Development, which will be the closest of the three developments, will also moderate the cumulative magnitude of change, as will the amount and influence of other intervening landscape influences between the viewpoint and the coast, to which the Proposed Development will be in the backdrop.

17.12.5.122 The Proposed Development will however extend the influence of offshore wind farm development further south in the view over the seascape from this viewpoint, which provides an elevated aspect over the cumulative changes occurring as a result of the addition of the Proposed Development together with Codling Wind Park and Dublin Array in the seascape backdrop. The position of the WTGs at the southern edge of the visible seascape means that offshore wind farm development will extend through much of the seascape, from the north-east to the south-east, although there will be clear separation between the Proposed Development and Codling Wind Park, which will maintain a section of undeveloped seascape horizon, and there are wider views of open seascape to the south. As a result of the addition of the Proposed Development together with Codling Wind Park and Dublin Array, a relatively wide proportion of the horizontal extent of the sea view available from this panoramic viewpoint will feature offshore wind farm development, albeit at relatively long range, relatively small vertical scale and in the backdrop to other prevailing landscape features in the intervening area between the viewpoint and the distant seas. On

balance, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is therefore assessed as Medium-Low.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.123 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as M**oderate (not significant)** owing to the High sensitivity of the visual receptors and the Medium-Low cumulative magnitude of change. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible. In this instance, the additional cumulative effect of the Proposed Development is assessed as not significant due to the relatively long range, relatively small vertical scale and distant position in the backdrop to other prevailing landscape features, combined with the influence of visibility modifiers at this distance and elevation, which is likely to limit visibility of the Proposed Development to periods of excellent visibility that occur infrequenty.

Viewpoint 27: Tara Hill Track

CUMULATIVE CONTEXT

17.12.5.124 Cumulative developments visible from this viewpoint comprise Codling Wind Park, which is theoretically visible in views to the north-east at a distance of 42.1 km. Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.45.1 shows that there is theoretical visibility of all of the WTGs within Codling Wind Park. There is also very limited theoretical visibility of a small number of WTGs within Dublin Array, at a minimum distance of 54.2 km, although it is unlikely that this will be visible in reality due to the distance and intervening topography. There will be no further cumulative developments visible.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.125 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.126 The cumulative wireline in Figure 17.45.1 shows that construction activity associated with Codling Wind Park will be visible to the north-east, seen towards the northern extent of the visible seascape, although there will be some screening by intervening topography from this viewpoint. The Proposed Development will be seen to the east and north-east in the seascape context, and construction activity throughout the Array Area will be visible.

17.12.5.127 Construction activity associated with the Proposed Development will be seen in closer proximity to the viewpoint, at a distance of 15 km to the nearest WTG, compared to a distance of 42.1 km to the construction activities associated with Codling Wind Park. The closer proximity of WTGs within the Proposed Development, as well as its relatively linear layout, means that its construction will occupy a wide horizontal extent, and will have a notable influence on the view, as described in the main assessment. Construction activity at the northern extent of the Array Area will overlap with construction associated with Codling Wind Park in views from this location, creating a concentration of activity in this area. The Proposed Development will introduce construction activity into otherwise undeveloped parts of the seascape. However, the cumulative magnitude of change will be moderated by the relatively limited visual influence of construction associated with Codling Wind Park, owing to the long distance to Codling Wind Park of more than

42 km from this viewpoint. On balance, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is therefore assessed as Low, primarily due to the limited cumulative interaction with Codling Wind Park at such long range from the viewpoint.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.128 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. The Proposed Development will occupy a larger horizontal extent of the view than Codling Wind Park and will be seen at closer proximity. It will be seen in the seascape context to the east and north-east, and the majority of WTGs will be readily visible, while WTGs within Codling Wind Park will be more difficult to discern in the view to the north-east due to distance. WTGs within the Proposed Development will appear to overlap with the horizontal extent occupied by WTGs within Codling Wind Park, which may mean that Codling Wind Park and the Proposed Development are perceived as combining to form one contiguous development. Taking into account ABWP1, the Proposed Development will not be seen as a new and unfamiliar feature in the view over the coast, which will moderate the magnitude of change. However, it will introduce further wind farm development into the view over the seascape to the east, which will otherwise be limited to smaller WTGs within ABWP1.

17.12.5.129 The Proposed Development will contribute more to the cumulative change due to its wider lateral spread in the field of view and its closer proximity to the viewpoint, however, the cumulative magnitude of change will be moderated by the relatively limited influence of Codling Wind Park on the views from this location, given its distance from the viewpoint and therefore the limited cumulative interaction with Codling Wind Park at such long range. On balance, the additional cumulative magnitude of change arising from the introduction of the Proposed Development is assessed as Low.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.130 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Moderate-Minor** (not significant) owing to the Medium-High sensitivity of the visual receptors and the Low cumulative magnitude of change. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible. In this instance, the effect is assessed not significant due to the limited potential for cumulative interaction with Codling Wind Park which is located at long range, given its long distance of approximately 42km from the viewpoint, which limits the effect of the Proposed Development primarily to a project alone effect from this viewpoint in all but infrequent excellent visibility conditions.

Viewpoint 28: Greystones Cliff Walk

CUMULATIVE CONTEXT

17.12.5.131 Cumulative developments theoretically visible from this viewpoint comprise North Irish Sea Array, Dublin Array and Codling Wind Park, located to the north-east at distances of 51.7 km, 9.7 km and 16.1 km respectively. Although North Irish Sea Array is indicated as theoretically visible on the cumulative wireline in Figure 17.46.1, at a distance of 51.7 km, actual visibility of this development is likely to be limited. Dublin Array will comprise 39 WTGs up to 309.6 m in height, and Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.46.1 shows that both Codling Wind Park and Dublin Array will be widely visible at relatively close proximity in the view from north-east to south-east. There will be no screening and all WTGs will be visible to their full extents, with a degree of stacking visible across both developments. Together, these developments, and North Irish Sea Array when visible, will occupy

a notable extent of the sea skyline. Dublin Array and Codling Wind Park will appear to overlap, combing to form a contiguous array extending across more than 90 degrees of the sea view. WTGs within Dublin Array will appear to be larger in scale than those within Codling Wind Park, due to their closer proximity to the viewpoint. There will be no further cumulative developments visible.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.132 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-Low. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.133 The cumulative wireline in Figure 17.46.1 shows that Dublin Array and Codling Wind Park will be visible to the north-east and south-east respectively. Construction activity associated with both developments will be apparent across a wide expanse of the visible seascape, at a distance of 9.7 km to the nearest WTG, within Dublin Array and 16.1 km to Codling Wind Park.

17.12.5.134 The Proposed Development will be seen at greater distance from the viewpoint than the cumulative developments, at a distance of 30.5 km to the nearest WTG. Construction activities within the southern parts of the Array Area will be screened from view by Wicklow Head to the south, although the construction of blade tips of several WTGs may be seen above this landform. Although construction activity associated with the Proposed Development will occupy a relatively limited extent of the overall panoramic views available from this location, it will extend the influence of construction further south into a new part of the view, in which it will be seen in sequence with Dublin Array and Codling Wind Park. Taking into account construction associated with WTGs within Dublin Array and Codling Wind Park, visible at a minimum distance of 9.7 km, the construction of the Proposed Development will appear to be relatively small in scale at such long range (over 30km). The cumulative magnitude of change during the construction period will be moderated by the oblique position of the Proposed Development in the view south along the coast, out of the main portion of the offshore sea view; the distance of 30.5 km to the closest construction activities associated with the Proposed Development; and the likelihood of more prominent construction activities associated with Dublin Array and Codling Wind Park at closer range attracting viewer attention. Dublin Array and Codling Wind Park will have a greater influence on the cumulative magnitude of change, at minimum distances of 9.7 km and 16.1 km respectively. On balance, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Medium-Low.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.135 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-Low. The Proposed Development will occupy a smaller horizontal extent of the seascape than either Dublin or Codling Wind Park, due to its greater distance from the viewpoint and screening of southern parts of the Array Area by the landform at Wicklow Head. While the Proposed Development and the cumulative developments will all have an influence on the view, they will be seen in different sectors of the view, in sequence, and there will be separation between the Proposed Development and the cumulative developments that will prevent them appearing as a continuous development.

17.12.5.136 The Proposed Development and the cumulative developments will all have a strong influence on the view, viewed in sequence in different sectors of the view, however there will be

separation between the Proposed Development and the cumulative developments which will prevent them appearing as a continuous development, as there is a clear gaps between Codling Wind Park and the Proposed Development further to the south. The longer distance of the Proposed Development from the viewpoint and its oblique position along the coast also contribute to moderating the cumulative magnitude of change.

17.12.5.137 Taking into account of the influence of the WTGs within Dublin Array and Codling Wind Park, visible at a minimum distance of 9.7 km and 16.1 km respectively, the Proposed Development will appear to be relatively smaller in scale and in the southern backdrop at such long range (over 30km). The cumulative magnitude of change during the operational and maintenance period will be moderated by the oblique position of the Proposed Development in the view south along the coast, is out of the main portion of the offshore sea view and located 30.5 km to the closest WTG within the Proposed Development. The likelihood of more prominent WTGs associated with Dublin Array and Codling Wind Park at closer range will attract greater viewer attention and contribute more to the cumulative effect than the more distant influence of the Proposed Development to the south. On balance, the additional cumulative magnitude of change arising from the construction of the Proposed Development in the context of cumulative developments is assessed as Medium-Low.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.138 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Moderate (not significant)** owing to the High sensitivity of the visual receptors and the Medium-Low cumulative magnitude of change. Although the effect is moderate, the cumulative effect is considered to be not significant in this instance, due to the distance of more than 30 km to the Proposed Development, its oblique position to the south out of the main offshore view and the greater influence that Dublin Array and Codling Wind Park will contribute to the cumulative effect at closer range. The cumulative effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible.

Viewpoint 29: Sorrento Park

CUMULATIVE CONTEXT

17.12.5.139 Cumulative developments theoretically visible from this viewpoint comprise Oriel, North Irish Sea Array, Dublin Array and Codling Wind Park. Oriel and North Irish Sea Array will be located to the north-east at distances of 68.7 km and 41.7 km respectively. Due to screening by intervening landform and distance, it is unlikely that there will be actual visibility of Oriel. North Irish Sea Array will comprise 35 WTGs up to 316 m in height. The cumulative wireline in Figure 17.47.1 indicates that there will be screening of northern parts of this development by the Howth peninsula, and actual visibility is likely to be reduced from that shown on the wirelines due to distance.

17.12.5.140 Dublin Array and Codling Wind Park will be located to the south-east, at distances of 9.8 km and 22.2 km respectively. Dublin Array will comprise 39 WTGs up to 309.6 m in height; and Codling Wind Park will comprise 60 WTGs at up to 314 m in height. The cumulative wireline in Figure 17.47.1 shows that both of these developments will be widely visible at relatively close proximity in the view to the south-east. There will be no screening and all WTGs will be visible to their full extents, with a degree of stacking visible across both developments. The horizontal extent of the two developments will overlap, which will create a concentration of WTGs across part of the horizon to the south-east. Together these developments, and to a lesser extent North Irish Sea Array when visible, will occupy a notable extent of the horizon. There will be no further cumulative developments visible.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.141 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.142 The cumulative wireline in Figure 17.47.1 shows that Dublin Array and Codling Wind Park will be visible to the north-east and south-east respectively. Construction activity associated with both developments will be apparent across a wide expanse of the visible seascape, at a distance of 9.8 km to the nearest WTG, within Dublin Array.

17.12.5.143 The Proposed Development, by contrast, may only be seen at greater distance from the viewpoint than these cumulative developments, at a distance of 41 km to the nearest WTG. Construction activities within the southern parts of the Array Area will be screened from view by Wicklow Head to the south, with construction in the north portion of the Array Area theoretically visible offshore from this distant headland. Construction activity associated with the Proposed Development will occupy a relatively limited extent of the overall panoramic views available from this location. The construction activities associated with the Proposed Development may extend the influence of construction further south into a new part of the view, however, the cumulative magnitude of change will be moderated by the distance of 41 km to the Proposed Development, which is likely to mean that the majority of construction activities at sea level would be barely discernible. Dublin Array and Codling Wind Park will contribute a greater influence to the cumulative magnitude of change on the view, due to their closer proximity at minimum distances of 9.8 km and 22.2 km respectively. On balance, the additional cumulative magnitude of change arising from the construction and decommissioning of the Proposed Development in the context of cumulative developments is assessed as Low.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.144 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Low. The Proposed Development will occupy a smaller horizontal extent of the seascape than either Dublin or Codling Wind Park, due to its greater distance from the viewpoint and screening of southern parts of the Array Area by the landform. While the Proposed Development and the cumulative developments will all have an influence on the view, they will be seen in different sectors of the view, and there will be separation between the Proposed Development and the cumulative developments which will prevent them appearing as a continuous development.

17.12.5.145 The Proposed Development is likely to extend the influence of offshore wind farm development further south in the view over the seascape from this viewpoint, appearing in sequence in the panoramic view. The Proposed Development will occupy a relatively limited horizontal extent of the wider panorama and its position is oblique to the main offshore view and features of interest to the west.

17.12.5.146 Taking into account of the influence of the WTGs within Dublin Array and Codling Wind Park, visible at a minimum distance of 9.8 km and 22.2 km respectively, the Proposed Development will appear to be relatively smaller in scale and in the southern backdrop at such long range (over 41km). The cumulative magnitude of change during the operational and maintenance period will be moderated by the oblique position of the Proposed Development in the view south along the coast, which is out of the main portion of the offshore sea view and located over 41 km to the closest WTG within the Proposed Development. The likelihood of more prominent WTGs associated with Dublin Array and Codling Wind Park at closer range will attract greater viewer attention and contribute more to the cumulative effect than the more distant

influence of the Proposed Development to the south. On balance, the additional cumulative magnitude of change arising from the construction of the Proposed Development in the context of cumulative developments is assessed as Low.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.147 The contribution of the Proposed Development to the cumulative effect during the construction and operational phases is assessed as **Moderate-Minor (not significant)** owing to the Medium-High sensitivity of the visual receptors and the Low cumulative magnitude of change. The effect is assessed as adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible. The cumulative effect is considered to be not significant in this instance, due to the distance of more than 41 km to the Proposed Development, its oblique position to the south out of the main offshore view and the greater influence that Dublin Array and Codling Wind Park will contribute to the cumulative effect at closer range.

Visual Receptors

17.12.5.148 This section provides a description of the likely significant cumulative effects on visual receptors arising from the additional contribution of the Proposed Development when considered with the Phase 1 Projects (particularly Codling Wind Park and Dublin Array), in respect of the operational and maintenance phase, and the construction and decommissioning phases of the Proposed Development. It is informed by the preceding viewpoint assessment considering cumulative effects from representative viewpoints. Visual receptors scoped in for detailed assessment comprise people travelling on the R750, Dublin-Cherbourg ferry, and the railway between Greystones – Wicklow. The baseline description and sensitivity of each visual receptor is presented in the main assessment in Section 17.10.1, and as described above, ABWP2 is assessed to result in significant project alone effects on visual receptors travelling on each of these routes in the main assessment (Section 17.10.1).

17.12.5.149 The cumulative ZTVs in Figures 17.17.1 – 17.18.2 indicate the areas from which there may be combined theoretical visibility of the Proposed Development with either Codling Wind Park or Dublin Array (in green) from where it may result in additional cumulative effects. Actual combined visibility will be more limited than that which is shown on the figures due to screening of views by settlement and vegetation cover in the landscape that is not modelled in the cumulative ZTVs.

R750

17.12.5.150 As described in the main assessment, vegetation alongside the R750 restricts outward views towards the Irish Sea from much of the route. Significant effects are identified in the project-alone assessment from parts of the route which experience open views to the east, generally restricted to parts of the route between Mizen Head and Arklow. Viewpoint 24: Mizen Head is indicative of the most open views experienced from this stretch of the route, and significant cumulative effects are identified from this viewpoint in the preceding assessment of this representative viewpoint.

17.12.5.151 However, from the majority of this route, there will be limited cumulative intervisibility of the Proposed Development alongside Codling Wind Park and Dublin Array, and therefore limited opportunity for significant cumulative visual effects. This includes parts of the route which are identified as experiencing a significant effect due to visibility of the Proposed Development alone. For example, significant visual effects are identified at Viewpoint 4: Ballynacarrig Public House in the main assessment, but there is no visibility of cumulative developments from this viewpoint, and there will therefore be no cumulative effect from this part of the R750.

17.12.5.152 From a short stretch of the R750 near Mizen Head, as represented by Viewpoint 24: Mizen Head, there will be a High cumulative magnitude of change. The contribution of the Proposed

Development to the cumulative effect during the construction and operational phases is assessed as **Major-Moderate (significant)** owing to the Medium sensitivity of the visual receptors along this part of the route and the High cumulative magnitude of change. Overall, the contribution of the Proposed Development to the cumulative effect will be significant from a short stretch of the R750 route near Mizen Head, but the cumulative effect will be not significant over the majority of the route (due to the lack of intervisibility of Dublin Array and Codling Wind Park, and the degree of containment by landform and vegetation along much of the route).

DUBLIN – CHERBOURG FERRY

17.12.5.153 Significant visual effects are identified in the main assessment from the majority of the Dublin – Cherbourg ferry route within the Study Area. Significant cumulative effects are also anticipated where the Proposed Development will be seen alongside Codling Wind Park and Dublin Array in the seascape. These effects are likely to be experienced by passengers from the northern parts of the Dublin – Cherbourg ferry route within the Study Area where the route is in closest proximity to the Proposed Development, Codling Wind Park and Dublin Array. In particular, along the stretch of the route where it passes between Dublin Array and to the east of the Array Area, visual receptors will experience successive visibility of the Proposed Development alongside both Dublin Array and Codling Wind Park, and there will be a High cumulative magnitude of change. The contribution of the Proposed Development to the additional cumulative effect experienced from the Dublin – Cherbourg ferry route is assessed as **Major (significant)** during the construction and decommissioning phases and the operation and maintenance phase, owing to the Medium-High sensitivity and the High cumulative magnitude of change. The cumulative effect will be not significant on views experienced from the Dublin – Cherbourg ferry route at longer distances to the south of the SLVIA study area, where the influence of Codling Wind Park and Dublin Array will diminish.

RAILWAY BETWEEN GREYSTONES AND WICKLOW17.10.3

17.12.5.154 As indicated in the cumulative ZTVs in Figures 17.17.1 – 17.18.2, there will be combined visibility of the Proposed Development alongside Codling Wind Park and Dublin Array from much of the railway line between Greystones and Wicklow. Passengers travelling in both directions on this route will experience successive views of the Proposed Development alongside Codling Wind Park and Dublin at relatively short to mid-range in easterly sea views.

17.12.5.155 Viewpoint 25: Newcastle Beach is representative of views experienced by people travelling on the route between Newcastle and north of Wicklow, from which significant cumulative effects are identified for passengers at this viewpoint during the construction and decommissioning phases and the operational and maintenance phase above. There will be a Medium cumulative magnitude of change associated with the contribution of the Proposed Development to the cumulative effect, and **Moderate (significant)** effects will be experienced by receptors travelling along this part of the railway line as represented by Viewpoint 25.

17.12.5.156 From parts of the route between Greystones and Newcastle, the cumulative magnitude of change is assessed as Medium and the contribution of the Proposed Development to the cumulative effect is considered to be **Moderate (not significant)**. Views along this part of the route will be similar to those experienced at Viewpoint 28: Greystones Cliff Walk. Although the effect is moderate, the cumulative effect is considered to be not significant from this stretch of the route, due to the distance of more than 30 km to the Proposed Development, its oblique position to the south out of the main offshore view and the greater influence that Dublin Array and Codling Wind Park will contribute to the cumulative effect at closer range.

17.12.5.157 As described in the main assessment, visibility of the Proposed Development will be more restricted from parts of the route directly north of Wicklow, and cumulative effects along this stretch of the railway line are assessed as not significant.

RSCA 13: South East Irish Sea

CUMULATIVE CONTEXT

17.12.5.158 There are no cumulative developments located within this RSCA. Codling Wind Park is located within the neighbouring RSCA14: Irish Sea, Sanbanks and Broad Bays, and Dublin Array is located partially within RSCA 14 and partially within RSCA15: Dublin Bay. The cumulative ZTVs in Figures 17.17.1 and 17.18.1 indicate that both Codling Wind Park and Dublin Array will be theoretically visible throughout much of RSCA13, with theoretical visibility extending throughout the area within which the Array Area is located, and to the north. Dublin Array will comprise 39 WTGs up to 309.6 m in height; and Codling Wind Park will comprise 60 WTGs at up to 314 m in height.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.159 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as High. There will be direct effects on the seascape of this RSCA as a result of the construction and decommissioning of the Proposed Development, while cumulative developments will be located within neighbouring RSCAs and will therefore not have a direct effect on the seascape of this RSCA. However, the key characteristics of the RSCA generally relate to the coastline of the area, and the perceptual characteristics of the sea as experienced from the coast, as opposed to the physical characteristics of the seascape. Direct effects will therefore generally be limited to the physical influence of construction and decommissioning activity, including the presence of partially built WTGs, and will be as assessed in the main assessment.

17.12.5.160 Perceptual characteristics of the RSCA will be influenced by the Proposed Development alongside cumulative developments. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view from the coastline will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness. There will be more limited intervisibility with Dublin Array, due to screening by Wicklow Head. On balance, the Proposed Development will generally be seen alongside Codling Wind Park.

17.12.5.161 The Proposed Development will be seen at closer proximity from the coastline of this RSCA than the cumulative developments. Between Wicklow Head at the northern extent of the RSCA and Cahore Point towards the south, there will visibility of construction and decommissioning activity throughout the full extent of the Array Area, seen at closer proximity than construction activity associated with Codling Wind Park, which will generally be seen beyond or adjacent to the Proposed Development to the north-east. From some limited parts of the coastline generally located towards the north of the RSCA, Dublin Array will also be seen beyond the Proposed Development and Codling Wind Park. To the south of Cahore Point, intervisibility of the Proposed Development alongside cumulative developments will be limited due to screening by the landform, and the magnitude of change across this area will be as described in the main assessment.

17.12.5.162 The Proposed Development will result in indirect effects on the key characteristics of the coastline, adding man-made activity to the often panoramic views available over the coast, and will bring this influence into closer proximity than other cumulative developments. It will also extend the spread of this influence throughout a greater horizontal extent of the view from the coastline, and the effect will be appreciated from a greater distance of the coastline within the RSCA, extending visibility of construction and decommissioning activity further south than either

Codling Wind Park or Dublin Array. This activity will be temporary and short-term, and generally restricted to movement of boats and associated infrastructure in the sea, and views of partially built WTGs. Overall, the contribution of the Proposed Development cumulative magnitude of change to the perceptual character of the seascape will be High.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.163 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as High. There will be direct effects on the seascape of this RSCA as a result of the operation of the Proposed Development, while cumulative developments will be located within neighbouring RSCAs and will therefore not have a direct effect on the seascape of this RSCA. However, the key characteristics of the RSCA generally relate to the coastline of the area, and the perceptual characteristics of the sea as experienced from the coast, as opposed to the physical characteristics of the seascape. Direct effects will therefore generally be limited to the physical influence of the Proposed Development, including the presence of WTGs, and will be as assessed in the main assessment.

17.12.5.164 Perceptual characteristics of the RSCA will be influenced by the Proposed Development alongside cumulative developments. The Proposed Development will be seen at closer proximity from the coastline of this RSCA than the cumulative developments. Between Wicklow Head at the northern extent of the RSCA and Cahore Point towards the south, there will be visibility of the full extent of the Array Area, seen at closer proximity than Codling Wind Park, which will generally be seen beyond or adjacent to the Proposed Development to the north-east. From some limited parts of the coastline generally located towards the north of the RSCA, Dublin Array will also be seen beyond the Proposed Development and Codling Wind Park. To the south of Cahore Point, intervisibility of the Proposed Development alongside cumulative developments will be limited due to screening by the landform, and the magnitude of change across this area will be as described in the main assessment.

17.12.5.165 The Proposed Development will result in indirect effects on the key characteristics of the coastline, adding man-made infrastructure to the often panoramic views available over the coast, and will bring this influence into closer proximity than other cumulative developments. It will also extend the spread of this influence throughout a greater horizontal extent of the view from the coastline, and the effect will be appreciated from a greater distance of the coastline within the RSCA, extending visibility of construction activity further south than either Codling Wind Park or Dublin Array. This activity will be temporary and long-term, and generally restricted to views of WTGs and OSPs. Overall, the magnitude of change to the perceptual character of the seascape will be High and the combined influence of the Proposed Development in addition to Codling Wind Park and Dublin Array will likely result in the character of the northern part of RSCA13 being partially changed to be influenced by offshore WTGs as a key characteristic of the seascape character.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.166 The contribution of the Proposed Development to the cumulative effect during the operational phases will be **Major (significant)** owing to the High sensitivity of the RSCA and the High cumulative magnitude of change. The effect will be adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible. Overall, the cumulative effect resulting from the addition of the Proposed Development in this seascape with the influence of both Codling Wind Park in the neighbouring RSCA14 and Dublin Array in RSCA15, will likely result in the northern part of RSCA13 being partially defined by the influence of offshore WTGs as a key characteristic of the seascape character, with this cumulative effect diminishes further to the south of RSC13 with increasing distance.

RSCA 14: Irish Sea, Sandbanks and Broad Bays

CUMULATIVE CONTEXT

17.12.5.167 Cumulative developments located within this RSCA comprise Codling Wind Park and Dublin Array, which extends between RSCA14: Irish Sea, Sandbanks and Broad Bays and the neighbouring RSCA15: Dublin Bay. The cumulative ZTVs in Figures 17.17.1 and 17.18.1 indicate that both Codling Wind Park and Dublin Array will be theoretically visible throughout the majority of RSCA14. Dublin Array will comprise 39 WTGs up to 309.6 m in height; and Codling Wind Park will comprise 60 WTGs at up to 314 m in height.

CONSTRUCTION AND DECOMMISSIONING PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.168 During the construction and decommissioning phases, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-High. There will be no direct effects on the seascape of this RSCA as a result of the construction and decommissioning of the Proposed Development. However, there will be an influence on the perceptual characteristics of the RSCA as experienced from the coastline.

17.12.5.169 Perceptual characteristics of the RSCA will be influenced by the Proposed Development alongside cumulative developments. For the purposes of the assessment, it is assumed that the Phase 1 offshore wind farms will be constructed during a similar time frame and, that as a result, the view from the coastline will be altered by the presence of construction vessels, the emergence of offshore WTGs and associated infrastructure and the use of artificial lighting to aid construction during hours of darkness.

17.12.5.170 The Proposed Development will be seen at greater distance from the coastline of this RSCA than Codling Wind Park and Dublin Array. Along parts of the coast between Wicklow and Newcastle beach, visibility of the Proposed Development will be limited. From parts of the coastline further north, there will be more extensive visibility of the Proposed Development. From these areas, it will be seen at greater distance than Codling Wind Park and Dublin Array, and will extend the influence of construction and decommissioning activity throughout a wider extent of the seascape.

17.12.5.171 The Proposed Development will result in indirect effects on the key characteristics of the coastline, extending the influence of man-made activity throughout a greater extent of the panoramic views available over the coast, albeit at greater distance and occupying a more limited horizontal extent of the view than other cumulative developments. This activity will be temporary and short-term, and generally restricted to movement of boats and associated infrastructure in the sea, and views of partially built WTGs. Overall, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as High during the construction and decommissioning phases.

OPERATIONAL AND MAINTENANCE PHASE CUMULATIVE MAGNITUDE OF CHANGE

17.12.5.172 During the operational phase, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-High. There will be no direct effects on the seascape of this RSCA as a result of the operation of the Proposed Development. However, there will be an influence on the perceptual characteristics of the RSCA as experienced from the coastline.

17.12.5.173 Perceptual characteristics of the RSCA will be influenced by the Proposed Development alongside cumulative developments. The Proposed Development will be seen at greater distance from the coastline of this RSCA than Codling Wind Park and Dublin Array. Along parts of the coast between Wicklow and Newcastle beach, visibility of the Proposed Development will be limited, while Codling Wind Park and Dublin Array will be visible and exert a greater influence on

views from the coastline. From parts of the coastline further north, there will be more extensive visibility of the Proposed Development. From these areas, it will be seen at greater distance than Codling Wind Park and Dublin Array and will extend the influence of construction and decommissioning activity throughout a wider extent of the seascape.

17.12.5.174 The Proposed Development will result in indirect effects on the key characteristics of the coastline, extending the influence of man-made development throughout a greater extent of the panoramic views available over the coast, albeit at greater distance and occupying a more limited horizontal extent of the view than other cumulative developments. This activity will be temporary and long-term. Overall, the additional cumulative magnitude of change resulting from the contribution of the Proposed Development is assessed as Medium-High during the operational and maintenance phases on the perceived character of RSCA14 and the combined influence of the Proposed Development in addition to Codling Wind Park and Dublin Array will likely result in the character of the northern part of RSCA14 being partially changed to be influenced by offshore WTGs as a key characteristic of the seascape character.

CUMULATIVE SIGNIFICANCE OF EFFECT

17.12.5.175 The contribution of the Proposed Development to the cumulative effect during the operational phases will be **Major-Moderate (significant)** owing to the Medium-High sensitivity of the RSCA and the Medium-High cumulative magnitude of change. The effect will be adverse, short term during the construction and decommissioning phases and long term during the operational phase, and reversible. Overall, the cumulative effect resulting from the addition of the Proposed Development to the south of RSCA14 with the influence of Codling Wind Park in this RSCA, and Dublin Array in the neighbouring RSCA15 to the north, will likely result in RSCA14 being partially defined by the influence of offshore WTGs as a key characteristic of the seascape character.

Phase 1 Projects CIA: Impact 3 – Landscape Character Effects

17.12.5.176 This section provides a description of the likely significant cumulative effects on landscape character receptors, arising from the additional contribution of the Proposed Development when considered with the Phase 1 Projects (particularly Codling Wind Park and Dublin Array), in respect of both the operational and maintenance phase, and the construction and decommissioning phases. The baseline description and sensitivity of each receptor is presented in the main assessment in Section 17.10.3.

17.12.5.177 The cumulative ZTVs in Figures 17.17.1 – 17.18.2 indicate the parts of the Study Area which may experience theoretical visibility of the Proposed Development alongside Codling Wind Park and Dublin Array, from which cumulative effects on perceived landscape may occur. Figures 17.17.1 – 17.17.2 indicate that combined visibility of the Proposed Development alongside Codling Wind Park is generally restricted to within approximately 20 km of the Array Area, while Figures 17.18.1 – 17.18.2 indicate that there will be combined visibility of the Proposed Development and Dublin Array within a relatively restricted area to the north-west of the Array Area, again within approximately 20 km. Actual visibility will be reduced by screening by surface features including settlement and vegetation cover.

17.12.5.178 Significant cumulative landscape effects resulting from the contribution of the Proposed Development to the cumulative context are likely to be restricted to coastal LCAs with open views towards the Irish Sea. These LCAs comprise the Northern Coastal Area (Wicklow) LCA, Southern Coastal Area (Wicklow) LCA and Coastal (Wexford) LCA. From parts of these LCAs, the Proposed Development will be seen alongside Codling Wind Park and/or Dublin Array in the view over the associated seascape context. These coastal LCAs have a direct relationship with the Irish Sea, as well as perceptual qualities and key characteristics which relate to the interplay between the landform and the sea. Significant effects on perceived character were identified for each of these LCAs within the main assessment.

17.12.5.179 The Northern Coastal Area (Wicklow) LCA will experience a Medium-Low cumulative magnitude of change and **Moderate (significant)** cumulative effect arising from the additional contribution of the Proposed Development when considered cumulatively with Codling Wind Park and Dublin Array. This will primarily be as a result of perceptual changes to the character of the LCA as a result of the increased influence of WTGs in the seascape context, as well as construction and decommissioning activity. In particular, these elements will have an influence on the "*intermittent views of the sea from the coast road*" (Wicklow County Council, 2016). The Proposed Development will be visible in relatively oblique views to the south-east from the coast within this LCA, while Codling Wind Park in particular will be seen in more direct views and will have a greater influence on the cumulative magnitude of change.

17.12.5.180 The Southern Coastal Area (Wicklow) LCA will experience a Medium cumulative magnitude of change and **Major-Moderate (significant)** cumulative effect arising from the additional contribution of the Proposed Development when considered cumulatively with Codling Wind Park and Dublin Array. This will primarily be as a result of perceptual changes to the character of the LCA as a result of the increased influence of WTGs in the seascape context, as well as construction and decommissioning activity. In particular, these elements will have an influence on the perceived "*tranquil and remote*" character of the LCA and on the "*continuous prospect and numerous views from the coast road out to sea*" (Wicklow County Council, 2016).

17.12.5.181 The Coastal (Wexford) LCA will experience a Medium-Low cumulative magnitude of change and **Moderate (significant)** cumulative effect arising from the additional contribution of the Proposed Development when considered cumulatively with Codling Wind Park and Dublin Array. This will primarily be as a result of perceptual changes to the character of the LCA as a result of increased influence of WTGs in the seascape context, as well as construction and decommissioning activity. In particular, these elements will have an influence on the perceived "*tranquil and remote*" character of the LCA and on the "*continuous prospect and numerous views from the coast road out to sea*" (Wicklow County Council, 2016).

17.12.5.182 For each of these LCAs, the characteristic views out to sea will remain, and the LCAs will remain flat, relatively expansive landscapes of varied land cover whose character is influenced by the dynamic influences of the sea and surrounding settlement. However, the Proposed Development will contribute to the increasing influence of WTGs in the view over the Irish Sea. A relatively expansive extent of the adjacent seascape will be occupied by offshore wind farm development, particularly from the Southern Coastal Area (Wicklow) LCA, as well as construction and decommissioning activity during these phases, to which the Proposed Development will contribute. From the Coastal (Wexford) LCA, a more limited extent of the adjacent seascape will be occupied by WTGs, due to the position of the Proposed Development, Codling Wind Park and Dublin Array to the north-east. From the Northern Coastal Area (Wicklow) and Southern Coastal Area (Wicklow) LCAs the Proposed Development, Codling Wind Park and Dublin Array will extend throughout the view from north-east to south-east and will therefore occupy a greater proportion of coastal views.

17.12.5.183 These significant cumulative effects are likely to be experienced within parts of the LCAs with open views over the Irish Sea, generally restricted to the coastline itself. Further inland, visibility of the sea is reduced by settlement and vegetation cover, and there will be more limited visibility of the Proposed Development alongside Codling Wind Park and Dublin Array, and therefore more limited opportunity for significant cumulative landscape effects.

17.12.5.184 Although the cumulative ZTVs in Figures 17.17.1 – 17.18.2 also indicate combined visibility of the Proposed Development alongside Codling Wind Park and Dublin Array from inland LCAs, these have a more limited relationship with the Irish Sea. Although there may be significant cumulative visual effects identified from viewpoints within these LCAs, the key characteristics and perceptual qualities of inland LCAs are generally focussed on characterising elements within the LCAs themselves, and are not informed by the relationship with the coast. Therefore, changes in

the seascape context associated with the construction and decommissioning or operation and maintenance phases of the Proposed Development in a cumulative context which includes Codling Wind Park and Dublin Array are unlikely to result in a significant effect on inland LCAs. These include the Mountain Uplands (Wicklow) LCA, Bray Mountains Group / Northern Hills (Wicklow) LCA, Uplands (Wexford) LCA and Lowlands (Wexford) LCA, as well as all other LCAs within the Study Area scoped out of detailed assessment.

Phase 1 Project CIA: Impact 4 – Landscape Designation Effects

17.12.5.185 This section provides a description of the likely significant cumulative effects on landscape designations, in respect of both the operational and maintenance phase, and the construction and decommissioning phases of the Proposed Development. The baseline description and sensitivity of each receptor is presented in the main assessment in Section 17.10.3. As identified in the main assessment above, there will be no significant effects on the WMNP and an assessment of cumulative effects on this receptor is therefore scoped out of the assessment. This section therefore focusses on cumulative effects on the Bray Head SAAO arising from the Proposed Development.

17.12.5.186 As shown in the cumulative ZTVs in Figure 17.17.1 – 17.18.2, there will be combined visibility of the Proposed Development alongside Dublin Array and Codling Wind Park from a very limited part of the Bray Head SAAO. Viewpoint 28 is representative of views experienced from this part of the SAAO, and significant cumulative visual effects are not identified from this viewpoint. As described in the main assessment, changes will only occur to the visual aspects of the designation's perceived character as a result of the views of the Proposed Development and cumulative developments outside the SAAO, in its associate seascape context. These changes occur to specific aesthetic / perceptual aspects, as described for the Bray Mountains Group / Northern Hills LCA, within which the SAAO is located, particularly its open and exposed character, as a result of further WTG development influence in its open views out across the sea to the horizon. However, these changes will primarily occur as a result of the addition of Codling Wind Park and Dublin Array to the view, while the Proposed Development will be seen at distances of almost 30 km and will have a more limited contribution to changes in the character of the designation. During the operational phase, the additional cumulative magnitude of change on the Bray Head SAAO resulting from the contribution of the Proposed Development is assessed as Medium-Low the additional cumulative effect resulting from the Proposed Development on the perceived landscape character of the Bray Head SAAO is assessed as **Moderate (not significant)**, during the operational and maintenance phase and the construction and decommissioning phases.

17.13 Transboundary effects

17.13.1.1 A screening of transboundary impacts has been carried out and has identified that there was no potential for significant transboundary effects with regard to seascape, landscape and visual receptors from the Proposed Development upon the interests of other states.

17.13.1.2 The Proposed Development is located approximately 76 km from the coastline of the nearest state (United Kingdom). Although theoretical visibility is indicated in the ZTV (Figure 17.6.2) from the Gwynedd coast in Wales, this is located approximately 80 km from the Proposed Development, with no likely significant effects predicted due to the very long distance, prevailing visibility conditions across the Irish Sea and the visual acuity of the eye to perceive WTGs at such range. The ZTV in Figure 17.6.2 shows that there is no theoretical visibility of the Proposed Development from seascape beyond approximately 70 km due to the effects of earth curvature, which would effectively 'hide' the wind turbines behind the horizon at this distance.

17.14 Summary of effects

17.14.1.1 The SLVIA has assessed the potential environmental impacts arising from the construction, operation and maintenance and decommissioning phases of the Proposed Development on the seascape, landscape and visual resource. The SLVIA has considered the impacts of the Proposed Development on viewpoints and visual receptors, seascape character, landscape character and landscape designations. This section, including Table 17.18, confirms the significance of any residual effects, considering embedded mitigation.

17.14.1.2 Two Project Design Options have been assessed. There is no difference in the level of effect identified for any of the receptors in relation to each of the Project Design Options. Each Project Design Option is therefore considered to have the same impact on the seascape, landscape and visual resource. A 100m limit of deviation of WTGs and OSPs has been included in the design parameters for both Project Design Options. This is not considered to have an influence on the level of effect experienced by seascape, landscape and visual receptors.

17.14.1.3 Overall, significant adverse effects have been identified in relation to:

- Visual receptors at 24 of the 29 viewpoints.
- Visual receptors experiencing views of night time lighting at three of the four representative viewpoints assessed.
- Visual receptors travelling along parts of the R750, Dublin – Cherbourg ferry routes and railway between Greystones and Wicklow. Receptors along other parts of these routes will not experience significant effects.
- One seascape character receptor, the RSCA 13: South East Irish Sea, within which the Array Area is located.
- Three landscape character receptors, comprising Coastal (Wexford) LCA, Northern Coastal Area (Wicklow) LCA and Southern Coastal Area (Wicklow) LCA.
- One landscape designation, the Bray Head SAAO.

17.14.1.4 Significant adverse cumulative effects have been identified in relation to:

- Visual receptors at 6 of the 29 viewpoints.
- Visual receptors travelling along parts of the R750, Dublin – Cherbourg ferry route and railway line between Greystones – Wicklow. Receptors along other parts of these routes will not experience significant effects.
- Two seascape character receptors, comprising the RSCA13: South East Irish Sea and RSCA14: Irish Sea, Sandbanks and Broad Bays, where the cumulative effect resulting from the addition of the Proposed Development with the influence of both Codling Wind Park and Dublin Array, will likely result in the seascape being partially defined by the influence of offshore WTGs as a key characteristic of the seascape character.
- Three landscape character receptors, comprising the Southern Coastal Area (Wicklow) LCA, Northern Coastal Area (Wicklow) LCA and Coastal (Wexford) LCA.

17.14.1.5 These effects will be short-term during the construction and decommissioning phases, and long-term during the operational and maintenance phase (as described within Section 17.8.2), and reversible.

17.14.1.6 All other effects have been identified as not significant.

17.14.1.7 A summary of the effects assessed in Chapter 17 is provided in Table 17.18.

Table 17.18: Summary of potential environmental impacts, mitigation and monitoring for Project Design Option 1 and Project Design Option 2

Description of impact	Phase C	Phase O	Phase D	Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
Visual Effects										
Viewpoint 1: Wicklow Head	✓	✓	✓	Adherence to a Lighting and Marking Plan (LMP) (Volume III, Appendix 25.6) Adherence to a Rehabilitation Schedule (Volume III, Appendix 4.1). Promulgation of information to the IAA. Layout design. Charting of all structures associated with the Proposed Development on relevant nautical and electronic charts (Volume	High	High	Major (significant)	None	Major (significant)	N/A
Viewpoint 2: Blainroe Golf Club	✓	✓	✓		High	Medium-high	Major (significant)	None	Major (significant)	N/A
Viewpoint 3: Ballynacarrig 3rd Class Road	✓	✓	✓		High	Medium-high	Major (significant)	None	Major (significant)	N/A
Viewpoint 4: Ballynacarrig Public House	✓	✓	✓		High	Medium	Major-moderate (significant)	None	Major-moderate (significant)	N/A
Viewpoint 5: Brittas Bay Beach	✓	✓	✓		High	High	Major (significant)	None	Major (significant)	N/A
Viewpoint 6: Tongelee 3rd Class Road	✓	✓	✓		Medium-high	Medium-high	Major-moderate (significant)	None	Major-moderate (significant)	N/A
Viewpoint 7: Ballinvally 3rd Class Road	✓	✓	✓		Medium-high	High	Major (significant)	None	Major (significant)	N/A

Description of impact	Phase			Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
	C	O	D							
Viewpoint 8: Ballinaskea 3rd Class Road	✓	✓	✓	III, Appendix 25.7: Vessel Management Plan). Aviation lighting (Volume III, Appendix 25.6: LMP).	Medium-high	Medium-high	Major-moderate (significant)	None	Major-moderate (significant)	N/A
Viewpoint 9: Johnstown N11 / M11	✓	✓	✓		Medium-high	Medium	Moderate (significant)	None	Moderate (significant)	N/A
Viewpoint 10: Ferry Bank, Arklow	✓	✓	✓		High	High	Major (significant)	None	Major (significant)	N/A
Viewpoint 11: Arklow Town	✓	✓	✓		High	Medium-high	Major (significant)	None	Major (significant)	N/A
Viewpoint 12: Moneyribbin 3rd Class Road	✓	✓	✓		Medium-high	Medium-high	Major-moderate (significant)	None	Major-moderate (significant)	N/A
Viewpoint 13: Clogga Amenity Area	✓	✓	✓		High	High	Major (significant)	None	Major (significant)	N/A
Viewpoint 14: Kilmichael Point	✓	✓	✓		High	High	Major (significant)	None	Major (significant)	N/A
Viewpoint 15: Clones Coast Road	✓	✓	✓		High	High	Major (significant)	None	Major (significant)	N/A

Description of impact	Phase			Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
	C	O	D							
Viewpoint 16: Tara Hill Minor Road	✓	✓	✓		Medium-high	High	Major (significant)	None	Major (significant)	N/A
Viewpoint 17: Ballymoney Beach	✓	✓	✓		High	High	Major (significant)	None	Major (significant)	N/A
Viewpoint 18: Courtown Harbour Beach	✓	✓	✓		Medium	Medium-high	Moderate (significant)	None	Moderate (significant)	N/A
Viewpoint 19: Cahore Point	✓	✓	✓		Medium-high	High	Major (significant)	None	Major (significant)	N/A
Viewpoint 20: Curracloe Beach	✓	✓	✓		Medium-low	Medium-high	Moderate (not significant)	None	Moderate (not significant)	N/A
Viewpoint 21: Barnacleagh Minor Road	✓	✓	✓		Medium	Medium-high	Moderate (significant)	None	Moderate (significant)	N/A
Viewpoint 22: Johnstown Coast Road	✓	✓	✓		High	High	Major (significant)	None	Major (significant)	N/A
Viewpoint 23: Kileagh Minor Road	✓	✓	✓		Medium	Medium-high	Moderate (not significant)	None	Moderate (not significant)	N/A

Description of impact	Phase			Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
	C	O	D							
Viewpoint 24: Mizen Head	✓	✓	✓		High	High	Major (significant)	None	Major (significant)	N/A
Viewpoint 25: Newcastle Beach	✓	✓	✓		Medium	Medium-high	Moderate (significant)	None	Moderate (significant)	N/A
Viewpoint 26: Scarr Mountain	✓	✓	✓		Medium-low	High	Moderate (not significant)	None	Moderate (not significant)	N/A
Viewpoint 27: Tara Hill Track	✓	✓	✓		Medium-high	High	Major (significant)	None	Major (significant)	N/A
Viewpoint 28: Greystones Cliff Walk	✓	✓	✓		Medium-low	High	Moderate (not significant)	None	Moderate (not significant)	N/A
Viewpoint 29: Sorrento Park	✓	✓	✓		Low	High	Moderate-minor (not significant)	None	Moderate-minor (not significant)	N/A
R750	✓	✓	✓		Low, medium, medium-high	Medium-low to Medium	Minor (not significant), moderate (significant), moderate (not significant)	None	Minor (not significant), moderate (significant), moderate (not significant)	N/A

Description of impact	Phase			Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
	C	O	D							
Dublin – Cherbourg ferry	✓	✓	✓		High, medium-high	Medium-high	Major (significant), major-moderate (significant)	None	Major (significant), major-moderate (significant)	N/A
Railway between Greystones and Wicklow	✓	✓	✓		Medium, low medium-low	Medium-high	Moderate (significant), moderate (not significant), moderate-minor (not significant)	None	Moderate (significant), moderate (not significant), moderate-minor (not significant)	N/A
Viewpoint 4: Ballynacarrig Public House at night time	✓	✓	✓		Medium-high (2000cd red aviation warning lights) / medium-low (2000cd white aviation warning lights)	Medium	Moderate (significant) (2000cd red aviation warning lights) / moderate-minor (not significant) (2000cd white aviation warning lights)	None	Moderate (significant) (2000cd red aviation warning lights) / moderate-minor (not significant) (2000cd white aviation warning lights)	N/A

Description of impact	Phase C	Phase O	Phase D	Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
Viewpoint 10: Ferry Bank, Arklow at night time	✓	✓	✓		Medium-high (2000cd red aviation warning lights) / medium (white aviation warning lights)	Medium-high	Major-moderate (significant) (2000cd red aviation warning lights) / moderate (significant) (2000cd white warning lights)	None	Major-moderate (significant) (2000cd red aviation warning lights) / moderate (significant) (2000cd white warning lights)	N/A
Viewpoint 13: Clogga Amenity Area at night time	✓	✓	✓		High (2000cd red aviation warning lights) / medium (2000cd white aviation warning lights)	High	Major (significant) (2000cd red aviation warning lights) / moderate (significant) (2000cd white aviation warning lights)	None	Major (significant) (2000cd red aviation warning lights) / moderate (significant) (2000cd white aviation warning lights)	N/A
Viewpoint 24: Mizen Head at night time	✓	✓	✓		High (2000cd red	Medium-high	Major (significant) (2000cd red aviation warning lights) /	None	Major (significant) (2000cd red aviation warning lights) /	N/A

Description of impact	Phase C	Phase O	Phase D	Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
					aviation warning lights) / medium (2000cd white aviation warning lights)		moderate (significant) (2000cd white aviation warning lights)		moderate (significant) (2000cd white aviation warning lights)	
Seascape effects										
RSCA 13: South East Irish Sea	✓	✓	✓	Adherence to a Lighting and Marking Plan (LMP) (Volume III, Appendix 25.6) Adherence to a Rehabilitation Schedule (Volume III, Appendix 4.1). Promulgation of information to the IAA.	High, medium	High	Major (significant), major-moderate (significant)	None	Major (significant), major-moderate (significant)	N/A
RSCA 14: Irish Sea, Sandbanks & Broad Bays	✓	✓	✓		Medium	Medium-high	Moderate (not significant)	None	Moderate (not significant)	N/A

Description of impact	Phase C	O	D	Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
				Layout design. Charting of all structures associated with the Proposed Development on relevant nautical and electronic charts (Volume III, Appendix 25.7: Vessel Management Plan). Aviation lighting (Volume III, Appendix 25.6: LMP).						
Landscape character effects										
Mountain Uplands (Wicklow) LCA	✓	✓	✓	Adherence to a Lighting and Marking Plan (LMP) (Volume	Medium-low	High	Moderate (not significant)	None	Moderate (not significant)	N/A
Bray Mountains Group / Northern Hills (Wicklow) LCA	✓	✓	✓		Medium	Medium-high	Moderate (not significant)	None	Moderate (not significant)	N/A

Description of impact	Phase C	Phase O	Phase D	Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
Northern Coastal Area (Wicklow) LCA	✓	✓	✓	III, Appendix 25.6) Adherence to a Rehabilitation Schedule (Volume III, Appendix 4.1). Promulgation of information to the IAA Layout design Charting of all structures associated with the Proposed Development on relevant nautical and electronic charts (Volume III, Appendix 25.7: Vessel Management Plan) Aviation lighting (Volume III, Appendix 25.6: LMP).	Medium-high, low	Medium-high	Major-moderate (significant), moderate-minor (not significant)	None	Major-moderate (significant), moderate-minor (not significant)	N/A
Southern Coastal Area (Wicklow) LCA	✓	✓	✓		High, low	High	Major (significant), moderate-minor (not significant)	None	Major (significant), moderate-minor (not significant)	N/A
Uplands (Wexford) LCA	✓	✓	✓		Medium-low, low	Medium	Moderate-minor (not significant), minor (not significant)		Moderate-minor (not significant), minor (not significant)	
Lowlands (Wexford) LCA	✓	✓	✓		Low	Medium-high	Moderate-minor (not significant)	None	Moderate-minor (not significant)	N/A
Coastal (Wexford) LCA	✓	✓	✓		High, low	Medium-high	Major (significant), moderate-minor (not significant)	None	Major (significant), moderate-minor (not significant)	N/A

Description of impact	Phase C	Phase O	Phase D	Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
Landscape designation effects										
Wicklow Mountains National Park	✓	✓	✓	Adherence to a Lighting and Marking Plan (LMP) (Volume III, Appendix 25.6). Adherence to a Rehabilitation Schedule (Volume III, Appendix 4.1). Promulgation of information to the IAA. Layout design. Charting of all structures associated with the Proposed Development on relevant nautical and electronic charts (Volume III, Appendix 25.7: Vessel	Medium-low	High	Moderate (not significant)	None	Moderate (not significant)	N/A
Bray Head SAAO	✓	✓	✓		Medium	High	Major-moderate (significant)	None	Major-moderate (significant)	N/A

Description of impact	Phase C O D	Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
		Management Plan). Aviation lighting (Volume III, Appendix 25.6: LMP).						
Cumulative Visual Effects (Phase 1 Projects CIA)								
Viewpoint 1: Wicklow Head	✓ ✓ ✓	Adherence to a Lighting and Marking Plan (LMP) (Volume III, Appendix 25.6). Adherence to a Rehabilitation Schedule (Volume III, Appendix 4.1). Promulgation of information to the IAA. Layout design.	Medium-low / high	High	Major (significant), moderate (significant)		Major (significant), moderate (significant)	N/A
Viewpoint 2: Blainroe Golf Club	✓ ✓ ✓		High	Medium-high	Major (significant)		Major (significant)	N/A
Viewpoint 3: Ballynacarrig 3rd Class Road	✓ ✓ ✓		N/A	Medium-high	N/A	None	N/A	N/A
Viewpoint 4: Ballynacarrig Public House	✓ ✓ ✓		N/A	Medium	N/A	None	N/A	N/A
Viewpoint 5: Brittas Bay Beach	✓ ✓ ✓		High	High	Major (significant)	None	Major (significant)	N/A

Description of impact	Phase			Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
	C	O	D							
Viewpoint 6: Tongelee 3rd Class Road	✓	✓	✓	Charting of all structures associated with the Proposed Development on relevant nautical and electronic charts (Volume III, Appendix 25.7: Vessel Management Plan). Aviation lighting (Volume III, Appendix 25.6: LMP).	N/A	Medium-high	N/A	None	N/A	N/A
Viewpoint 7: Ballinvally 3rd Class Road	✓	✓	✓		Medium-low	High	Moderate (not significant)	None	Moderate (not significant)	N/A
Viewpoint 8: Ballinaskea 3rd Class Road	✓	✓	✓		Medium	Medium-high	Moderate (significant)	None	Moderate (significant)	N/A
Viewpoint 9: Johnstown N11 / M11	✓	✓	✓		N/A	Medium	N/A	None	N/A	N/A
Viewpoint 10: Ferry Bank, Arklow	✓	✓	✓		Medium-low	High	Moderate (not significant)	None	Moderate (not significant)	N/A
Viewpoint 11: Arklow Town	✓	✓	✓		Low	Medium-high	Moderate-minor (not significant)	None	Moderate-minor (not significant)	N/A
Viewpoint 12: Moneyribbin 3rd Class Road	✓	✓	✓		N/A	Medium-high	N/A	None	N/A	N/A
Viewpoint 13: Clogga Amenity Area	✓	✓	✓		Medium-low	High	Moderate (not significant)	None	Moderate (not significant)	N/A

Description of impact	Phase			Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
	C	O	D							
Viewpoint 14: Kilmichael Point	✓	✓	✓		Medium-low	High	Moderate (not significant)	None	Moderate (not significant)	N/A
Viewpoint 15: Clones Coast Road	✓	✓	✓		Low	High	Moderate-minor (not significant)	None	Moderate-minor (not significant)	N/A
Viewpoint 16: Tara Hill Minor Road	✓	✓	✓		Low	High	Moderate-minor (not significant)	None	Moderate-minor (not significant)	N/A
Viewpoint 17: Ballymoney Beach	✓	✓	✓		Negligible	High	Minor (not significant)	None	Minor (not significant)	N/A
Viewpoint 18: Courtown Harbour Beach	✓	✓	✓		Negligible	Medium-high	Minor (not significant)	None	Minor (not significant)	N/A
Viewpoint 19: Cahore Point	✓	✓	✓		Negligible	High	Minor (not significant)	None	Minor (not significant)	N/A
Viewpoint 20: Curracloe Beach	✓	✓	✓		N/A	Medium-high	N/A	None	N/A	N/A
Viewpoint 21: Barnacleagh Minor Road	✓	✓	✓		N/A	Medium-high	N/A	None	N/A	N/A

Description of impact	Phase			Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
	C	O	D							
Viewpoint 22: Johnstown Coast Road	✓	✓	✓		N/A	High	N/A	None	N/A	N/A
Viewpoint 23: Kileagh Minor Road	✓	✓	✓		Low	Medium-high	Moderate-minor (not significant)	None	Moderate-minor (not significant)	N/A
Viewpoint 24: Mizen Head	✓	✓	✓		High	High	Major (significant)	None	Major (significant)	N/A
Viewpoint 25: Newcastle Beach	✓	✓	✓		Medium	Medium-high	Moderate (significant)	None	Moderate (significant)	N/A
Viewpoint 26: Scarr Mountain	✓	✓	✓		Medium-low	High	Moderate (not significant)	None	Moderate (not significant)	N/A
Viewpoint 27: Tara Hill Track	✓	✓	✓		Low	High	Moderate-minor (not significant)	None	Moderate-minor (not significant)	N/A
Viewpoint 28: Greystones Cliff Walk	✓	✓	✓		Medium-low	High	Moderate (not significant)	None	Moderate (not significant)	N/A
Viewpoint 29: Sorrento Park	✓	✓	✓		Low	High	Moderate-minor (not significant)	None	Moderate-minor (not significant)	N/A

Description of impact	Phase			Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
	C	O	D							
R750	✓	✓	✓		High	Medium	Major-moderate (significant)	None	Major-moderate (significant)	N/A
Dublin – Cherbourg ferry	✓	✓	✓		High	Medium-high	Major (significant)	None	Major (significant)	N/A
Railway between Greystones and Wicklow	✓	✓	✓		Medium	Medium-high	Moderate (significant), moderate (not significant)	None	Moderate (significant), moderate (not significant)	N/A
Cumulative seascape effects (Phase 1 Projects CIA)										
RSCA13: South East Irish Sea				Adherence to a Lighting and Marking Plan (LMP) (Volume III, Appendix 25.6). Adherence to a Rehabilitation Schedule (Volume III, Appendix 4.1).	High	High	Major (significant)	None	Major (significant)	N/A
RSCA14: Irish Sea, Sandbanks and Broad Bays					Medium-high	Medium-high	Major-moderate (significant)	None	Major-moderate (significant)	N/A

Description of impact	Phase C O D	Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
		Promulgation of information to the IAA. Layout design. Charting of all structures associated with the Proposed Development on relevant nautical and electronic charts (Volume III, Appendix 25.7: Vessel Management Plan). Aviation lighting (Volume III, Appendix 25.6: LMP).						
Cumulative landscape character effects (Phase 1 Projects CIA)								
Southern Coastal Area (Wicklow) LCA	✓ ✓ ✓	Adherence to a Lighting and	Medium	High	Major-moderate (significant)	None	Major-moderate (significant)	N/A

Description of impact	Phase			Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
	C	O	D							
Northern Coastal Area (Wicklow) LCA	✓	✓	✓	Marking Plan (LMP) (Volume III, Appendix 25.6). Adherence to a Rehabilitation Schedule (Volume III, Appendix 4.1). Promulgation of information to the IAA. Layout design. Charting of all structures associated with the Proposed Development on relevant nautical and electronic charts (Volume III, Appendix 25.7: Vessel Management Plan). Aviation lighting (Volume III,	Medium-low	Medium-high	Moderate (significant)	None	Moderate (significant)	N/A
Coastal (Wexford) LCA	✓	✓	✓		Medium-low	Medium-high	Moderate (significant)	None	Moderate (significant)	N/A

Description of impact	Phase C O D	Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
		Appendix 25.6: LMP).						
Cumulative landscape designation effects (Phase 1 Projects CIA)								
Bray Head SAAO		Adherence to a Lighting and Marking Plan (LMP) (Volume III, Appendix 25.6). Adherence to a Rehabilitation Schedule (Volume III, Appendix 4.1). Promulgation of information to the IAA. Layout design. Charting of all structures associated with the Proposed Development on relevant nautical and electronic	Medium-low	High	Moderate (not significant)	None	Moderate (not significant)	N/A

Description of impact	Phase C O D	Factored-in measures	Magnitude of impact	Sensitivity of Receptors	Significance of effect	Additional measures	Residual effect	Proposed monitoring
		charts (Volume III, Appendix 25.7: Vessel Management Plan). Aviation lighting (Volume III, Appendix 25.6: LMP).						

17.15 References

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