

17.

INTERACTIONS OF THE FOREGOING

17.1

Introduction

The preceding Chapters 5 to 16 of this EIAR identify the potential significant environmental effects that may occur in terms of Population and Human Health, Biodiversity (Flora and Fauna), Ornithology, Land, Soils and Geology, Hydrology and Hydrogeology, Air Quality, Climate, Noise and Vibration, Landscape and Visual, Archaeological, Architectural and Cultural Heritage, Material Assets (Roads and Traffic, Telecommunications, Aviation, Utilities and Waste Management), and Vulnerability to/from Major Accidents and Natural Disasters as a result of the Prospective Development, as described in Chapter 4 (Description of the Prospective Development) of this EIAR. All of the potential significant effects of the Prospective Development and the measures proposed to mitigate these have been outlined in the preceding chapters of this EIAR. Mitigation measures and best practice measures for the construction, operation and decommissioning of the Prospective Development are detailed in the accompanying Construction and Environmental Management Plan (CEMP) (Appendix 4-3), and Chapter 18 Schedule of Mitigation and Monitoring Measures. However, for any development with the potential for significant environmental effects there is also the potential for interaction between these potential significant effects. The result of interactive effects may exacerbate the magnitude of the effects or ameliorate them or have a neutral effect.

Article 3 of EIA Directive 2011/92/EU as amended by Directive 2014/52/EU states that the environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the following factors: (a) population and human health; (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air and climate; (d) material assets, cultural heritage and the landscape; (e) the interaction between the factors referred to in points (a) to (d). The assessment in this chapter assesses the interaction between the relevant assessments in this EIAR.

A matrix is presented in Table 17-1 below to identify potential interactions between the various aspects of the environment already assessed in this EIAR. The matrix highlights the occurrence of potential positive or negative effects during both the construction (C) and operational (O) phases. It is considered that the potential effects during the decommissioning phase will be similar to the construction phase but of a lesser magnitude and therefore has not been included in Table 17-1 below. In Section 17.2 below, the potential interactions between each environmental component have been discussed in order of the relevant chapters of the EIAR. Once a potential interaction between two environmental components has been discussed, for example, Population & Human Health and Water, the interaction will not be discussed again in the following relevant section, therefore there is no Water and Population & Human Health section.

Table 17-1 Interaction Matrix: Potential for Interacting Impacts

	Phase	Population and Human Health	Biodiversity	Ornithology	Land, Soils and Geology	Hydrology & Hydrogeology	Air Quality	Climate	Noise and Vibration	Landscape and Visual	Cultural Heritage	Material Assets	Accidents & Disasters
Population and Human Health	C												
	O												
Biodiversity	C												
	O												
Ornithology	C												
	O												
Land, Soils and Geology	C												
	O												
Hydrology & Hydrogeology	C												
	O												
Air Quality	C												
	O												
Climate	C												
	O												
Noise and Vibration	C												
	O												
Landscape and Visual	C												
	O												
Cultural Heritage	C												
	O												
Material Assets	C												
	O												

Accidents & Disasters	C													
	O													

Legend:

No Interacting Effect:		Positive Effect:	
Neutral Effect:		Negative Effect:	

The potential for interaction of effects has been assessed, throughout this EIAR, as part of the Impact Assessment process. While the work on all parts of the EIAR were not carried out by MKO, the entire project and all the work of the sub-consultants was managed and coordinated by the company. The EIAR was edited and collated by MKO as an integrated report of findings from the impact assessment process, by all relevant experts, and effects that potentially interact have been assessed in detail in the individual chapters of the EIAR and summarised in Section 17.2 below.

Where any potential negative effects have been identified during the assessment process, these impacts have been avoided or reduced by design and the proposed mitigations measures, as presented throughout the EIAR.

17.1.1 Statement of Authority

This section of the EIAR has been prepared by Keelin Bourke and it has been reviewed by Sean Creedon, all of MKO.

Keelin is an Environmental Scientist with MKO, with over 2 years' experience in private consultancy, having joined the company in September 2023. Keelin holds a BSc (Hons) in Environmental Science from University College Cork and an MSc (Dist) in Environmental Engineering from Trinity College Dublin. Keelin's current key strengths and areas of expertise are in environmental mapping, environmental surveying, and environmental report writing. Keelin has experience in conducting environmental impact assessments of a broad range of topics, including population and human health assessments, air quality assessments, assessments of built services and infrastructure and major accidents and natural disaster risk assessments for both onshore and offshore wind energy projects. Prior to taking up her position with MKO, Keelin worked as an Environmental Health and Safety Officer in an EPA licensed Waste Transfer Facility in Cork City. Since joining MKO, Keelin has become a member of the MKO Environmental Renewables Team and has been involved in preparing and managing Environmental Impact Assessments and in leading large multi-disciplinary teams in order to produce robust Environmental Impact Assessment Reports for large-scale onshore and offshore wind energy developments.

Sean is an Associate Director in the Environment Team at MKO. He oversees a team of highly skilled environmental professionals working on EIAR for large-and medium scale Renewable Energy infrastructure. Sean has directed and overseen multiple renewable energy projects across wind, solar, battery, biogas and hydrogen as well as a range of thermal and other energy related developments. He has worked on the planning and environmental impact elements within all stages of wind farm project delivery. He is a member of the MKO senior management team responsible for developing the business, mentoring team members, fostering a positive culture and promoting continuous employee professional development. Sean has over 24 years' experience in program and project development, holds an MSc from NUI Galway and a Diploma in Project Management from Institute of Project Management Ireland.

17.2

Impact Interactions

17.2.1

Population and Human Health

Population and Human Health and Land, Soils & Geology

Construction Phase

The as-built infrastructure footprint of the Existing Development is 32.6 ha consisting of the 110kV substation and the 14 no. completed, 4 partially completed wind turbine foundations and 18 no. completed or partially completed hardstand areas, this is approximately 3.7 % of the overall Wind Farm Site (892 ha). During the construction phase there may be slight interference with commercial forestry and blanket bog within the Site Boundary. Activities will be able to resume as normal after the construction phase. Due to the Prospective Development's use of 2.2% of the overall site 1,018ha, it is considered that the residual effect is to be a negative, short-term, slight, effect on land use and activities.

Current land-use at the Site is comprised of the partially constructed Meenbog Wind Farm, areas of commercial forestry and blanket bog, and roadways. The surrounding land-use predominantly comprises peat bogs, commercial forestry and other seminatural areas with limited residential use along local and public roads.

Approximately 117ha (hectares) of forestry (comprising of approximately 9ha as part of the Wind Farm Site) will be permanently felled as part of the Prospective Development. Whilst there will be a change of land use in these areas to facilitate the development of the wind turbines, associated infrastructure, and proposed enhancement measures, this is an acceptable and unavoidable part of the Prospective Development. The removal of 117ha of commercial forestry crop will result in a change of land use of these areas for the local population. The Prospective Development will therefore have a short-term slight negative direct effect, which is not significant, on land use.

Operation Phase

A wind farm and associated grid infrastructure is not a recognised source of pollution and so the potential for effects during the operational phase are imperceptible. With the implementation of mitigation and monitoring measures detailed in Section 8.5.3 of Ch. 8 Lands, Soils & Geology and the CEMP (Appendix 4-3), the potential for residual effects associated with soil or ground contamination during the operational phases and subsequent health effects are negative, imperceptible, indirect, long-term, and unlikely. Commercial forestry and blanket bog will not be impacted during the operational phase.

The permanent footprint of the Prospective Development will occupy only a small percentage of the Site; 22.9ha of the overall 1,018ha Site. The addition of new access tracks throughout the Site will enable access for landowners throughout their lands, this will consist of approximately 18 kilometres of existing onsite roads and tracks, and to widen at eight specific points along the existing onsite roads. Approximately 3km of roads require more substantial works and upgrades.

The Grid Connection Site extends from the Wind Farm Site entrance along the N15 National Road to the L-2595 Local Road, then proceeds to the L-1985 Local Road where it travels east along the road and through agricultural lands parallel to the Local Road before continuing along the L-19852 Local Road and finally following a private road to reach the Clogher 110kV substation. The Grid Connection is located primarily underground along the public road, therefore it is considered that there will be no interacting effect during operation. Current land-use such as commercial forestry practices will not be affected.

The Biodiversity Management and Enhancement Plan (BMEP) will include peatland restoration and hen harrier habitat restoration. This will offset the losses of degraded wet heath to facilitate the Prospective Development and result in habitat of higher suitability for Hen Harrier, as well as the establishment of areas of patchy willow-dominated scrub. This will have a long-term positive impact on population and human health from land soils and geology.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration.

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Population and Human Health, and Hydrology & Hydrogeology

Construction Phase

The construction phase ground works and use of plant on the Site may give rise to the potential release of suspended solids and hydrocarbons into surface and groundwaters.

There are no underground water or sewerage networks at the Wind Farm Site infrastructure locations. There are no registered Group Water Schemes (GWS) or Public Water Schemes (PWS) or an associated Source Protection Area (SPA) within the Site or the surrounding lands. There are no mapped Drinking Water Protected Areas (DWPA) within or immediately downstream of the Site. The closest DWPA is Lough Mourne located upstream of the Wind Farm Site. However, Uisce Éireann abstract water from the Bunadownen River within the Wind Farm Site and pump it to Lough Mourne Reservoir, ~1.7km to the north. There is potential for, short-term slight, negative, indirect effects on the Lough Mourne surface water drinking supply. Mitigation measures in relation to the protection of downstream surface water quality is described in detail for all construction phase activities in Chapter 9 Hydrology and Hydrogeology.

There are a significant number of watercourse crossings within the Wind Farm Site. Further details on watercourse crossings are provided in Section 9.5.2.8 of this EIAR. There are no private wells located in the vicinity of the Wind Farm Site. Chapter 9 Hydrology and Hydrogeology assesses the potential for impact on group water schemes and other public water supplies during the construction phase. The impact on water quality is assessed as negative, imperceptible, indirect, long term, unlikely effect on drinking water supplies.

Operation Phase

During the operational phase of the Prospective Development all permanent drainage controls will be in place and the disturbance of ground and excavation works will be complete. Some minor maintenance works may be completed, such as maintenance of the Site entrance, internal roads and hardstand areas. These works would be of a very minor scale and would be very infrequent. During such maintenance works there is a small risk associated with the release of hydrocarbons from Site vehicles, although it is not envisaged that any significant refuelling works will be undertaken on Site during the operational phase. Therefore, there will be a negative, slight, indirect, temporary, unlikely impact on human health due to a potential deterioration of water quality.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration.

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Population and Human Health, and Air Quality

Construction Phase

Potential dust and exhaust emission sources during the construction phase of the Prospective Development include upgrading of existing access tracks and construction of new access roads, construction and completion of turbine and meteorological mast foundations, temporary construction compound, peat management areas, proposed enhancement and management and tree felling areas.

An increase in dust and exhaust emissions has the potential to cause a nuisance to sensitive receptors in the immediate vicinity of the Site. The entry and exit of construction vehicles from the Site may result in the transfer of mud to the public road, particularly if the weather is wet. This may cause nuisance to residents and other road users. The transport of volumes of stone to be transported into the Wind Farm Site and BMEP Site also has the potential to create dust, which could affect nearby sensitive receptors. These effects will have a short-term, slight, negative impact on air quality, which is not significant. The potential dust impacts that may occur during the construction phase of the Prospective Development are further described in Chapter 10: Air Quality.

Operational Phase

The Wind Farm Site will require daily visits of maintenance staff in LGVs and will produce dust and other emissions. The Grid Connection Site will require less frequent visits by maintenance staff, will produce dust and other emissions during the operational phase. Maintenance of the existing onsite 110kV infrastructure may, on occasion, generate small volumes of dust and exhaust emissions. This will result in a long-term, slight, negative effect on air quality.

The Prospective Development will generate electricity from a renewable source, contributing to a positive impact on air quality. Over the envisaged 25-year lifespan of the Prospective Development it is expected to effectively reduce carbon dioxide emissions that would have occurred if the same energy were generated by traditional fossil fuel plants. This is a long-term moderate positive effect on air quality.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration.

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Population and Human Health, and Climate

Construction Phase

The construction of the Prospective Development will have a short-term, imperceptible, negative effect on climate and will be restricted to the duration of the construction phase. However, once emitted to the atmosphere, the greenhouse gas emissions that will arise from construction phase activities will have a permanent imperceptible, negative effect on Climate and therefore population and human health.

Operational Phase

The Prospective Development when in operation, will reduce the input of carbon intensive energy into the national grid and reduce the amount of greenhouse gas emissions being released to the atmosphere. Harnessing more energy by means of renewable sources will reduce dependency on fossil fuels, thereby resulting in a reduction in harmful emissions that can be damaging to human health and the environment. For the purposes of this EIAR, a rated output of 4.8MW per turbine has been chosen to calculate the anticipated power output of the proposed turbines, which would result in an estimated output of 91.2 MW, displacing approximately 53,862 tonnes of carbon dioxide per annum from traditional carbon-based electricity generation. This will have a long-term moderate positive impact on climate.

The operation of the Prospective Development will displace 53,862 tonnes of carbon dioxide per annum from fossil fuel-based electricity generation, 1,885,165 tonnes over the proposed 25-year operational lifespan due to the provision of clean, renewable energy to the national grid. Therefore, while there will be greenhouse gas emissions associated with the operation of the Prospective Development, this will be offset by its operation over its 25-year period.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration,

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Population and Human Health and Noise and Vibration

Construction Phase

There will be an increase in noise levels in the vicinity of the Wind Farm Site and BMEP during the construction phase, as a result of heavy machinery and construction work which has the potential to cause a nuisance to sensitive receptors located closest to the Prospective Development. The wind turbine construction noise assessment results, detailed in Section 12.6.2 of Chapter 12 Noise and Vibration, show that, under theoretical precautionary conditions, predicted construction noise levels from the Wind Farm Site are below the Category A Threshold Levels (lowest threshold in BS 5228) for all of the Construction Noise Assessment Locations (CNALs). For all scenarios, therefore, there would be no significant construction noise effects.

These effects will be short-term in duration. The noisiest construction activities associated with wind farm development are internal road/track upgrades, excavation and concrete pouring of the turbine bases. Excavation of all turbine bases except for T7 has been completed, which can typically be completed in five days however, and the main concrete pour is usually conducted within one day. 14 no. of the 19 no. proposed turbine foundations have already been excavated and poured.

Construction noise at any given noise sensitive location will be variable throughout the construction project, depending on the activities underway and the distance from the main construction activities to the receiving properties. The potential noise impacts that will occur during the construction phase of the Prospective Development are further described in Chapter 12 Noise and Vibration. The predicted pre-mitigation noise impacts during the construction of the Prospective Development are assessed as negative, slight and short-term.

Operational Phase

A baseline assessment of the existing background noise conditions was carried out, the results of which are presented in Chapter 12 Noise and Vibration of the EIAR. An assessment of the operational wind turbine noise levels has also been undertaken, in accordance with best practice guidelines and

procedures as outlined in Chapter 12: Noise and Vibration, through modelling of the development using noise prediction software. The Site-Specific Noise Limits were compared to the predictions of the Wind Farm Site operating on its own, and the results, based on the precautionary scenario candidate turbine for the Prospective Development (Nordex N133), are summarised in Table 12-20 in Chapter 12 of this EIAR: Noise & Vibration. Please note, the level of noise from the Grid Connection Site underground cabling route will be negligible and will only occur during maintenance or monitoring activities.

The predicted noise levels at various wind speeds have been compared against the noise criteria curves outlined in Section 12.6.3 of Chapter 12 and are below the day and night-time criteria in all cases. Predicted noise levels are presented in Appendix 12-5.

Considering that there is no significant traffic expected on site roads during the operational phase and the significant distances from any site road to the nearest NSL; there are no noise and vibration impacts anticipated from wind farm roads during the operational phase.

Overall, it is assessed that the operational phase will incur a slight, long-term, negative impact on local populations through noise and vibration.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration.

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Population and Human Health, and Landscape and Visual

Construction Phase

The construction phase of the Prospective Development will see the temporary introduction of construction machinery and the erection of wind turbines into a natural but already modified landscape. The erection of the proposed turbines in particular will change the existing landscape. The construction activities may potentially cause temporary impacts on the landscape such as the creation of temporary structures, dust, soil erosion and alterations to drainage. It is considered that the construction phase will have a 'Moderate', 'Short-term', 'Negative' effect in terms of direct landscape effects

Operational Phase

There are no significant landscape attractions within or adjacent to the Site that could be affected by the operation of the Prospective Development. The locations with the potential to cause a visual impact within 10km are the; Barnesmore Gap, Northwest Cycle Trail, Trusk Lough Walkway, Ballybofey/Stranolar and Alt na Peist Walking Trail. The landscape value and sensitivity of the Wind Farm Site is deemed to be 'Low'. Low sensitivity balanced with a 'Substantial' magnitude of change amount to 'Long-Term', 'Negative' landscape effects of 'Moderate' significance to the landscape of the Wind Farm Site.

Beyond 1.5km, visibility reduces with distance, as well as due to visual screening provided by intervening landform and tree cover surrounding individual dwellings and across the wider landscape. Where visibility does occur, the proposed turbines would be seen within an expansive upland landscape, predominantly characterised by commercial forestry. VP02 is located approx. 2.3km north-east of the nearest proposed turbine and is representative of the residential receptors at this distance. VP02 was assigned 'Medium' sensitivity. The proposed turbines, whilst visible, are largely screened by the tract of commercial forestry and are set-back from the viewpoint. As discussed in Appendix 13-2,

residual visual effects at this viewpoint were deemed to be ‘Slight’. In a general sense, where visibility does occur at distances beyond 1.5km, the proposed turbines would be perceived in the context of an expansive upland landscape and extensive commercial forestry, such that their scale would accord with the expansive, large-scale character of the receiving landscape. Overall, effects on residential receptors ranges from ‘Imperceptible’ to ‘Moderate’. On balance, these effects are considered to be long-term, negative and slight.

Decommissioning Phase

During the decommissioning phase of the Prospective Development, turbine foundations would remain in place underground and would be covered with earth and allowed to revegetate. This naturalisation process shall revert the landscape of the Site back to a condition similar to the current landscape baseline. Removal of the proposed turbines and ancillary infrastructure (except the proposed substation) from the Wind Farm site during decommissioning will result in short-term, slight, negative visual effects.

On this basis, while Significant effects are identified at two viewpoint locations, these effects are very localised. On balance the overall effect on Scenic Routes, Views and Prospects are not significant.

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Population, and Human Health and Material Assets

Construction Phase

During the construction phase, the Prospective Development will give rise to traffic movements of abnormal loads and increased traffic volumes on the local road network and, therefore, is likely to create a short-term slight negative effect for other road users as well as dust and exhaust emissions. Traffic Management plan is included as an Appendix (15-2) as part of Chapter 15 and will be updated and agreed with Donegal County Council prior to construction to minimise all disruption, as described in Chapter 15 Material Assets and the CEMP (Appendix 4-3). It is considered that the construction phase will have a short-term, slight to moderate negative effect as a result of traffic movements. Once a traffic management plan is implemented for the construction phase of the Prospective Development, there will be a slight, short-term, negative residual effect on local road users.

Operational Phase

During the operational phase, impacts on the surrounding local road network will be long term negative imperceptible impact. With the implementation of measures detailed in Chapter 5 Population & Human Health and the CEMP (Appendix 4-3) dust and exhaust emission will be contained and the potential for impact on health will be imperceptible.

During the operational phase, there will be no impacts or associated effects on built services or telecommunications associated with the Prospective Development. The Prospective Development will have a long-term imperceptible, negative, residual effect on telecommunications and aviation assets during the operational phase.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration,

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Biodiversity

Biodiversity, and Ornithology

Construction Phase

Site activities during the construction phase of the Prospective Development may have the potential to give rise to disturbance and deterioration of habitat to Ornithology and their prey species. An overview of survey data is included in Appendix 7-3 (Summary Data) with detailed maps provided in Appendix 7-4 (Survey Data). Survey data and maps relating to roost sites are provided in Appendix 7-5 (Confidential Survey Data). Potential impacts on Key Ornithological Receptors (KORs) are included in Section 7.4.2 of Ch. 7 Ornithology. Potential effects during the construction phase range only from imperceptible to slight, negative and long term during the construction phase.

Operational Phase

The BMEP Site is comprised of two parcels of land both contained entirely within the townland of Tievecloghoge, referred to as Parcel 1 (to the east) and Parcel 2 (to the west), which have a combined area of approximately 117 ha, 108ha of which are intended for enhancement. Land use on site within both parcels of land currently comprises coniferous forestry and associated forestry access tracks, which is proposed to be felled and converted to peatland and scrub habitats. Site access to Parcel 1 is located along the L-2974 local road, whilst site access to Parcel 2 is located along the L-65242. Parcel 2 is located approximately 2.3 km east of the Wind Farm Site, and Parcel 1 is located approximately 4.2km east of the Wind Farm Site. The BMEP works will have a positive, slight, direct, permanent likely effect on the land environment which will have a subsequent indirect slight positive long term impact on Ornithology.

Within the BMEP Site, the Prospective Development will involve the felling of commercial conifer plantation to facilitate habitat restoration. These habitats are of Low suitability for bat commuting and foraging, with slightly higher suitability limited to localised forestry edges. The removal of plantation forestry will not result in the loss of habitats of higher suitability or key commuting corridors. This will result in a slight, negative, long term effect on ornithology.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Biodiversity and Land, Soils & Geology

Construction Phase

The Prospective Development will be primarily built upon or adjacent to the infrastructure provided by the Existing Development. However, it will result in the loss of 22.3 ha. of habitats of Local Importance (Lower Value) including conifer plantation, pre-existing, built habitats associated with the Existing Development and forestry operations, along with small fragmented areas of scrub and wet grassland that is peripheral to the aforementioned infrastructure. Whilst the Prospective Development will impact upon these habitats, these effects are not ecologically significant, given the low value of the habitats for biodiversity and their abundance in the wider area. No habitats of Local Importance (Higher Value) will be lost to facilitate the Prospective Development. This may potentially cause a short term, slight, negative effect on flora and fauna. These potential impacts have been assessed in Ch. 6 Biodiversity of

this EIAR, and excavated peat and spoil will be contained on site in the designated peat and spoil management areas (Appendix 4-2 contains the Peat and Spoil Management Plan).

Some of the proposals outlined in the BMEP (Appendix 6-4) will disturb local peat, soil and subsoil deposits and increase the likelihood of erosion of peat and subsoils. However, due to the largely non-invasive nature of the works the potential for effects on the soils and geological environment are limited.

Operational Phase

The BMEP works will have a positive, slight, direct, permanent likely effect on the land environment. Please see Ch. 6 Biodiversity and Appendix 6-4 Biodiversity Management and Enhancement Plan (BMEP) for details.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase to a lesser extent and lesser duration, with the exception of the implementation of the BMEP works which are intended to be permanent.

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Biodiversity and Water

Construction Phase

The Prospective Development has the potential to result in indirect impacts on a number of watercourses resulting from direct habitat loss and deterioration during the replacement of a culvert, run off of pollutants such as silt, hydrocarbons and cementitious material as a result of tree felling and construction activity. These watercourses include Mary Breen's Burn, the Shruhangerve, the Bunadaowen, the Glendergan, the Lowerymore and the Mourne Beg. Such impacts could also affect KERs including otter, freshwater pearl mussel, Atlantic salmon, brown trout and European eel in the form of siltation, eutrophication and reduction in water quality. Any such effects would be negative, short term and reversible but could potentially be significant. The Geotechnical and Peat Stability Report for the Prospective Development as provided in Appendix 8-4 finds the Site to be stable and at a low risk of peat failure. No evidence of otter breeding or resting places was identified within 150m of any works in this catchment and no potential for significant disturbance was identified. However, given that they are a mobile species, the possibility that they may migrate into the Site has been considered. After the implementation of mitigation measures it is not considered that there will be any effects on identified watercourse and associated aquatic habitats and species.

Operational Phase

The Prospective Development will lead to an increased amount of hard standing/impermeable surfaces associated with the wind farm infrastructure. This has the potential to lead to faster run off of surface waters from the Site into the KER (Key Ecological Receptors) watercourses causing potential hydrological change. It may also include periodic maintenance works, which could lead to small scale pollution as a result of siltation, hydrocarbons, cementitious material or other pollutants. The operating wind farm substation will have toilet facilities, but these will be managed within a sealed and monitored system and emptied by a licenced contractor.

Given that the majority of the infrastructure is already in place as a result of the Existing Development (with no evidence of operational effects recorded) and that the works associated with the Prospective

Development are relatively small scale, when compared to the existing forestry and wind farm infrastructure, the magnitude of any impact on the aquatic KERs would be slight.

Given the location of the infrastructure, buffering from watercourses and infrequent nature of operational activity, there is no potential for significant effects as a result of disturbance to otter.

There will be no additional loss of habitats associated with the operational phase of the Prospective Development. However, the positive effects of the Biodiversity Management and Enhancement Plan (Appendix 6-3) will be ongoing through the operational phase of the Prospective Development, and the BMEP Site will be managed, maintained and monitored throughout.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Biodiversity and Air Quality

Construction Phase

During the construction phase of the Prospective Development, increased vehicular and dust emissions within and around the Site have the potential to be a nuisance to flora and fauna, thereby having a short-term, slight, negative effect. The mitigation measures outlined in Ch 10 Air Quality and the CEMP (Appendix 4-3) of the EIAR will ensure that the potential for negative effects is reduced or eliminated.

Operational Phase

During the operational phase, the potential for effects on biodiversity from vehicular and dust emissions are imperceptible, however the overall displacement of fossil fuel emissions resulting from the operation of the Prospective Development will have a long-term moderate positive effect on air quality for biodiversity.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Biodiversity and Climate

Construction Phase

The construction of the Prospective Development will result in greenhouse gas emissions associated with construction of Prospective Development infrastructure and construction materials, and operation of vehicles and plant. As well, the Prospective Development footprint will result in the loss of carbon fixing vegetation within the Site. The impact on biodiversity will be negative and slight only given the quantity of greenhouse gases that will be emitted to the atmosphere and will be restricted to the

duration of the construction phase. However, once emitted to the atmosphere, the greenhouse gas emissions that will arise from construction phase activities will have a permanent imperceptible, negative effect on the climate and therefore biodiversity. This is assessed further in Chapter 11 (Climate) of this EIAR, and mitigation measures are presented to minimise any potential effects.

Operational Phase

During the operational phase, the potential for effects on biodiversity from vehicular and dust emissions are long-term, imperceptible, and negative, however the overall displacement of fossil fuel emissions resulting from the operation of the Prospective Development will have a long-term moderate positive effect on air quality for biodiversity.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Biodiversity and Noise & Vibration

Construction Phase

Site activity during the construction phase could give rise to noise that could be a nuisance for fauna, which use the Site. Best practice mitigation measures are included in Ch 6 Biodiversity, Ch 12 Noise & Vibration and the CEMP (Appendix 4-3) to minimise the potential negative effect of noise generated during the construction phase on biodiversity. Taking into account the mitigation measures the effect of noise on biodiversity is considered to be negative, slight and short term.

Operational Phase

The predicted noise levels associated with the proposed turbines are within best practice noise criteria therefore it is not considered that a significant effect is associated with turbine noise from the Proposed Wind Farm. The limited onsite noise activity generated by the Prospective Development during the operational phase will have a negative, imperceptible and permanent effect on biodiversity.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

17.2.3

Ornithology

Ornithology and Land, Soils & Geology

Construction Phase

The removal of hedgerows and disturbance to soil during construction phase of the Prospective Development is likely to result in some disturbance of flora and fauna, including Ornithology, in the

areas surrounding the Prospective Development works area. During the construction phase, there will be a short-term, slight, negative effect on Ornithology. The relevant mitigation measures outlined in Ch. 7 Ornithology, Ch. 8 Lands, Soils & Geology and the CEMP (Appendix 4-3) will be in place to avoid any potential significant effect on Ornithology.

Operational Phase

A wind farm and associated grid infrastructure is not a recognised source of pollution and so the potential for effects during the operational phase are imperceptible. With the implementation of mitigation and monitoring measures detailed in Section 8.6.3 of Ch. 8 Lands, Soils & Geology and the CEMP (Appendix 4-3), the potential for residual effects associated with soil or ground contamination during the operational phases and subsequent health effects are negative, imperceptible, indirect, long-term, and unlikely.

For the Grid Connection, maintenance works are minor and infrequent, and are all located within the existing road and access track corridors. On a precautionary basis, it is assumed that some temporary disturbance may occur during works. The most recent hen harrier nest (2025) is within 650m of some of these activities, however as part of the Construction and Environmental Management Plan (CEMP), works causing disturbance will not take place within 500m of an active hen harrier nest. Given this, the scale of the works and the extent of similar habitat in the wider surroundings, significant effects are not predicted. The effect significance for all KORs is assessed as no greater than Low (Percival, 2003) or a likely short-term slight negative effect (EPA, 2022).

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Ornithology and Water

Construction Phase

Site activities during the construction phase of the Prospective Development may have the potential to give rise to some water pollution, and consequential short term negative effects on Ornithology and their prey species (such as disturbance and deterioration of habitat quality) that use that water within the same catchment. With the implementation of mitigation and monitoring measures outlined in Ch. 7 Ornithology, Ch. 9 Water and the CEMP (Appendix 4-3), there will be a short-term, slight, negative effect during the construction phase.

There will be no habitat loss at any waterbodies in the wider surroundings as these are located outside of the Wind Farm Site boundary. Additionally, the available potential habitat for whooper swan within the Wind Farm Site is limited, restricted to Carrickaduff Lough to the south of Turbine 6. In addition to its location outside of the proposed infrastructure footprint, this small lough was surveyed as part of the waterbird distribution abundance surveys and no whooper swan were ever recorded in this location.

Operational Phase

The potential for increased surface water runoff is the primary potential impact during the operational phase of the Proposed Wind Farm. This is considered to have a possible negative, long term effect on Ornithology.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Ornithology and Air Quality

Construction Phase

During the construction phase of the Prospective Development, increased vehicular and dust emissions within and around the Site have the potential to be a nuisance to Ornithology, thereby having a short-term, slight, negative effect. The mitigation measures outlined in Ch. 10 Air Quality and the CEMP (Appendix 4-3) of the EIAR will ensure that the potential for negative effects is reduced or eliminated.

Operational Phase

During the operational phase, the potential for effects on Ornithology from vehicular and dust emissions are imperceptible, however the overall displacement of fossil fuel emissions resulting from the operation of the Prospective Development will have a long-term moderate positive effect on air quality for Ornithology.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Ornithology and Climate

Construction Phase

The construction of the Prospective Development will result in greenhouse gas emissions associated with tree felling, production of Prospective Development infrastructure and construction materials, and operation of vehicles and plant. As well, the Prospective Development footprint will result in the loss of carbon fixing vegetation within the Site. This impact on Ornithology ranges from a negative slight to imperceptible, short term, indirect effect, given the quantity of greenhouse gases that will be emitted to the atmosphere and will be restricted to the duration of the construction phase. Once emitted to the atmosphere, the greenhouse gas emissions that will arise from construction phase activities will have a permanent imperceptible negative effect on Climate.

Operational Phase

During operational phase, the Prospective Development will displace carbon dioxide from fossil fuel-based electricity generation, over the proposed 25-year operational lifespan due to the provision of clean renewable energy to the national grid, consequently, in combination with other renewable energy projects, the Prospective Development will have a long term, moderate positive effect on Ornithology.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Ornithology and Noise & Vibration

Construction Phase

Site activity during the construction phase could give rise to noise and vibration that could be a nuisance for Ornithology, which use the Site. Best practice mitigation measures are included in Ch 7 Ornithology and Chapter 12 Noise & Vibration and the CEMP (Appendix 4-3) to minimise the potential negative effect of noise generated. During the construction phase, noise limits, noise control measures, hours of operation (i.e. dusk and dawn is high faunal activity time) and selection of plant items will be considered in relation to disturbance of birds. All plant and equipment for use will comply with the European Communities (Noise Emission By Equipment For Use Outdoors) Regulations, 2001, as amended (SI 632/2001). Plant machinery will also be turned off when not in use. The residual effect of noise and vibration during construction on Ornithology is considered to be negative, short term, and not significant.

Operational Phase

The limited onsite noise activity generated by the Prospective Development during the operational phase could be a nuisance for Ornithology. Operational noise could have a negative, imperceptible and long term effect on Ornithology.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

17.2.4

Land, Soils and Geology

Land, Soils & Geology, and Water

Construction Phase

The potential effects from the contamination of soil and bedrock by leakages and spillages of hydrocarbons can occur from the accidental spillage during refuelling of construction plant with petroleum hydrocarbons. The accumulation of small spills of fuels and lubricants during routine plant use can also be a significant pollution risk. Hydrocarbon has a high toxicity to humans, and all flora and fauna, including fish, and is persistent in the environment. Large spills or leaks have the potential to result in significant effects (i.e. contamination of soils, subsoils and pollution of the underlying aquifer) on the geological and water environment, depending on where a spill may occur. Additionally, waste tar, removed from the roads has the potential to affect soil/subsoil geochemistry. With the implementation of the prescribed mitigation measures the residual effect will be a negative, imperceptible, direct, short-term, low unlikely effect on soils, subsoils and bedrock with water.

Release of effluent from on-site temporary wastewater treatment systems has the potential to contaminate soils, subsoils and bedrock. There will be a negative, imperceptible, direct, short-term, low unlikely effect on soils, subsoils and bedrock with water in this instance.

Tree felling is a component of the Prospective Development, with approx. 9ha of permanent felling of within the Wind Farm Site, with an additional approx. 4ha of temporary felling. In addition, ~108ha will be permanently felled at the Biodiversity Enhancement Lands. During felling operations there is a high likelihood of erosion due to the distance of soils and subsoils associated with vehicle and plant movements. This also has associated potential effects on the water within the area, there may be a negative, imperceptible, direct, permanent, unlikely effect on soils, subsoils and weathered bedrock.

Operational Phase

The transformer in the substation and transformers in each turbine are oil cooled. There is potential for spills / leaks of oils from this equipment resulting in contamination of soils and groundwater. Hydrocarbon has a high toxicity to humans, and all flora and fauna, and is persistent in the environment. With the implementation of the prescribed mitigation measures the residual effect will be a negative, imperceptible, direct, short-term, unlikely effect on peat, subsoils, and bedrock with water.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Land, Soils & Geology and Air Quality

Construction Phase

The construction works associated with the Prospective Development will give rise to localised dust emissions. It is intended to obtain the majority of materials for the construction of the Prospective Development from the onsite borrow pits. It is estimated that approx. 74,180m³ of stone material will be required to complete construction of the Prospective Development. Engineer's specified material may be imported onto the Wind Farm Site for capping should suitable quality material not be encountered during excavation for the Prospective Development. The removal of peat followed by its transportation and management at the peat management areas during the construction phase will also give rise to dust emissions. With the implementation of the mitigation measures, the Prospective Development is considered to have a short-term, slight, negative effect on air quality brought about by dust emissions generated during the construction activities, that is not significant.

Operational Phase

No anticipated interactive effect.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Land, Soils & Geology and Climate

Construction Phase

Bogs and peatlands are known to store large amounts of carbon. Due to the waterlogged nature of these habitats, stored carbon is not broken down and released into the atmosphere. The construction of wind farms on bog and peat habitats may affect the natural hydrological regime, thus exposing and drying out the peat and allowing the decomposition of carbon. With the implementation of mitigation measures set out in Chapter 8 Land Soils and Geology, section 8.5.2.2 the Prospective Development will incur a negative, imperceptible, direct, short-term effect on the climate.

Operation Phase

Plant and vehicles used on Site for maintenance will be run on fuels and use hydraulic oils. Accidental spillage during refuelling of construction plant with petroleum hydrocarbons is a significant pollution risk to land, soils and associated ecosystems. The accumulation of small spills of fuels and lubricants during routine plant use can also be a pollution risk to the climate. Hydrocarbon has a high toxicity to humans, and all flora and fauna, and is persistent in the environment. This may incur a negative, direct, slight, short term, unlikely effect on peat, subsoil and bedrock. In the absence of mitigation measures, there will be no potential for significant effects on the climate from peat, subsoils and bedrock at the Wind Farm Site.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Land, Soils & Geology and Cultural Heritage

Construction Phase

The Barnesmore Gap County Geological Site (CGS) (Site Code: DL002) overlaps with the northwest of the Wind Farm Site. The only wind farm infrastructure which overlaps with this CGS is ~1.2km of existing wind farm access roads. No works associated with the Prospective Development overlap with this CGS. The construction of the Prospective Development will not result in any direct, negative effects on the recorded archaeological, architectural or cultural heritage resource as none of these sites are located within the footprint of the development that require excavations and ground works

Operation Phase

During the operational phase, there is no potential for impacts on cultural heritage from a land soils and geology perspective as there will be no groundworks excavations associated with this phase.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

Land, Soils & Geology and Landscape & Visual

Construction Phase

Earthworks such as cut and fill required to facilitate construction of the Prospective Development will have the greatest potential for direct landscape effects where the physical fabric of the landscape is materially altered. Where excavation is required, existing land cover, vegetation, and spoil will be removed during the construction phase. The character of the BMEP Site will be altered by the removal of commercial forestry and the establishment of a mosaic of open heathland and patchy scrub vegetation. Where peat/spoil arising from construction activities is managed within the Prospective Development, the vegetative top-soil layer will be removed and re-instated. The construction activities may potentially cause temporary impacts on the landscape, such as the creation of temporary structures, dust, minor soil erosion and minor alterations to drainage. It is considered that this is a 'Short-term', 'Negative', 'Slight', effect in terms of landscape effects. On balance, these effects are not considered significant. The Prospective Development makes use of the existing infrastructure of the Existing Development. This reduces the requirement for new internal site roads, grid infrastructure, new borrow pits, or new hardstands, thereby reducing the extent of direct Landscape Effects on the Wind Farm Site. The construction works will be 'Temporary' / 'Short-Term' in nature and completed as soon as practically possible.

Operation Phase

During the operational phase, there is no potential for impacts on landscape from a land soils and geology perspective as there will be no groundworks excavations associated with this phase.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

17.2.5 Air Quality

Air Quality and Material Assets

Construction Phase

The transport of turbine components, supporting infrastructure materials, construction and staff vehicles, and waste removal vehicles to/from the Site, (see accompanying CEMP Appendix 4-3) will give rise to exhaust emissions associated with the transport vehicles. This constitutes a short-term, slight, negative effect in terms of air quality, which is not significant.

Operation Phase

The operational phase of the Prospective Development will generate additional traffic to the area in the form of light goods vehicles (LGVs) visiting the Site 1-2 times per day for inspections but on occasion, daily visits by LGVs and HGVs may be required over short periods during maintenance/component replacement activities. The addition of a LGV to the area 1-2 times per day during the operational

phase will give rise to a long-term, imperceptible, negative effect on air quality due to exhaust emissions, which is not significant.

The addition of several HGVs on occasion over the 25-year lifetime of the Prospective Development will give rise to a long-term, imperceptible, negative effect that is not significant, due to the localised and intermittent nature of the maintenance.

The permanent onsite 110kV substation will be operated and maintained by the Electricity Supply Board (ESB) and EirGrid throughout the lifetime of the wind farm. It is anticipated that substation operators will visit the Site 1-2 times per day in LGVs but on occasion, HGVs may be required to visit the Site for maintenance/substation component replacement. On occasion, the removal of hydrocarbons (transformer oil) and waste from substation welfare facilities will be removed from the Site by a licenced waste disposal company. The addition of a LGV to the area 1-2 times per day during the operational phase will give rise to a long-term, imperceptible, negative effect on air quality due to exhaust emissions, which is not significant. The addition of several HGVs on occasion over the 25-year lifetime of the Prospective Development will give rise to a long-term, imperceptible, negative effect on air quality that is not significant.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

17.2.6

Climate

Climate and Material Assets

Construction Phase

During the construction phase of the Prospective Development there will be greenhouse gas emissions arising from production of construction materials (such as cement), and the operation of construction vehicles and plant. These will be restricted to the duration of the construction phase, and as such will give rise to emission over a short-term duration. However, once emitted to the atmosphere, the greenhouse gas emissions that will arise from construction phase activities of material assets will have a permanent, imperceptible, negative effect on Climate, which is Not Significant.

Operation Phase

During the operational phase, the Prospective Development will displace carbon dioxide from fossil fuel-based electricity generation, over the proposed 25-year lifespan of the Prospective Development. Therefore, while there will be greenhouse gas emissions associated with the operation of the Prospective Development, this will be offset by the operation of the Prospective Development which will offset 53,097 tonnes of carbon dioxide per annum or 1,327,425 tonnes over its operational life from traditional carbon-based electricity generation. Subsequently, this will cause a long-term, moderate, positive, effect on Climate as a result of reduced greenhouse gas emissions.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

17.2.7 Landscape and Visual

Landscape & Visual and Cultural Heritage

Construction Phase

The construction phase of the Prospective Development will involve earthmoving activities such as topsoil/peat removal and excavation works as part of the construction phase. This may have a number of potential negative effects on the known and potential archaeological heritage. The potential effects of the BMEP proposals have also been considered.

Where excavation is required, existing land cover, vegetation, and spoil will be removed during the construction phase. In most instances, groundworks and excavation trenches will be re-instated upon completion of construction. Where spoil arising from construction activities is managed within the Prospective Development, the vegetative top-soil layer will be removed and re-instated following spoil management taking place. The construction activities may potentially cause temporary impacts on the landscape, such as the creation of temporary structures, dust, minor soil erosion and minor alterations to drainage. It is considered that this is a 'Short-term', 'Negative', 'Slight', effect in terms of landscape effects.

No recorded archaeological assets are located within the Wind Farm Site or the BMEP Site. As ground works for the construction of Meenbog Wind Farm have been substantially completed and no recorded archaeological features are located therein there is no potential for direct effects to the recorded archaeological resource. Ground works have also been completed for the Grid Connection. Archaeological monitoring of those works did not identify any impacts to the recorded archaeological resource. This is considered a Neutral effect.

No previously unrecorded archaeological monuments, stray finds or structures were noted within the Site during the previous walk-over surveys, the site inspection carried out for this assessment in 2025 or during archaeological monitoring of ground works for the Existing Development. In this regard no potential direct effects to such finds or sites are identified. This is considered a Neutral effect.

One potential Cultural Heritage feature was noted within the Western block of the BMEP Site during the cartographic review carried out as part of this assessment. The potential feature is indicated on the third edition OS map and named 'Labbincugy'. No evidence for a feature at this location was apparent on the available aerial photography and dense coniferous forestry is located in its immediate vicinity. Clear-felling of that forestry is proposed as part of the BMEP in addition to the construction of an access road to facilitate provision of harvesting machinery. The proposed access road which is located c. 75m to the south of the potential feature will not involve ground disturbance as a 'Build on Top' methodology will be utilised. In this regard no potential direct effects to the feature as a result of same is identified, however, some mitigation is proposed as a precautionary measure.

Both the Eastern and Western blocks are currently covered in dense coniferous forestry. the presence of such forestry cover may obscure the presence of previously unknown Cultural Heritage assets. In this regard and in the interest of ensuring the continued preservation of any items of Cultural Heritage merit which may be located within the proposed BMEP Site some mitigation is proposed as a precautionary measure.

Operation Phase

Operational effects are considered largely as a result of the proposed turbines rather than other elements of the Prospective Development which would not be dominant in the wider landscape setting

in general, however the proposed met mast is also considered. The assessment of effects on visual setting was undertaken using both the Zone of Theoretical Visibility (ZTV) map in the Landscape and Visual Impact Assessment (LVIA), as presented in Chapter 13 of this EIAR, and also with reference to photomontages. The ZTV is a bare-ground model which does not take screening vegetation into account. This effect is considered to be indirect, negative visual effect of the proposed turbines on sites and monuments range from imperceptible to moderate.

No potential visual effects as a result of the Grid Connection or the proposed BMEP Site to the Cultural Heritage resource are considered possible and therefore are screened out of this Section of the assessment.

Decommissioning Phase

Any interactive impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent and lesser duration

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

17.2.8 **Major Accidents and Natural Disasters**

Construction, Operation and Decommissioning Phase

As described in Ch. 16 Major Accidents and Natural Disasters, major accidents or natural disasters are hazards which have the potential to affect the Prospective Development and lead to environmental effects both directly and indirectly. These include accidents during construction, operation and decommissioning of the Prospective Development caused by operational failure and/or natural hazards. The assessment of the potential for significant accidents or disasters is conducted in connection with the information that must be included in the EIAR. This includes aspects such as population and human health, biodiversity, birds, land and soil, water, air quality, climate, cultural heritage, the landscape and material assets. The risk of a major accident and/or disaster during the construction of the Prospective Development is considered 'low' in accordance with the 'A Framework for Major Emergency Management – A Guide to Regional Risk Assessment' (DoHLGH, 2024) Document.

The residual effect(s) associated with the construction, operation and decommissioning of the Prospective Development are Not Significant.

On this basis, the identified interaction during the construction, operation and decommissioning phase is Not Significant.

17.3 **Mitigation and Residual Effects**

Where any potential interactive negative effects have been identified in the above, a full suite of appropriate mitigation measures has already been included in the relevant sections (Chapters 5 – 16) of the EIAR and are detailed in the CEMP (Appendix 4-3). The implementation of these mitigation measures will reduce and / or eliminate the potential for there to be effects. Information on potential residual effects and the significance of effects, is also presented in each relevant chapter. On this basis the effects arising from the identified interactions are Not Significant.