

Remedial Environmental Impact Assessment Report

Substitute Consent for
Deviations at Meenbog
Windfarm, Co. Donegal

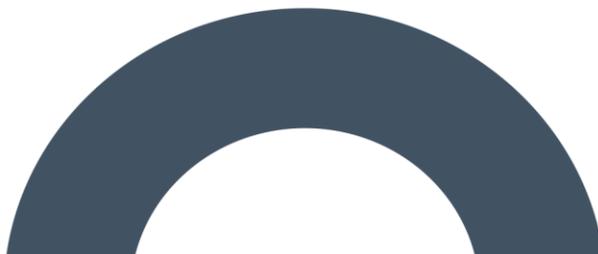


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NON-TECHNICAL SUMMARY

Introduction

The Subject Development comprises of 25 deviations from the windfarm permitted under ABP-300460-17 (amended by APB-303729-19).

The Subject Development relates to wind farm roads and hardstand areas, peat storage and containment measures, borrow pits, environmental and water quality mitigation measures, and ancillary works.

All elements of the Subject Development have been assessed as part of this rEiAR. A full and detailed description of the Subject Development is provided in Chapter 3 of this rEiAR.

References to Permitted Development, Subject Development, Meenbog Windfarm, and Site

The list below provides terminology used in this rEiAR.

- **'Site'**: refers to the primary rEiAR study area as shown in green in Figure 1-1.
- **'Permitted Development'**: means the permitted wind farm development including, wind turbine infrastructure, internal site roads and all supporting infrastructure, including the grid connection, which was granted permission by the Board under Planning Ref: ABP-300460-17 as amended by ABP-303729-19.
- **'Subject Development'**: means the 25 deviations from the Permitted Development as shown in Figure 1-2, for which substitute consent is being sought.
- **'Meenbog Windfarm'** means both the Permitted Development and the Subject Development combined.
- **'November 2020 Peatslide'**: means the peatslide or peat movement that occurred on 12th November 2020, during the construction of a permitted access road to turbine T7.

The primary study area of this rEiAR is approximately 903 hectares in extent and is located approximately 8km southwest of the twin towns of Ballybofey and Stranorlar and approximately 12km northeast of Donegal Town. Two of the 25 deviations are partly outside of the study area for the Permitted Development. The study areas of each individual topic being assessed, are identified in the relevant chapters of this rEiAR.

Applicant

The applicant for substitute consent for the Subject Development is Planree Ltd. Planree Ltd is an associated company of Enerco Energy Ltd., which is an Irish-owned, Cork-based company with extensive experience in the design, construction and operation of wind energy developments throughout Ireland, with projects currently operating or in construction in Counties Cork, Kerry, Limerick, Clare, Galway, Mayo and Donegal.

By Q1 2024 Enerco associated companies had over 875 Megawatts (MW) of wind generating capacity in commercial operation or in construction, with a further c.400MW of projects at various stages in its portfolio to assist in meeting Ireland's renewable energy targets.

Brief Description of the Subject Development

The Subject Development comprises of 25 deviations from the windfarm permitted under ABP-300460-17 (amended by APB-303729-19). The Subject Development comprises wind farm roads and hardstand areas, peat storage and containment measures, borrow pits, environmental and water quality mitigation measures, and ancillary works. All elements of the Subject Development have been

assessed as part of this rEIAR. A full and detailed description of the Subject Development is provided in Chapter 3 of this rEIAR.

Need for the Subject Development

The Permitted Development is a large-scale civil engineering project that has been granted consent by the Board having been considered and permitted as a Strategic Infrastructure Development (SID) due to its nature, scale and characteristics. The 25 deviations that comprise the Subject Development are contiguous with the footprint of the Permitted Development. The Meenbog Windfarm as constructed to-date, including the subject 25 deviations, is consistent in terms of the nature, scale, and extent of impacts to the environment as assessed in the EIAR for the Permitted Development, and as assessed in the EIA and AA undertaken by the Board.

The deviations which form the Subject Development occur in similar habitats and locations to the previously assessed and permitted plans, do not change the nature or scale of the Permitted Development, and do not materially alter the environmental impacts associated with the Permitted Development.

The primary reason for the Subject Development relates to the need to often make adjustments to the infrastructure as presented in the planning application drawings for a permitted development in response to actual conditions encountered on the ground, during the construction of such SID wind farm developments. In large-scale strategic infrastructure and civil engineering projects, some minor deviations from planning-stage designs are commonplace due to the greater level of detail required for the preparation of detailed engineering and construction designs prior to construction, or to adapt to ground conditions encountered on-site. The project design team recommend and implement minor modifications in order to improve the safety and constructability of the development as and when circumstances, unforeseen at planning level, dictate. These circumstances often do not become apparent until construction has commenced.

Legislative Context

This rEIAR complies with the EIA Directive of 2011/92/EU and as amended by Directive 2014/52/EU. In addition, Article 94 of the Planning and Development Regulations 2001 (as amended) sets out the information to be contained in an rEIAR, with which this rEIAR complies.

The provisions for Substitute Consent are contained primarily within the Planning and Development Act 2000 (as amended) (hereafter referenced as 'the Act'). Pertinent amendments relating to substitute consent include those set out by Section 57 of the Planning and Development (Amendment) Act 2010, the Environmental (Miscellaneous Provisions) Act 2011, the European Union (EIA and Habitats) Regulations 2011, the European Union (EIA and Habitats) (No. 2) Regulations 2011, the European Union (Substitute Consent) Regulations 2011, the European Union (Environmental Impact Assessment and Habitats) Regulations 2015 (numbers 1 and 2), and the Planning and Development, Maritime and Valuation (Amendment) Act 2022, including those provisions which have come into effect since December 2023 through the Commencement of Certain Provisions (No. 2) Order (SI No. 645/2023).

Part XA of the Act refers to the legislative process for Substitute Consent, with Section 177C to 177G being of most relevance to this application for Leave to Apply for Substitute Consent for certain deviations at the Meenbog Wind Farm.

An application for Leave to Apply for Substitute Consent was made to An Bord Pleanála in accordance with Section 177C(2)(b) of the Act on 8th July 2022, which demonstrated that the works carried out satisfied 'exceptional circumstances' and sought permission to prepare and lodge the subject application. The decision to grant the Leave to Apply for Substitute Consent was made by An Bord Pleanála on 16th October 2023, and the subsequent grant of an extension of time period to lodge this application in accordance with Section 177E(4) was granted on 12th January 2024. Once exceptional

circumstances are demonstrated, an application for Substitute Consent can be made in accordance with Section 177E of the Act.

Purpose and Structure of this rEIAR

The purpose of this rEIAR prepared as part of the substitute consent application is to document the likely significant effects, if any, on the environment, which have occurred, or which are occurring, or which can reasonably be expected to occur because the Subject Development was carried out. To this end it includes an assessment of all phases of the Subject Development - construction, operational and decommissioning.

The EIAR project team comprises a multidisciplinary team of experts with extensive experience in the assessment of wind energy developments and in their relevant area of expertise. Each chapter of this EIAR has been prepared by a competent expert in the subject matter. The chapters of this rEIAR are as follows:

1. *Introduction*
2. *Background to the Subject Development and Reasonable Alternatives Considered*
3. *Description of the Subject Development*
4. *Population and Human Health*
5. *Biodiversity - Flora and Fauna, including Ornithology*
6. *Land, Soils and Geology*
7. *Hydrology and Hydrogeology*
8. *Air and Climate*
9. *Noise and Vibration*
10. *Archaeological, Architectural and Cultural Heritage*
11. *Landscape and Visual*
12. *Material Assets*
13. *Vulnerability of the Project to Major Accidents and Natural Disasters*
14. *Interaction of the Foregoing*
15. *Schedule of Mitigation and Monitoring Measures*

A remedial Natura Impact Statement has also been prepared in line with the requirements of the Habitats Directive and this rEIAR and the NIS will accompany the planning application to the Board for the Subject Development under Section 37E of the Planning and Development Act 2000, as amended.

The Subject Development and the remainder of Permitted Development have been cumulatively assessed as part of this rEIAR. The Board has acknowledged that the substitute consent process applies to the Subject Development only. Therefore, the purpose of this rEIAR is to assess the environmental effects of the Subject Development for the substitute consent process.

Background to the Subject Development

This section of the rEIAR sets out the energy and climate change related policy and targets along with the strategic, regional and local planning policies relevant to the Subject Development. It also summarises the EIA scoping undertaken, and the cumulative impact assessment process undertaken.

The policies and targets which have been put in place at the various levels of Government in relation to renewable energy and climate change illustrate the need for the Subject Development to assist Ireland in meeting its national targets and European commitments in relation to climate change and decarbonisation.

The Subject Development relates to a total of 25 no. deviations as outlined in Chapter 1 and Chapter 3 of the rEIAR, and forms part of the consented and partially constructed Meenbog Wind Farm ('the Permitted Development') (ABP Ref: PA05E.300460 as amended by ABP-303729-19) in County Donegal. The primary reason for the majority of the 25 no. deviations of the Subject Development relates to the need to often make minor adjustments to the internal layout of a permitted road network and ancillary infrastructure, in response to actual conditions encountered on the ground during the construction of such SID wind farm developments. The Meenbog Wind Farm as constructed to-date, including the subject 25 no. deviations, is consistent in terms of the nature, scale, and extent of impacts to the environment as assessed in the rEIAR for the Permitted Development, and as assessed in the EIA and AA undertaken by the Board.

The Climate Action Plan (CAP) 2024 builds on CAP 23 by refining and updating the status of the actions required to deliver the decarbonisation required under the carbon budgets and sectoral emissions ceilings. The renewable electricity generation targets are unchanged from the CAP 23 (9GW of onshore wind & 80% renewable electricity share). CAP 24 acknowledges the urgency and importance of the decarbonising the electricity sector. The plan states: *"Given that the programme of large-scale offshore wind deployment is expected to be realised towards end decade, deployment rates for onshore renewables will need to increase to match demand growth to ensure we keep electricity emissions within range of the carbon budgets. This requires a major upscaling and accelerating in current deployment of renewables, particularly onshore wind."*

A gradual shift towards increasing our use of renewable energy is no longer viable. There is an urgency now to ensure real change happens. Renewable energy development is recognised as a vital component of Ireland's strategy to tackle the challenges of combating climate change and ensuring a secure supply of energy. Ireland is heavily dependent on the importation of fossil fuels to meet its energy need. 70% of energy used in Ireland is imported from abroad, higher than the EU average of almost 60% (National Energy Security Framework 2022). This high dependency on energy imports is highly risky and Ireland is currently extremely vulnerable both in terms of meeting future energy needs and ensuring price stability. As such, expanding indigenous renewable energy supply is critical for energy security and price stability.

Local Policy

The site of the Subject Development is located in the administrative area of Donegal County Council. The Donegal County Development Plan 2018-2024 (As Varied) is strongly supportive of renewable energies, more specifically wind energy, particularly in the context of climate change mitigation and adaptation. This policy document represents a crucial blueprint for steering the county towards a sustainable and resilient future. The policies outlined in this strategic document align with national and European objectives in terms of promoting renewable energy and energy projects that facilitate sustainable development. The development of Meenbog wind farm, including the Subject Development under consideration here, continues to meet the objectives of and align with key policies relating to the protection and conservation of the environment, including the sensitive development and strategic location of the wind farm. A number of these policies highlight the role of the Council in facilitating the successful development of wind energy projects across the county, in the interest of sustainable development.

The Draft Donegal County Development Plan (2024-2030) was published for public consultation between 4th August and 13th October 2023. The Chief Executive's Report was published in January 2024, and so it is anticipated that the Plan will be adopted within the coming months. Similar to the extant plan, the Draft Plan demonstrates an ambition to support renewable energy projects. It acknowledges the cruciality of renewable energy in the context of climate change mitigation and adaptation and notes the opportunity that Donegal county has to offer in terms of wind energy potential. Overall, it is evident that the Draft Donegal County Development Plan (2024-2030) is supportive of the delivery of wind energy projects, in the context of climate change mitigation and adaptation. The policy analysis demonstrates that the planning deviations and subject development, continue to align with the key policy objectives outlined within the Plan.

Planning History

Chapter 2 Section 2.5 presents an overview of the planning history of the development site. The planning history search was compiled via a desk-based study in which the Donegal County Council (DCC) Planning Portal, the An Bord Pleanála website, and Northern Ireland Planning Portal were consulted. Windfarm planning applications and 'significant' planning applications were considered within a 1.5km, 10km and 20km radius from the centre of the Meenbog Windfarm site. The detail of these can be viewed in Appendix 2-1.

Scoping and Consultation

A scoping letter, providing details of the Subject Development, was prepared by MKO and circulated to prescribed statutory bodies and relevant NGOs in January 2024. The Scoping Consultee List contacted for the Permitted Development informed the scoping for the Subject Development. The scoping letter provided details of the Subject Development and set out the scope of work for the rEiAR. Consultees were invited to contribute to the rEiAR by suggesting baseline data, survey techniques and potential impacts that should be considered as part of the assessment process and in the preparation of the rEiAR.

Error! Reference source not found. in Chapter 2 lists the responses received from the bodies to the scoping documents circulated. Copies of all scoping responses received are included in **Appendix 2-2** of this rEiAR. If further responses are received, the comments of the consultees will be considered in the operation and decommissioning of the Subject Development in the event of Substitute consent being granted. The recommendations of the consultees have informed the scope of the assessments undertaken and the contents of the rEiAR. Table 2-10 in Chapter 2 further presents the key points from the scoping responses and identifies where such points have been addressed in this rEiAR. Following a number of calls to clarify the scoping request, Derry and Strabane District Council made the decision to forward the Scoping Letter to a number of consultees they deemed relevant within Northern Ireland on the 8th of February. Their responses are listed separately in Table 2-11 as these consultees were not part of Scoping List and were not scoped for the Permitted Development.

Consideration of Reasonable Alternatives

This section of the rEiAR contains a description of the reasonable alternatives that were studied by the developer, which are relevant to the Subject Development and the Site and its specific characteristics, in terms of site location and other renewable energy technologies as well as design layout incorporating size and scale of the Subject Development, connection to the national grid and transport route options to the Site. It provides an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects. The consideration of alternatives is an effective means of avoiding environmental impacts. As set out in the '*Guidelines on The Information to be Contained in Environmental Impact Assessment Reports*' (Environmental Protection Agency, 2022), the presentation and consideration of reasonable alternatives investigated is an important part of the overall EIA process.

Cumulative Impact Assessment

To gather a comprehensive view of cumulative impacts on the above environmental considerations and to inform the rEIAR process being undertaken by the consenting authority, each relevant chapter within this document addresses the potential for cumulative effects to arise, where appropriate.

The potential cumulative impacts with other relevant development has been carried out with the purpose of identifying what influence the development has had, or potentially could have, on the surrounding environment when considered cumulatively and in combination with relevant permitted, proposed and constructed projects and other landuses in the vicinity of the site.

Conclusion

Overall, the Project has been designed to mitigate impacts on the environment and particularly water, and a suite of mitigation measures is set out within the rEIAR. Additional detail in relation to the potential significant cumulative effects arising and, where appropriate, the specific suite of relevant mitigation measures proposed are set out within each of the relevant chapters of this rEIAR. The Subject Development is compliant with international, national, regional, and local planning and renewable policies. This clearly highlights its overall positive contribution to planning and development, specifically within the context of renewable energy and climate change mitigation and adaptation.

Description of the Subject Development

This section of the rEIAR describes the Subject Development and its component parts which are the subject and its component parts which is the subject of a substitute consent application by Planree Ltd. to An Bord Pleanála (ABP).

The development for which substitute consent is being sought consists of deviations from the wind farm permitted under ABP-300460-17 (amended by ABP-303729-19). The deviations relate to wind farm roads and hardstand areas, peat storage and containment measures, borrow pits, environmental and water quality mitigation measures and all ancillary works. The Subject Development comprises 25 no. deviations from the Permitted Development.

The Subject Development is part of the consented and partially constructed Meenbog Wind Farm (Permitted Development) in Co. Donegal. All other elements of the Permitted Development are fully consented, and it is not proposed to make any alterations to the current site layout, wind turbines or associated infrastructure. All elements of the Permitted Development, other than the Subject Development (as described above) were constructed in accordance with the planning consents for that project. Construction of the Subject Development began in November 2019 concurrently and in conjunction with the Permitted Development. No further construction on the Subject Development is anticipated.

The components of the Subject Development are broadly grouped into the following categories:

- Site Roads and Hardstand Areas
- Borrow Pits
- Peat and Spoil Management
- Environmental and Water Quality Mitigation Measures

Each of the components is described in detail in Chapter 3 of this rEIAR. A Construction and Environmental Management Plan (CEMP) was prepared for the Meenbog Windfarm and is included in Appendix 3-2 of this rEIAR. The provisions of the CEMP applied to all construction at the site including the Subject Development. The CEMP includes details of drainage, peat and overburden management and waste management. The CEMP was updated as necessary during the construction phase, to include all mitigation measures and prescribed construction methodologies. Construction of the

Subject Development began in November 2019 concurrently and in conjunction with the Permitted Development.

Access to the Site is from the west via an existing main site entrance off N15 approximately 8km southwest of Ballybofey. This Site entrance will be used for day-to-day maintenance and monitoring of the Meenbog Windfarm. Construction access for the Subject Development was also via the main Site entrance to the west. There is a secondary Site entrance from Dearg Line Road to the north of the Site. This entrance was used as a staff entrance for workers accessing the northern portion of the Site. All deliveries of construction materials to the Subject Development were by way of the main Site entrance off the N15. The Subject Development did not result in any additional traffic beyond that assessed in the EIAR for the Permitted Development.

During the construction of the Meenbog Windfarm the drainage management system was extended to encompass the Subject Development. Interceptor drains and stilling ponds were constructed around borrow pits in keeping with the drainage system for the Permitted development to ensure surface water quality was protected in accordance with the CEMP.

Given the nature of the Subject Development it will have no bearing on the operational phase of the Meenbog Windfarm. The only activities associated with the Subject Development during the operations phase will be periodic maintenance of the site tracks which will be undertaken as part of the overall maintenance plan for the Meenbog Windfarm, and which was assessed in the EIAR for the Permitted Development.

Given the nature of the Subject Development it will have no bearing on the decommissioning phase of the Meenbog Windfarm. The Subject Development will not alter the decommissioning plan for the Meenbog Windfarm.

An outline decommissioning plan for the Meenbog Windfarm is contained in the CEMP in Appendix 3.2. The Decommissioning Plan will be updated prior to the end of the operational period in line with decommissioning best practices that may exist at the time and will agree with the competent authority at that time.

Population and Human Health

One of the principal concerns in the development process is that individuals or communities, should experience no significant diminution in their quality of life from the direct, indirect or cumulative effects arising from the construction, operation and decommissioning of a development. Ultimately, the impacts of a development have the potential to impinge on human health, directly and indirectly, positively and negatively. The key issues examined in this chapter of the rEIAR include population, human health, encompassing employment and economic activity, land-use, residential amenity (noise, visuals) community facilities and services, tourism, property values, and health and safety.

The Subject Development does not directly affect population, employment and economic activity, tourism, health and public perception and therefore does not alter the conclusions of the EIAR for the Meenbog Windfarm in relation to these elements. The subject deviations represent minor changes to the internal layout of the permitted development.

The Subject Development site is located in County Donegal approximately 8km southwest of the twin towns of Ballybofey and Stranorlar and approximately 12km northeast of Donegal Town. The N15 National Road runs South-West to North-East along the western boundary of the Site with the main wind farm area lying about 2km east of the road. The site is located within the townlands of Meenbog and Croaghonagh and borders County Tyrone in Northern Ireland, specifically the administrative division of Omagh West and the townland of Termonamongan along the Southeast site boundary. The surrounding land use predominantly comprises peat bogs, commercial forestry and other seminatural areas with limited residential use along local roads.

The Site lies within the Direct Electoral Division of Goland, in Donegal. Demographic trends for Goland, County Donegal and the State where assessed.

Impacts on human beings during the construction, operational and decommissioning phases of the Proposed Project are described in Chapter 4 in terms of population density, household statistics age structure, employment and economic activity, land use patterns and activities, Services, Tourism and Amenity, property values, residential amenity and health and safety. Where a negative impact is identified, appropriate mitigation measures were put in place to ensure that there will be no significant health effects on Sensitive Properties in the surrounding area.

Any impacts on Population and Human Health during the construction phase were assessed to be, at worst, short-term, imperceptible, and of negative effect.

Impacts of the Subject Development during the operational and decommissioning phase are also assessed in Chapter 4 and are found to be not significant.

Biodiversity including Ornithology

This chapter assesses whether the Subject Development, (both alone and cumulatively with other plans and projects including the Permitted Development and the Peat Slide event that occurred in December 2020) could have resulted in any significant cumulative impacts on Biodiversity.

The Site has been subject to extensive ecological surveys. These were carried out to as part of the permitted Development application and more recently, to assess the ecological conditions of the 25 deviations that make up the Subject Development. All habitats within the Site were the subject of detailed surveys and assessment and habitat mapping. This habitat mapping and assessment was undertaken following the 'A Guide to Habitats in Ireland' (Fossitt, 2000). The majority of the Subject Development Footprint is dominated by Commercial **Coniferous Forestry (WD4)** (including clear fells), comprising mainly of Lodgepole pine (*Pinus contorta*) and Sitka spruce (*Picea sitchensis*). Further, **Buildings and Artificial Surfaces (BL3), Spoil and Bare Ground (ED2), Recolonising Bare Ground (ED3)** associated with the Permitted Development are abundant within the Subject Development Footprint. The site is accessible via the N15 and a network of existing forestry access tracks and forestry roads. The Subject Development Site is surrounded by existing commercial **Conifer Forestry (WD4)** (including clear fell), and areas of **Lowland Blanket Bog (PB3)** and **Upland Grasslands**.

The habitats recorded within the Subject Development Footprint are of low ecological value in the context of the wider landscape. The construction of the Subject Development did not result in the loss of any habitat of high ecological value or significant supporting habitats for protected floral and fauna. No evidence of protected fauna within the Subject Development Footprint was recorded during the surveys carried out.

No potential for the deviations to have resulted or to result in any adverse effects on surface water quality, groundwater quality or the hydrological/ hydrogeological regime were identified, as none of the components of the Subject Development were located within or adjacent any EPA named watercourse. Further, the deviations are entirely contiguous with the Permitted Development and are commensurate with works that have already been assessed in the EIAR and NIS for the Permitted Development. As such, following the implementation of mitigation measures as set out in the original EIAR for the Permitted Development, the Subject Development did not result in any significant effects on the water quality. There is, therefore, no potential for any cumulative effects on land use in this regard.

In conclusion, each element of the Subject Development (individually and/or accumulatively) was assessed and produced no evidence to suggest that significant negative ecological effects occurred or has the potential to occur as a result of the Subject Development.

Land, Soils and Geology

The Site is located in Co. Donegal, situated ~8km to the southwest of the towns of Ballybofey and Stranorlar, and ~12km northeast of Donegal Town. The eastern and southern boundaries of the Site are defined by the Northern Ireland border. The closest town in Northern Ireland is Castlederg which is located ~19km to the southeast. The Site has a total area of ~903ha (~9km²) in area. The Site comprises of a mix of conifer forestry, blanket bog and the partially constructed Meenbog Wind Farm. The elevation of the Site ranges between ~145 and 312 mOD (metres above Ordnance Datum).

The baseline for our assessment of the Subject Development at the site is November 2019, prior to the onset of construction works. The construction phase occurred from November 2019 to November 2020. All construction works were suspended following the occurrence of a peat slide on 12th November 2020.

Substitute Consent is being sought for 25 no. alterations, where the constructed development deviated from the Permitted Development. These 25 no. deviations are described in Chapter 3.

From a land, soils and geological perspective, the main impacts occurred during the construction of the Subject Development when forestry was felled, the acrotelm (topmost living peat layer), peat and subsoil, and bedrock were excavated and removed to facilitate the construction of the components of the Subject Development.

The loss of ~8.8ha of peat bogs and coniferous forestry has not had a significant effect on the land environment within the overall Site. The footprint of the Subject Development represents ~1% of total Site area. Furthermore, the construction of these 25 no. deviations has been in line with recent trends within the Site (*i.e.* the construction of the Permitted Development). Therefore, the effects on the land environment are similar to those which would have occurred if the Meenbog Wind Farm was constructed in accordance with the current planning permission.

To date the total amount of peat and spoil moved and stored amounts to 325,500m³, and the project engineers have determined that a further 14,500m³ will be moved and stored in order to complete the construction of the wind farm development. In total that would be an increase of 8,180m³ above that assessed in the EIAR, or an increase of ~2.5%. This is considered to be negligible and will not have resulted in any additional impact to that already assessed in the EIAR. To date the total amount of stone extracted is 288,000m³, and the project engineers have determined that a further 39,000m³ of rock will be required to be extracted to complete the project. In total that would be an increase of 19,190m³ above that assessed in the EIAR, or an increase of ~6.2%. This is considered to be negligible in terms of overall volumes of extracted rock. Cumulatively these small increases in peat/spoil and rock volumes have not caused any additional potential for cumulative impacts on the land soils and geology environment. The negligible impacts are local/direct to the areas where excavations and extraction/storage has occurred.

A peat slide occurred at the Site 12th November 2020. Overall site stability has been assessed in the Ionic Consulting Site Stability Assessment Report and the AFRY Site Inspection Technical Note (Appendix 4-3). These reports conclude that the overall site is currently stable based upon the detailed assessment carried out along all roads, hardstandings, borrow pits, peat storage areas and peat stabilisation areas. Furthermore, inspections concluded that the Subject Development was not responsible for the peat slide.

Our assessment confirms that no significant cumulative effects on land soil and geology environment have resulted from the Subject Development. Effects on the land, soils and geological environment will only occur as direct effects, local to the point of extraction/excavation, and therefore cannot extend beyond the Site boundary.

Hydrology and Hydrogeology

Regionally, the vast majority of the Site is located in the Foyle River surface water catchment. This area of the Site, including 21 no. deviations, is drained by the Mourne Beg River and its tributaries which include the Bunadaowen River, the Shruhingarve Stream and Mary Burns Breen. An additional 3 no. deviations in the southwest of the site are located in the catchment of the Glendergan River, a tributary of the River Derg. The Mourne Beg River itself is also a tributary of the River Derg. Meanwhile, a small area in the northwest of the Site is mapped in the Donegal Bay North regional surface water catchment. This area of the Site is drained by the Lowerymore River. Only 1 no. deviation is located in the catchment of the Lowerymore River which flows to the southwest and discharges into Lough Eske.

The baseline hydrological environment at the Site was comprised of a network of mound drains and ploughed ribbon drains which drained the forestry plantations. These drains discharged into interceptor drains which in-turn discharge to local surface watercourses.

The construction of the Subject Development included the design detailed drainage plans and systems which were inserted prior to the construction works. The drainage design was integrated with the existing forestry drainage network. The wind farm drainage system was designed to 'keep clean water clean' by avoiding disturbance to natural drainage features, minimising any works in or around artificial drainage features, and diverting clean surface water flow around excavations, construction areas and temporary storage areas. Furthermore, all drainage waters from works areas that might have carried silt or sediment, and nutrients, were collected and routed towards settlement ponds (or stilling ponds) prior to controlled diffuse release over vegetated surfaces. There was and is no direct discharge from the work areas or from the footprint of the Subject Development to surface waters. During the construction phase all runoff from works areas (i.e. dirty water) was attenuated and treated to a high quality prior to being released.

Whilst the location, alignment and size of components of the Subject Development differ from what would have been built strictly in accordance with the plans and particulars lodged with the current planning permission (ABP Ref: PA05E.300460), these infrastructure elements were constructed as per the methodology and guidelines prescribed in the original EIAR. The original EIAR (2016) for the Permitted Development prescribed detailed mitigation measures relating to earthworks, the release of suspended solids, hydrocarbons and wastewater for the protection of surface and groundwater quality. The implementation of the mitigation measures detailed in the EIAR and the CEMP ensured the protection of the hydrological and hydrogeological environments.

Water quality monitoring data from the EPA (biological monitoring) and monitoring data associated with the development (biological monitoring, surface water chemistry monitoring, visual inspections and continuous turbidity monitoring), show that, with the exception of the Shruhingarve Stream, there has been no reduction in surface water quality in any of the watercourses downstream of the Site. The negative effect recorded on the Shruhingarve Stream was associated with a peat slide which occurred on the 12th November 2020. However, subsequent water quality monitoring has shown that the effect was a short-term effect and that the water quality in the Shruhingarve is recovering. Meanwhile, water quality in the Mourne Beg River downstream of the Shruhingarve Stream now exceeds the pre-construction baseline water quality. Assessments have found that the Subject Development (the 25 no. deviations) was not in any way responsible for the peat slide. Therefore, there has been no reduction in water quality associated with the Subject Development.

Furthermore, all standard mitigation measures with respect to hydrocarbon spills and leaks and wastewater disposal were implemented at the Site. As a result, no spills or leaks of hydrocarbons or wastewater occurred at the Site and there was no associated negative effects on the local hydrological environment.

In terms of hydrogeology, the Site is underlain by Precambrian quartzites, gneisses and schists which are classified as a Poor Bedrock Aquifer. These rocks are devoid of intergranular permeability and reject a high proportion of potential groundwater recharge. Therefore, due to the local hydrological regime

(high rates of runoff and low rates of groundwater recharge) and the shallow nature of the completed works, surface waters were the primary receptor. Nevertheless, the standard mitigation measures implemented in relation to hydrocarbons and wastewater ensured the protection of groundwater quality.

No groundwater level effects have occurred at most deviation locations due to the shallow nature of the works. Some deviations relating to the dewatering of borrow pits and peat cells would have had the potential to effect groundwater levels. However, due to the topographic elevation and hydrogeological setting of the Subject Development (Poor Aquifer with only minor, short and localised groundwater flows), the residual effects on groundwater levels were, at worst, localised, short term, imperceptible, and of negative effect. Effects would have been limited to the immediate vicinity (less than 30 – 300m). These effects on groundwater levels can be considered to be equivalent to what was assessed in the original EIAR.

Based on the extensive available hydrological dataset, the impact assessment concludes that no significant effects on the surface water and groundwater environmental have occurred, are occurring or are likely to occur in the future as a result of the Subject Development. Furthermore, the assessment concludes that the Subject Development has not resulted in any significant effects on downstream designated sites, water supplies or the WFD status of receiving waterbodies (i.e. downstream surface water bodies or underlying groundwater body). A cumulative impact assessment has also been completed and also concludes that no significant cumulative or in combination effects have occurred, are occurring or are likely to occur in the future as a result of the Subject Development.

Air and Climate

Air Quality

This chapter identifies, describes and assesses the potential significant direct and indirect effects on air-quality arising from the construction, operation and decommissioning of the Proposed Project.

The Environmental Protection Agency (EPA) has designated four Air Quality Zones for Ireland:

- Zone A: Dublin City and environs
- Zone B: Cork City and environs
- Zone C: 16 urban areas with population greater than 15,000
- Zone D: Remainder of the country.

The Site lies within Zone D, which represents rural areas located away from large population centres.

The air quality in the vicinity of the Subject Development is typical of that of rural areas of Ireland, i.e., Zone D. Prevailing south-westerly winds carry clean, unpolluted air from the Atlantic Ocean onto the Irish mainland. The EPA publishes Air Monitoring Station Reports for monitoring locations in all four Air Quality Zones. The most recent report on air quality in Ireland, 'Air Quality in Ireland 2022' was published by the EPA in 2023. The EPA reports provide SO₂, PM₁₀, NO₂ and O₃ concentrations for areas in Zone D. These are detailed in section 8.1.5 of Chapter 8 Air and Climate.

Due to the non-industrial nature of the Subject Development and the general character of the surrounding environment, air quality sampling was deemed to be unnecessary for this rEIAR.

The Subject Development was assessed for air quality regarding exhaust emissions of construction machinery and plant to, from and around the site and for dust emissions. A Construction and Environmental Management Plan (CEMP) was in place throughout the construction phase (see Appendix 4-3 of the rEIAR) and included dust suppression measures. There was no potential of exhaust emissions to and from the site as the Subject Development did not generate any additional traffic volumes other than those already assessed in the EIAR of the Permitted Development. Exhaust and dust emissions from within the site were mitigated through the measures set out in the CEMP. Transport

from the Permitted Development, which included materials and staff for both the Permitted and Subject development followed a previously with the local authority agreed Transport Management Plan (TMP) included in the CEMP in Appendix 3-2, as well as mitigation measures to reduce Exhaust and Dust emissions during transport to and from the site. Among other mitigation measures as outlined in the chapter, the agreed transport route roads adjacent to the Site was regularly inspected for cleanliness and cleaned as necessary.

The Subject Development is part of the Meenbog Windfarm. Once operational, any air quality emissions that will be generated by the Meenbog Windfarm will be limited to the transport of a small number of security and maintenance staff to and from the site and has been assessed as part of the Permitted Development. Over the 30-year lifespan of the Meenbog Windfarm, it is anticipated that the Subject Development will give rise to a long-term imperceptible negative effect on air quality in line with the EIAR for the Permitted Development.

Climate

This chapter identifies, describes and assesses the potential significant direct and indirect effects on climate arising from the construction, operation and decommissioning of the Subject Development.

Climate change is one of the most challenging global issues facing us today and is primarily the result of increased levels of greenhouse gases in the atmosphere. These greenhouse gases come primarily from the combustion of fossil fuels in energy use. Changing climate patterns are linked to increased frequency of extreme weather conditions such as storms, floods and droughts. In addition, warmer weather trends can place pressure on animals and plants that cannot adapt to a rapidly changing environment. Moving away from our reliance on coal, oil and other fossil fuel-driven power plants is essential to reduce emissions of greenhouse gases and combat climate change.

The Intergovernmental Panel on Climate Change (IPCC), in their AR6 Synthesis Report: Climate Change 2023¹, state that widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred. This has led to widespread adverse impacts and related losses and damages to people and nature due to the pressures of climate change and the inability to adapt to a rapidly changing environment. Moving away from our reliance on coal, oil and other fossil fuel-driven power plants is essential to reduce emissions of greenhouse gases and combat climate change.

The Donegal County Council Local Authority Climate Action Plan 2024-2029 (Donegal LACAP) was adopted on 27th February 2024, it is not yet available for viewing purposes.

The Donegal LACAP highlights the current state of climate action in Ireland, and how Donegal County Council intends to deliver and enable climate action for a just transition to a low carbon and climate resilient future within County Donegal. The Donegal LACAP will help address the mitigation of greenhouse gases, the implementation of climate change adaptation measures, and will strengthen the alignment between national climate policy and the delivery of effective local climate action.

The production of energy from wind turbines such as those to be installed as part of the Permitted development, has no direct emissions as is expected from fossil fuel-based power stations. Harnessing more energy by means of wind farms will reduce dependency on fossil fuels, thereby resulting in a reduction in harmful emissions that can be damaging to human health and the environment.

A methodology was published in June 2008 by scientists at the University of Aberdeen and the Macaulay Institute with support from the Rural and Environment Research and Analysis Directorate of the Scottish Government, Science Policy, and Co-ordination Division. The document, '*Calculating Carbon Savings from Wind Farms on Scottish Peat Lands*', was developed to calculate the impact of wind farm developments on the soil carbon stocks held in peat. This methodology was refined and updated in 2011 based on feedback from users of the initial methodology and further research in the

¹ IPCC (2023) AR6 Synthesis Report: Climate Change 2023 <<https://www.ipcc.ch/report/sixth-assessment-report-cycle/>>

area. The web-based version of the carbon calculator, which supersedes the excel based versions of the tool, was released in 2016 and is currently available as Version 1.8.1 which was last updated in 2023. The carbon calculator provides a transparent and easy to follow method for estimating the impacts of wind farms on the carbon dynamics of peatlands. Previously guidance produced by Scottish Natural Heritage in 2003 had been widely employed to determine carbon payback in the absence of any more detailed methods.

Although the loss of carbon fixing potential from plants on peat land is not substantial, it is nonetheless calculated for areas from which peat is removed and the areas affected by drainage. This calculation can take account of the annual gains due to the carbon fixing potential of the peat land and the time required for any habitat restoration. The carbon sequestered in the peat itself represents a much more substantial potential source of carbon loss. During the construction of the wind farm, carbon is lost as a result of peat excavation and peat drainage. The amount of carbon lost is estimated using default values from the IPCC (IPCC, 1997) as well as by more site-specific equations derived from the scientific literature and updated emission factors. Carbon gains due to habitat improvement and site restoration are calculated in a similar fashion.

With the implementation of the above measures during the construction phase, residual effects on Climate from greenhouse gas emissions associated with construction phase of the Subject Development were considered to have a short-term, imperceptible, negative effect on Climate. 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.

When considering these greenhouse gas emissions within the context of the national Electricity Sector Emissions Ceilings detailed in Section 8.2.2.2.5, Carbon Budget 1 (2021-2025) has an Electricity Sector budget of 40 MtCO₂eq. and Carbon Budget 2 (2026-2030) has an Electricity Sector budget of 20 MtCO₂eq for large-scale deployment of renewables. Based on the assessment above no significant direct or indirect effects on Climate occurred as a result of the Subject Development.

Noise and Vibration

AWN Consulting Limited has conducted an assessment into the likely environmental noise and vibration impacts of the Subject Development.

The noise and Vibration chapter of the rEIAR assesses the potential for any likely significant effects of noise and vibration effects of arising from the 25 deviations (Subject Development) from the originally permitted wind farm development (Permitted Development) as approved by An Bord Pleanála (ABP reference PA05E.300460).

Noise impact assessments have been prepared for the construction phase at the nearest Noise Sensitive Locations (NSLs). Baseline noise levels representative of the nearest NSLs in the vicinity of the site were measured as part of the original planning application and have informed this assessment. Noise-sensitive locations in this context are any occupied dwelling house, hostel, health building or place of worship and may include areas of particular scenic quality or special recreational amenity importance. In this instance all of the NSLs are dwellings.

It is important to note that in the case of construction noise in general, once the noise generating activity has ceased, any environmental noise effects also stop, and there is no effect which persists after the noise has stopped.

In the absence of specific noise limits, appropriate criteria relating to permissible construction noise levels for a development of this scale may be found in the British Standard British Standard BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Noise. The approach adopted here calls for the designation of a noise sensitive location into a specific category (A, B or C) based on existing ambient noise levels in the absence of construction noise. This

then sets a threshold noise value that, if exceeded, indicates a significant noise impact is associated with the construction activities.

Vibration standards come in two varieties: those dealing with human comfort and those dealing with cosmetic or structural damage to buildings. With respect to this development, the range of relevant criteria used for building protection is expressed in terms of Peak Particle Velocity (PPV) in mm/s.

Following a baseline noise and vibration assessment for the Subject Development assuming a worst-case scenario, effects from the Subject Development were not significant considering best practice guidance. Given that the worst case predicted noise level for construction works is nearly 10 dB below the construction noise threshold, it can be concluded that a significant impact due to cumulative construction activities on site would be unlikely. As an example, considering a worst-case scenario of breaking occurring simultaneously at both Nos. 20 and 21 deviations, the resultant noise level would be 59 dB L= at the closet receptor (H257) which is still below the adopted construction noise thresholds. The resultant impact would be described as negative, not significant to slight and temporary. Overall, the cumulative impact is considered not significant.

Archaeology and Cultural Heritage

This Cultural Heritage chapter was prepared by Tobar Archaeological Services Ltd. It presents the results of an archaeological, architectural and cultural heritage impact assessment of the Proposed Project. The assessment was based on desktop research, field surveys prior to construction and GIS based mapping.

The Site was the subject of a cultural heritage assessment which was carried out by Tobar for the planning application for the Permitted Development. The assessment included desk-based research and a walk-over survey of the Site. The Site was subject to a walk-over survey in 2015 and 2017.

No UNESCO World Heritage Sites or those on the tentative list were recorded near the site. The nearest World heritage site structure is on the tentative list and approximately 61km southwest.

National Monuments are those recorded monuments which are in the ownership / guardianship of the Minister for Housing, Local Government and Heritage. They are frequently referred to as being in 'State Care'. National Monuments also include those which are subject to a Preservation Order. No National Monuments or those subject to a Preservation Order are located within the Site or within 1km of the Subject Development. No monuments in State Care NI are located within 1km of the Subject Development. The nearest monuments in State Care or subject to a Preservation Order are located c. 15km and 11km to the south-west and north-east of the Subject Development Site, respectively.

No recorded monuments (SMR or NI SMR) are located within the Site. The nearest monument TY014-002 is situated c. 1.2km to the south-west of the Site in County Tyrone and comprises a possible crannog detected by aerial photography.

No previously unrecorded archaeological monuments were noted within the Site during the walk-over surveys carried out by Tobar in 2015 and 2017.

The database of excavations carried out in Ireland (www.excavations.ie) was consulted for any such licensed work which took place on or adjacent to the Site. One entry was returned for Meenbog and relates to the archaeological monitoring of ground works carried out during the construction of the Meenbog Windfarm. The monitoring was undertaken between November 2019 and November 2020 by Dominic Delaney & Associates under Excavation Licence Number: 19E0739 and in compliance with Condition No. 17 of the grant of planning permission (Ref. ABP-300460-17). No archaeological finds or features were uncovered during the monitoring.

The topographical files of the National Museum of Ireland were consulted for archaeological finds from the townlands within or adjacent to the Site. No find spots are recorded from within the Site. One find (length of straw or rope) is recorded from Croaghonagh townland, c. 344m north of the Site.

All ground works associated with the Meenbog Windfarm were subject to archaeological monitoring between November 2019 and November 2020. No archaeological finds or features were uncovered during monitoring of the works, which included the Subject Development. No direct or indirect effects on any relevant features for cultural heritage were identified from the construction phase of the Subject Development. As ground works for the Subject Development have been completed there is no potential for the uncovering of sub-surface archaeology in those areas.

Operational effects are considered largely in terms of visually dominant elements such as turbines or substation buildings. Given the nature of the Subject Development and its location in areas adjacent to the Permitted Development footprint it is not deemed to be as visually prominent as elements such as turbines or substation buildings (previously assessed). Furthermore, as outlined in Section **Error! Reference source not found.**, no cultural heritage assets are located within the Site, in close proximity to the Subject Development or generally in close proximity to the Site. In this regard, no potential visual effects to the cultural heritage resource as a result of the Subject Development are identified.

The addition of the Subject Development to the Permitted Development was considered in order to assess Cumulative Effects. Direct effects for the Subject Development are considered to be confined to within the Site and relate to construction effects.

No UNESCO World Heritage Sites, National Monuments in State Care, RPS structures or NIAH sites are located within the Site therefore no direct effects on these resources were identified when considering the Subject Development alone. When the Subject Development is added to the Permitted Development it does not result in direct cumulative effects since none were identified in the first place. The aforementioned cultural heritage assets are located away from the Site and therefore are not capable of being directly affected by the Subject Development. No cumulative effects have or will occur.

Landscape and Visual

Chapter 11 of the rEIAR addresses the landscape and visual impacts of the Subject Development in County Donegal. The Subject Development is located on the same site as the Permitted Development, that is currently under construction. The Site is part of a remote landscape. The Site is a mosaic of conifer forest of various plantation age classes interspersed with shrubs and degraded peat bog. The Permitted Development comprises wind turbine infrastructure, internal site roads and all supporting infrastructure as well as the permitted grid connection. The landscape surrounding the Site comprises irregular, undulating topography.

Onsite visibility appraisals determined that visibility of the Subject Development will be limited to the immediate setting of the Site itself. The landscape of the Subject Development was deemed to be 'Low'. Considering this factor, as well as the small-scale nature of the Subject Development, the susceptibility of the landscape of the Site to the proposed change is 'Low'. Overall, on balance, the sensitivity of this landscape to the Subject Development is deemed to be 'Low'. The magnitude of change was deemed to be 'Moderate' due to the change of character to the highly localised setting of the Subject Development. 'Low' sensitivity balanced with a highly localised 'Moderate' magnitude of change amounts to long-term landscape effects of 'Slight' significance upon the physical fabric of the landscape of the Site.

The Subject Development is located within three Co. Donegal Landscape Character Areas (LCAs). All three LCAs were designated as 'Low' sensitivity in the DCDP (2022-2028). The Magnitude of change was deemed to be 'Negligible' and residual effects on landscape character were deemed to be 'Imperceptible'.

Considering the limited visibility of the Subject Development from receptors outside the Site, the assessment of visual effects focussed on the immediate setting of each of the deviations. No sensitive receptors are located within the immediate setting of the Subject development. Visual Receptor Sensitivity is deemed to be 'Low'. Overall, the Magnitude of change is deemed to be 'Negligible'. As the Subject Development is surrounded by vegetation, the deviations will not be visible to receptors

outside of the immediate setting. A 'Low' sensitivity balanced with a 'Negligible' magnitude of change amounts to 'Imperceptible' residual effects on receptors within the immediate setting of the deviation. There will be no residual visual effects on receptors in the public realm.

Due to the localised nature of the Subject Development, there will be no interaction between the Subject Development and other developments outside the Site. There will be no cumulative effects as a result of the Subject Development with any other existing permitted, or proposed projects in the LVIA Study Area.

Considering the limited visual exposure of the Subject Development and limited number of sensitive landscape and visual receptors impacted within the LVIA Study Area, the Subject Development will not result in any negative landscape or visual effects.

Material Assets

Roads, Traffic, Transport & Access

This section considers the effect of the Subject Development on roads, traffic and transport. The EIAR for the Meenbog Windfarm found that the construction phase of the project would have a slight to moderate and temporary, negative effect on existing road users, which would be minimised with the implementation of the mitigation measures included in the traffic management plan. The traffic assessment also determined that the N15 National Road would operate within operational capacity for all days within the construction period.

There was no additional traffic generated due to the construction phase of the Subject Development and therefore no effect on traffic or transport. Similarly, there will be no additional traffic generated by the operational or decommissioning phase of the Subject Development. Therefore, the Subject Development has had, and will have, no effect on traffic and transport.

Other Material Assets

The Subject Development comprises of low or below ground structures such as roads or borrow pits. Therefore, there was no potential for effects on broadcast communications, telecommunications, aviation or electromagnetic interference or impacts on aviation.

There is no gas network Ireland infrastructure within or near the Site. There are existing overhead and underground electricity cables and other services present on the site of the Subject Development and in the vicinity of the site, and with the construction phase completed, there were no significant effects. No effects are anticipated during the operational phase. The Subject Development had no effect on gas or electrical infrastructure.

Water Infrastructure and Supply

There are no underground sewerage networks within the Site. There were no group water schemes or public water schemes or associated Source Protection Areas within the Subject Development Site or the surrounding lands. There were no private wells recorded in the GSI well database with the closest groundwater wells located approximately 2km northeast of the Subject Development Site.

Regarding groundwater Resources, the Geographical Survey Ireland do not map the presence of any National Federation registered Group Water Schemes (GWS) or Public Water Schemes (PWS) or an associated Source Protection Area (SPA) within the Subject Development site or in the surrounding lands. A search of private well locations (accuracy of 1 – 50m only) was undertaken using the GSI well database (www.gsi.ie). The GSI database does not record any wells in the vicinity of the Subject Development site. The closest mapped groundwater wells are located ~2km northeast of the Subject Development site in the and are reported as having a poor yield class.,

Regarding Surface Water Quality, there are no mapped Drinking Water Protected Areas (DWPA) within or immediately downstream of the Subject Development site. The closest DWPA is Lough Mourne located upstream of the Subject Development site. However, Donegal Council abstract water from the Bunadaowen River within the site and pump it to Lough Mourne Reservoir, ~1.7km to the north. In the Donegal Bay North Catchment, the Eske_020 SWB upstream of Donegal Town and downstream of Lough Eske is listed as a DWPA.

Elements of the Subject Development that could have effected groundwater, such as borrow pits, were not located near any existing water supply or waste infrastructure. Therefore, the Subject Development had no effect on water supply and infrastructure. The peat storage cells are not located near any existing water supply or infrastructure. Therefore the creation of the peat storage cells had, no effect on water supply or infrastructure. The Subject Development is not located in the vicinity of the Donegal County Council pumping station on the Bunadaowen River, or the associated water pipeline.

Waste Management Services

The Subject Development had potential to generate small amounts of additional waste. A Waste Management Plan (WMP) has been prepared and forms part of the Construction and Environmental Management Plan (CEMP) in Appendix 3-2 of the rEiAR. The residual effect of the construction phase activities for the Subject Development had a Short-term Imperceptible Negative effect on waste management services during the construction phase. No further effects are anticipated.

Vulnerability of the Project to/from Major Accidents and Natural Disasters

This section of the EiAR describes the likely significant effects on the environment arising from the vulnerability of the Proposed Project as detailed in Chapter 3 to risks of major accidents and/or natural disasters.

Major accidents or natural disasters are hazards which have the potential to affect the Proposed Project and consequently have potential impacts on the environment. These include accidents during construction and operation caused by operational failure and/or natural hazards. The assessment of the risk of major accidents and/or disaster considers all factors defined in the EIA Directive that have been considered in this EiAR, i.e., population and human health, biodiversity, ornithology, land, soil, water, air quality, climate and material assets, cultural heritage and the landscape.

A desk-study has been completed to establish the baseline environment for which the proposed risk assessment is being carried out. This will influence both the likelihood and the impact of a major accident or natural disaster. Local and regional context has been established prior to undertaking the risk assessment to develop an understanding of the vulnerability and resilience of the area to emergency situations.

Further detail on the baseline environment is provided in Section 13.3 of this rEiAR,

The scenario with the highest risk score in terms of the occurrence of major accident and/or disaster was identified as 'Peat Stability' during the construction phases, and 'Contamination' during operational and decommissioning phases.

The risk of a major accident and/or disaster during the construction of the Subject Development is considered 'low' in accordance with the '*Guide to Risk Assessment in Major Emergency Management*' (DoEHLG, 2010).

The subject of peat stability is discussed in detail in the chapter given the history of peat instability at the site. On 12th November 2020, during the construction of a permitted access road to T7, a peat failure occurred. The works that were underway at the time in the area where the peat slide occurred, were

fully permitted and were being undertaken in line with the project design that had been subject to both Environmental Impact Assessment (EIA) and Appropriate Assessment (AA).

Following this peat failure, the Environmental Protection Agency (EPA) engaged the services of ARUP Consulting Engineers, to advise and represent the EPA on the geotechnical and peat stability aspects of the follow-up investigations. Following extensive additional site investigation work, geotechnical analysis, site meetings and reporting undertaken by both Fehily Timoney and Company and Ionic Consulting, the EPA concluded in April 2021 that the issues identified had been satisfactorily addressed. The factors which resulted in this peat slide are understood to have been a combination of the construction works and antecedent rainfall. The Subject Development was not deemed to be a contributing factor. AFRY Ireland Ltd (formerly Ionic Consulting) completed a site inspection to the Site on 19th October 2023 to assess the overall stability of the wind farm from a geotechnical perspective and to assess whether there has been any instability since the peat slide. This inspection was completed alongside a geotechnical engineer from Tara Engineering Consultants.

The Technical Note arising from this site inspection is attached as Appendix 6-4 and concluded that:

“the overall site is currently stable based upon our assessment of the roads, hardstanding’s, borrow pits, peat storage areas and peat stabilisation areas”.

Since the failure in November 2020, there has been no indication from any of the assessments that the construction of the 25 no. deviations was responsible for the peat failure event.

No major accidents and/or disasters occurred as a result of the construction of the Subject Development or impacted on the Subject Development during the construction phase. Reporting of Site stability in 2021 and 2023 has found that all as built infrastructure, including all the deviations, are currently stable and there is no evidence of excessive peat movement associated with any of the deviations. Therefore, there were no residual effect(s) associated with the construction phase of the Subject Development

Interactions of the Foregoing

Chapter 14 of this rEIAR is identifying the potential significant environmental effects that may occur in terms of Population and Human Health, Biodiversity and Birds, Land, Soils and Geology, Hydrology and Hydrogeology, Air Quality, Climate, Noise and Vibration, Landscape and Visual, Cultural Heritage, Material Assets and Vulnerability to Major Accidents and Disasters, as a result of the Subject Development. All potential significant effects of the Subject Development and the measures proposed to mitigate them have been outlined in the main rEIAR. 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. A matrix is presented in Chapter 14 of the rEIAR to identify interactions between the various aspects of the environment already discussed in the rEIAR. The matrix highlights the occurrence of potential positive or negative impacts during the construction, operational and decommissioning phases of the Subject Development. Where any potential interactive impacts have been identified, appropriate mitigation is included in the relevant sections (Chapters 4–13) of the rEIAR.